

Finding Tingira

THE SEARCH FOR THE ROYAL AUSTRALIAN NAVY'S
FIRST TRAINING SHIP





A small bay in Sydney Harbour may be the last resting place of a vessel once described as a ‘most perfect ship’. It sailed between England to Australia as a luxury passenger clipper for 25 years, before becoming first a reformatory ship then a naval training vessel. **Dr James Hunter** traces its career, its demise and the hunt for its remains.

ON A COLD SUNNY morning in June 2016, Silentworld Foundation Director and maritime archaeologist Paul Hundley steered the survey vessel *Maggie III* into shallow water at the head of Berrys Bay on Sydney’s north shore. Accompanying him were ANMM maritime archaeologists Kieran Hosty and myself, both of us staring intently at a laptop computer as it displayed readings from a marine magnetometer towed a short distance behind the boat. As *Maggie III*’s hull glided through water less than a metre deep, we watched for any indication that remnants of a unique sailing ship might lie buried in the silt below.

The object of our search was the bottom of a massive, iron-framed wooden hull that had been hauled into the mud at the head of the bay and abandoned by another enterprising team 75 years before. This forlorn shell may be all that remains of HMAS *Tingira*, the first training vessel commissioned by the fledgling Royal Australian Navy (RAN) following its creation in 1911. *Tingira* ended its remarkable 75-year career in Berrys Bay, its final chapter written ‘with the searing flame of an acetylene torch for a pencil, and a drab shipbreaker’s yard as parchment’.¹

A splendid ship for the Australian trade

The vessel that would eventually become HMAS *Tingira* was constructed by Alexander Hall & Co in Aberdeen, Scotland. Named *Sobraon* (after the Battle of Sobraon in the First Anglo-Sikh War of the mid-1840s), it was launched on 17 April 1866 and commenced service as a passenger clipper for the shipping firm Shaw, Lowther, Maxton & Co. The ship was originally designed for both sail and steam propulsion,

but installation of its engine was cancelled during construction. *Sobraon* was the largest composite-hulled sailing ship ever built; its teak planking was sourced in Burma (Myanmar) and affixed to internal iron frames and diagonal stiffeners with copper-alloy fasteners. It had an overall length of 317 feet (97 metres) and maximum breadth of 40 feet (12 metres), and its displacement was 2,131 gross registered tons. *Sobraon*’s draught was 16 feet (4.9 metres) and its depth of hold 27 feet (8.2 metres). Under full sail, the ship could spread up to two acres (0.81 hectares) of canvas and attain a maximum speed of 16 knots (30 kilometres per hour).

Sobraon operated exclusively between London and Sydney between 1866 and 1871. It embarked on one voyage per year and carried 90 first-class passengers, 40 second-class passengers and a crew of 69. Voyages normally commenced in September to take advantage of better weather, and returned to England via Cape Town in South Africa and the island of St Helena. During its first three return legs, *Sobraon* loaded cargoes of Indian tea and raced other clippers back to London. Tea was replaced by Australian wheat and wool on subsequent voyages. In 1870, the ship was purchased by the firm Devitt & Moore and began operating exclusively between London and Melbourne two years later.

Speed and comfort made *Sobraon* extremely popular with passengers. Among its celebrated features were a water condenser, a cold store that could hold three tons of ice, and fresh milk from three cows held with an array of other livestock in a vast pen in the ship’s hold. *Sobraon* was never pushed to its limits out of consideration for passengers, but still made excellent time.

The ship frequently covered 2,000 nautical miles (3,704 kilometres) in a week, and once travelled 392 miles (631 kilometres) in a single day. Its fastest voyages to Sydney and Melbourne were 73 days and 68 days respectively. Had it not faced contrary winds in the latter instance, the ship would have recorded the fastest time for a sailing ship transiting between England and Australia.

Sobraon's final voyage to Australia began on 14 October 1890 and ended 80 days later in Melbourne. Much of the clipper's 25-year career proved uneventful, but it briefly caught fire on two occasions, was nearly run ashore in the English Channel twice and encountered one severe storm that resulted in significant damage. Between 1866 and 1891 only one person was lost overboard, and that incident was ultimately ruled a suicide.

From luxury clipper to floating reformatory

In January 1891, *Sobraon* was sold to the colonial government of New South Wales and towed to Sydney. On arrival it underwent a complete internal and external refit and replaced the colony's reformatory ship *Vernon*, which had been in use since the 1860s. Some of the more notable changes were the opening of the entire lower deck as a dormitory, construction of three solitary confinement cells and the addition of a layer of concrete atop the orlop deck to act as permanent ballast. The ship's main deck was divided into a school room, mess room and sleeping and living quarters for teaching staff. A drawing room for the school superintendent and his family was built on the upper deck, as were a library, seamen's mess, galley, bath house, sick bay and berths for the cooks and permanent crew. The newly converted Nautical School Ship (NSS) *Sobraon* commenced service during the second half of 1891, and became home to more than 4,000 neglected, destitute or delinquent boys during the next two decades.

Sobraon was permanently moored off Cockatoo Island for the duration of its career as a reformatory ship. Its inmates received a mixture of elementary education and nautical and industrial training, the purpose of which was to convert them into 'useful, worthy and morally upright' adults.² While nautical training was a significant component of the curriculum, the ship never put to sea, so the boys had no opportunity to practise their seamanship skills. Indeed, very few *Sobraon* boys ended up in seafaring occupations, with most

apprenticed to farmers in rural New South Wales. In an effort to amend this problem, the government leased the steam-powered brigantine HMS *Dart* as a sea-going tender to *Sobraon*. From 1904, *Dart* often embarked on short voyages to coastal New South Wales ports and gave groups of older *Sobraon* boys an opportunity to experience life at sea.

Sobraon spent two decades as home to more than 4,000 neglected, destitute or delinquent boys

Industrial training was provided as a means of preparing boys for a variety of land-based occupations, including shoemaking, tailoring and carpentry. The latter proved immensely popular, and during the first decade of the 20th century *Sobraon* provided most of the school furniture used by the New South Wales Department of Public Instruction. Boys engaged in carpentry work were paid a small allowance of between one and five shillings per week. Those living aboard the vessel also had the chance to participate in a vigorous program of recreational activities, including football, cricket, gymnastics and swimming. One *Sobraon* boy, Barney Kieran, took up swimming while serving his sentence, and later gained fame as a record-breaking competitor in several Australian and international events.

Life for those incarcerated aboard *Sobraon* was strictly regimented, and punishment for infractions could be severe. It was partly for this reason that the vessel was closed and the nautical school ship approach to training and education discontinued. In one parliamentary debate the New South Wales Minister of Public Instruction, G S Beeby, observed:

*The object [of a reformatory institution] ... is to check criminal tendencies on the part of a boy, and to restore him to his normal surroundings as soon as possible – not to confine him for years and to subject him to rigid discipline ... that is the new policy, and the necessity for an institution of close confinement like the Sobraon has been steadily decreasing.*³

Experts in institutionalised care also noted the anachronistic nature of sail-based nautical training in a profession increasingly dominated by steam-powered vessels, and that very few of the *Sobraon* boys pursued a seafaring life once they were released.

By 1905 *Sobraon* was no longer cost-effective and the New South Wales government estimated it could save some £15,000 per year with its closure. The school was discontinued and the ship offered to the Commonwealth government in June 1911.

The 'navy's cradle'

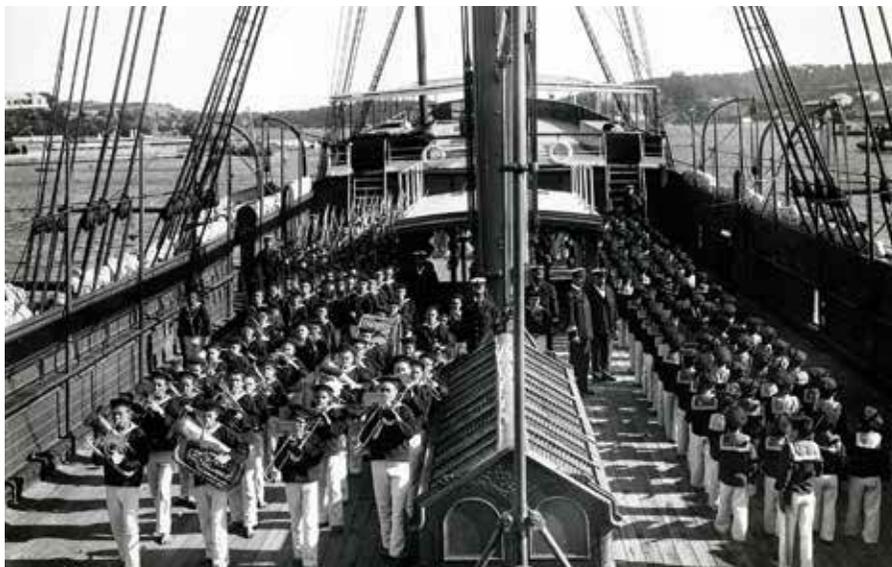
Sobraon was purchased by the Commonwealth at the end of 1911 and transferred to RAN control. It was renamed His Majesty's Australian Training Ship (HMATS, later HMAS) *Tingira*, a derivative of *dingira* (pronounced din-GEER-a), a word meaning 'sea' in the language of the Badtjala people of Fraser Island, Queensland.⁴ The ship was towed to Mort's Dock and Engineering Company in January 1912 to be repaired and refitted, and was commissioned as the RAN's first training vessel four months later. *Tingira* subsequently moved to Rose Bay in Sydney Harbour, where it was moored for the duration of its naval career.

Tingira, like NSS *Sobraon*, served as a training vessel for boys, but entry was limited to youths between the ages of 14 and 16 years, and all recruits were expected to serve a minimum of seven years in the RAN once they reached the age of 18. Unlike the destitutes and delinquents who filled *Sobraon's* ranks, those who came aboard *Tingira* did so willingly under the Department of the Navy's boy enlistment scheme, and were sourced 'from the best Australian homes ... great public schools ... outback spaces and ... the city's heart'.⁵ The first intake of 37 boys was recruited from New South Wales on 1 June 1912, and the draft from other states brought the total to 100 by the end of the month. New recruits were given an official number that remained with them throughout their naval service. They were then assigned to either the port or starboard watch, and supplied with an interim kit that contained one 'casual' naval uniform made of coarse white cloth, as well as a towel, soap, hammock and blankets. Other items, including shoes and a finer-quality dress uniform, were issued later. George Leatham Roberts embarked aboard *Tingira* as a 15-year-old naval cadet in 1914 and was assigned one of these kits, the complete contents of which are preserved in the museum's National Maritime Collection.

For the first four months of his tenure, each boy received comprehensive instruction in seamanship. This was followed by rifle and gunnery training at shore-based facilities at Kent Hall and Lyne Park near Rose Bay. Visual signalling such as semaphore was a speciality of many

- 01 *Sobraon*'s brass band often held concerts on board the ship for the general public, and also performed at philanthropic events in Sydney. ANMM Collection ANMS1096-205
- 02 George Leatham Roberts embarked aboard *Tingira* as a 15-year-old naval cadet in 1914. He was invalided from the RAN the following year and died shortly afterwards, aged just 16. ANMM Collection ANMS0067[001]
- 03 *Tingira* after its conversion into the RAN's first naval training ship. ANMM Collection ANMS1092-083

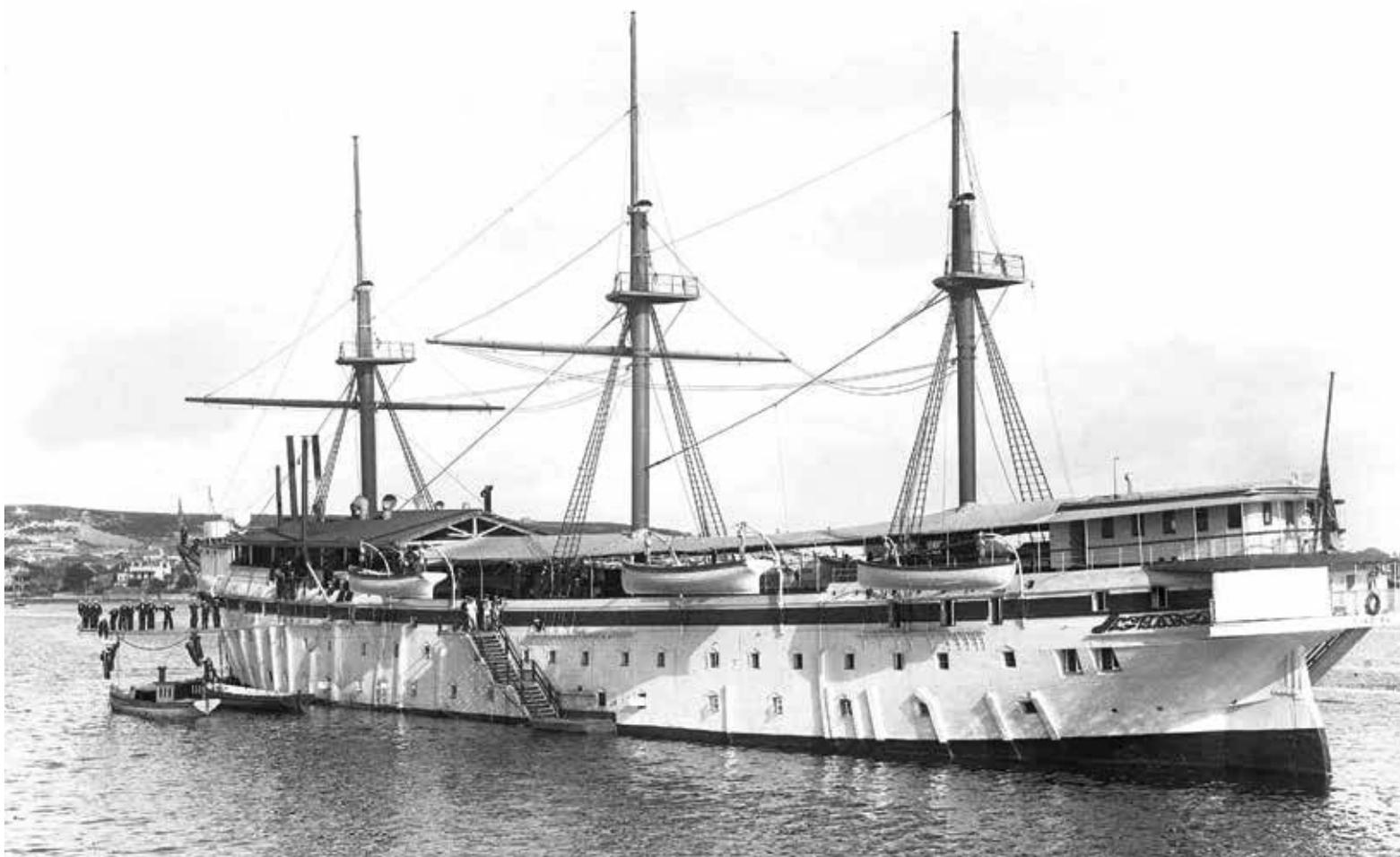
Many *Tingira* recruits would also go on to serve their country with distinction in the two world wars



01



02



03

- 01 *Tingira's* hull stripped to the waterline, c 1940. National Library of Australia nla.obj-146674518
- 02 An aerial image of the mudflat at the top of Berrys Bay in 1943, with the hull of a large ship clearly visible. NSW Department of Finance and Services
- 03 A current satellite image of Berrys Bay. The red line corresponds with the position of the hull in the previous image, now thought to be half buried under the reclaimed land of Waverton Park. NSW Department of Finance and Services



01

instructors aboard *Tingira*, with the result that several boys were proficient by the time they graduated and later served as RAN fleet signalmen. Many *Tingira* recruits would also go on to serve their country with distinction in the two world wars. Among them were boys assigned to HMAS *Sydney* (I) when it engaged and defeated the German raider SMS *Emden* on 9 November 1914. Other notable graduates included Signalman John William Varcoe, who was awarded the Distinguished Service Medal while serving aboard HMAS *Parramatta* (I) during World War I,⁶ and Petty Officer John Thomas Humphries, who received the George Medal for undertaking hazardous salvage diving activities in World War II.

In the mid-1920s, the RAN instituted a move away from the boy enlistment scheme towards a direct entry system for new recruits. The last draft of boys was brought aboard in early 1926, and by the end of the year recruitment ceased entirely. *Tingira* was decommissioned on 27 June 1927. During its 15 years as a naval vessel, the ship was home to 3,168 boys, many of whom formed the core of the RAN's experienced shipboard personnel during the next three decades.

The demise of a 'most perfect ship'

The final phase of *Tingira's* life began in 1929, when it was purchased by shipwright W M Ford, towed to Berrys Bay and moored a short distance from shore. The vessel would remain in the same spot for over a decade, its once-gleaming white hull gradually transformed into a sun-bleached, rust-streaked derelict.

Following Ford's death in 1935, ownership transferred to Major Sidney Friere and Mrs Louisa Ankin, who intended to transform the hulk into a floating naval museum. This idea failed and was followed by other short-lived proposals. These included conversion of the ship into a floating cabaret, or a shipboard casino that could sail beyond Australia's three-mile (4.8 kilometre) offshore territorial limit, thereby enabling those aboard to legally gamble. In October 1937 *Tingira* was purchased for £1,050 by demolition contractor Karlo Silvinen. Following a failed attempt to sell the vessel back to Friere and Ankin, Silvinen kept it moored at Berrys Bay, where it remained another three years.

Tingira's end finally came during the latter half of 1940, when a salvage crew began dismantling the ship's surviving upper-works. The hull was systematically reduced over the course of the following year, until only a shell remained. A photograph believed to be the last known image of *Tingira* afloat shows the surviving hull preserved to a point just above the waterline. Iron framing was still present, but all other internal structure – save for a small shed probably built as an office and shelter for the salvage crew – was removed. By the end of 1941 what remained of *Tingira* was no longer moored at Berrys Bay, and its fate seems to have gone largely unrecorded in contemporary archival sources. The sole exceptions are two brief newspaper articles published in the early 1950s that mention in passing that the vessel's 'shell' was towed outside the opening to Sydney Harbour and scuttled.⁷

Finding *Tingira*

Tingira's disposal off Sydney was possible, but highly unlikely, given the tremendous risks involved. The sheer size of the surviving hull, coupled with its very low freeboard and lack of decking, would have made it difficult to move in anything less than dead calm wind and sea conditions. In the worst case, the hull could take on water, break its tow and sink in the harbour, where it was certain to become a hazard to navigation – and a headache for its owners. For this reason, ANMM's maritime archaeology team speculates that *Tingira* never left Sydney Harbour, and was probably discarded within or near Berrys Bay, a former shipbreaking and discard area.

An initial theory proposed by the team was that *Tingira* was scuttled at its moorings. The water depth at this location exceeds 10 metres, and the seabed is predominantly silt and sand. A soft bottom would have allowed the sunken hull to become embedded and immovable, while the water depth was sufficient for small and medium-sized vessels to safely navigate over it. To test the idea, a survey was conducted at *Tingira's* former mooring site. The area is now an anchorage for small craft; consequently, the magnetometer was affected by interference from several sources, including the metal hulls, engines and fittings of modern boats, as well as submerged mooring blocks. Despite these false positives it quickly became apparent that a very large and complex zone of magnetic influence existed on and within the seabed.



02



03

This was correlated by side-scan sonar imagery, which revealed a low mound of debris interspersed with larger objects, including what may be iron knees or braces.

While results of the survey were being analysed, new historical information came to light. Aerial photographs of Sydney taken in 1943, and made available online through the New South Wales government's Spatial Information Exchange system,⁸ revealed a large composite hull in a mud flat at the northern end of Berrys Bay. These aerial images have been corrected to accurately match a modern uniform map scale and known coordinate system. As a result, the overall dimensions of the unidentified hull could be determined, as well as its projected location within the modern landscape. Its preserved length (83 metres) and breadth (11 metres) are virtually identical to *Tingira's* length between perpendiculars (83 metres) and maximum beam (12 metres). This provides compelling evidence that *Tingira* is depicted in the 1943 aerial photographs, and that it was intentionally moved from its moorings and ultimately grounded in the mud flat and abandoned.

Although *Tingira* appears to have been run ashore in Berrys Bay in the early 1940s, it is unclear whether its remnants are still there. Reclamation in 1960 replaced the mud flat with Waverton Park, which was created through the discharge of 42,000 cubic yards (35,170 cubic metres) of silt from Sydney Harbour dredging. The silt was held in place by a retention wall that laterally bisects the proposed location of *Tingira's* surviving hull. Today, the ship's forward half may be buried beneath the park,

while the remainder could be located beneath the shallows and intertidal zone at the head of the bay. The latter zone was the focus of the June survey, which detected a large magnetic anomaly in approximate alignment with *Tingira's* projected orientation. However, this area – like *Tingira's* mooring site – is surrounded by several modern magnetic sources, and it is presently unclear whether an abandoned hull is the source of the large anomaly.

The maritime archaeology team plans to conduct additional remote sensing work, including a land-based magnetometer survey of Waverton Park in the area where *Tingira* is thought to be buried. Other search techniques, including ground-penetrating radar, may be employed to determine the physical presence and extent of any surviving hull, as well as its depth beneath the modern ground surface. The team also intends to inspect the source of the magnetic and acoustic anomalies at *Tingira's* mooring site, which may represent hull components and artefacts that were dropped overboard as the vessel was dismantled by shipbreakers. Results of this work will be reported in future issues of *Signals*.

Notes

1 'Most "Perfect Ship" may now be munitions', *Newcastle Sun*, 24 January 1941, p 4.

2 Legislative Council and Legislative Assembly, *New South Wales parliamentary debates (second series) session 1911*, Vol XL, 16 May to 28 June 1911, Government Printer, p 467.

3 New South Wales Legislative Assembly, *Report for the year ended 30 April 1902: Nautical School Ship Sobraon*, Government Printer, p 1.

4 The author wishes to thank ANMM's Indigenous Programs Project Assistant, Helen Anu, and Manager of Indigenous Programs, Donna Carstens, for sourcing the Aboriginal origin of *Tingira's* name.

5 'Australia's sons of the sea: Inheritors of glorious traditions', *Farmer and Settler*, 1 January 1926, p 1.

6 Varcoe later became the model for the sailor statue at the Cenotaph in Martin Place, Sydney.

7 'RAN training ship: Story of the *Tingira*', *The Age*, 28 October 1950, p 12; 'Bad boys who made good', *The Land*, 3 December 1954, p 34.

8 six.nsw.gov.au/wps/portal

Further reading

Ramsland, J, 1981, 'Life aboard the Nautical School Ship *Sobraon*, 1891–1911', *Great Circle: Journal of the Australian Association for Maritime History*, 3(1): 30–45.

Thurston, H J, 1979, 'The history of HMAS *Tingira*', *Naval Historical Review*, 2(5): 17–19.

The Silentworld Foundation is a non-profit organisation founded in 1999 to support maritime archaeology in Australia. It has had an ongoing collaborative relationship with ANMM and sponsored many of its maritime archaeology expeditions since 2009.

Dr James Hunter is ANMM's Curator of RAN Maritime Archaeology. He has worked in the field of maritime archaeology for nearly two decades, and during that time has participated in the investigation of shipwrecks and other archaeological sites ranging from prehistory to the modern era.