

An underwater photograph showing two divers in silhouette against a bright blue background. They are holding onto a thick, braided rope (shot line) that extends from the top right towards the center. The water is clear, and there are some bubbles visible in the upper left corner.

The web experience highlights the local, national and international work the maritime archaeology program has undertaken since its establishment in 1990

Divers descend a shot line to the site of HMAS *Perth* (I) in Banten Bay, Indonesia. Image James Hunter/ANMM

Virtual immersion

Deep Dive: The museum's online centre for maritime archaeology

An innovative web experience enables the public to engage with the research and discoveries of the museum's maritime archaeologists and to virtually explore the wrecks of HMB *Endeavour*, HMAS *Perth*, submarine HMAS *AE1* and other lost vessels. By Kieran Hosty and Dr James Hunter.

IN FEBRUARY 2022, the Australian National Maritime Museum made two significant announcements relating to its maritime archaeology program. The first was the statement from the museum's former Director and CEO, Kevin Sumption, that the site of James Cook's famous vessel, His Majesty's Bark *Endeavour*, had been positively identified following a 22-year program of fieldwork and research in Newport Harbor, Rhode Island.

The second major announcement was the launch of an innovative new web experience by The Hon Paul Fletcher MP, Minister for Communications, Urban Infrastructure, Cities and the Arts. The web experience is dedicated to the museum's maritime archaeology program and highlights the local, national and international work it has undertaken since its establishment in 1990.

Developed by the museum's Digital Engagement and Insight team, Deep Dive: The Australian National Maritime Museum's Centre for Maritime Archaeology allows the general public, as well as educational and academic communities, to engage with the work of the museum's maritime archaeologists. The website's content was created with input from the Knowledge team, in which the maritime archaeology program is based, and uses immersive video, still imagery, reconstructive animation, oral interviews and sound bites, photogrammetry data sets, field blogs, online archaeological reports, journals and *Signals* articles.

Deep Dive will feature ongoing and future initiatives undertaken by the maritime archaeology team and its collaborative partners



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Visualisation of details of the *Endeavour* wreck. Still image from a video by Mike Daly

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Endeavour being scuttled in Newport Harbour. Still image from a graphic animation by Ireneusz Herok

Explore Deep Dive today at sea.museum/Explore/maritime-archaeology/deep-dive

Brief biographies of the museum's maritime archaeologists are provided on 'The Team' page. The 'Finding *Endeavour*' page presents the archaeological and historical reasoning behind the announcement that *Endeavour's* wreck site has finally been found. It is richly illustrated with both underwater still and video imagery, most of which has not been previously published. The visitor is then taken to 'Tracing *Endeavour*', which recounts the ship's history and how it ended up in Newport, Rhode Island.

The final menu option is broadly termed 'Research' and includes The PS *Herald* Virtual Reality Experience, links to more than 80 journal articles, academic publications and field blogs, and the technical report *Archaeological Identification of Shipwreck Site RI 2394 (Endeavour) in Newport Harbor, Rhode Island*. The 'Research' page concludes with a video of museum maritime archaeologists surveying the remains of HMAS *Perth* (I).

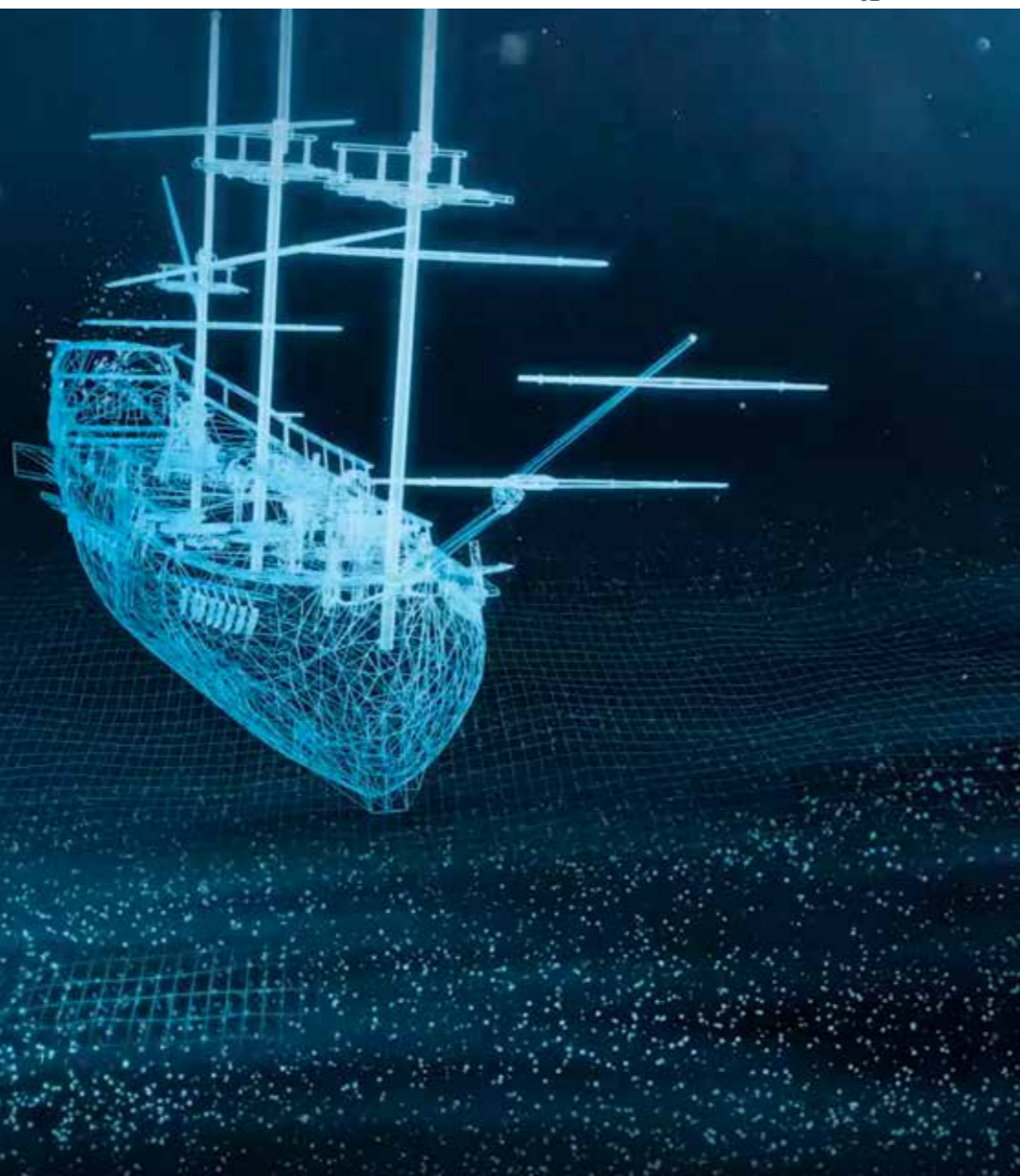
Deep Dive will feature ongoing and future initiatives undertaken by the maritime archaeology team and its collaborative partners. Other stories that will be profiled on the website in the near future include archaeological surveys of HMAS *Perth* (I), the discovery and documentation of the World War I submarine HMAS *AE1*, ongoing historic shipwreck surveys in the Australian Coral Sea Territory and Great Barrier Reef, and the search for the wreck site of the mid-19th-century Dutch ship *Koning Willem II* in South Australia.

Deep Dive is a taste of what's to come from the museum's new approach of building digital innovations to underpin all of its activities, from storytelling to daily programming. Our focus is on a human-centred design approach to deliver new experiences, both online and in the museum.

None of Deep Dive's design, configuration or content would have been possible without the fantastic efforts of the museum's Digital team, including Paula Bray (Head of Digital Engagement and Insight), Leonie Jones (Digital Producer), Renae Mason (Digital Producer), Luke Dearnley (Web Developer) and Snow (Lead Developer).

Deep Dive enables audiences to experience what it is like to research, discover and investigate shipwrecks and other underwater cultural heritage sites such as historic aircraft, inundated ports and deep time submerged Indigenous sites. It is being published using a staged approach. The first featured story, quite fittingly, is 'Finding *Endeavour*' and its information portal provides the detailed background, underwater footage and archaeological evidence that led to the positive identification of *Endeavour's* wreck site.

When a visitor first enters the Deep Dive homepage, they are taken to a series of pull-down menus that are labelled 'Deep Dive', 'The Team', 'Finding *Endeavour*', 'Tracing *Endeavour*', and 'Research'. The homepage features a spectacular image of two divers descending the shot line to the site of HMAS *Perth* (I) in Banten Bay, Indonesia, and a graphic animation of the British transport *Lord Sandwich* (ex-HMB *Endeavour*) being scuttled in Newport Harbor. It outlines the Deep Dive concept and then introduces the visitor to other featured and planned stories via a short clip of 3D photogrammetric models created by the maritime archaeology team of shipwreck sites and artefacts. These include *Lord Sandwich*, *South Australian* (wrecked at Victor Harbor, South Australia, in 1837), the paddle steamer *Herald* (which sank off Sydney Harbour's North Head in 1884 after one of its boilers ruptured) and a mystery shipwreck at Boot Reef near the entrance to Torres Strait in far north Queensland (possibly the remnants of the Canadian-built convict transport *Henry*, which wrecked in 1825).



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