ON 7 APRIL 1841 THE INDIAN-BUILT, 555-ton, armed three-masted ship Ferguson was wrecked on a reef in the Coral Sea, en route from Port Jackson to the Bay of Bengal. On board were 170 rank and file of the 50th (Queen’s Own) Regiment of Foot, who had sailed for the Australian colonies as convict escorts and now were bound for Madras on India’s Coromandel Coast. There they were expected to fight for king, country and the East India Company in some of the many struggles being waged to secure India as the jewel in Britain’s imperial crown. Fortunately they were sailing in convoy with the Orient and Amphitrite of Hasting and, along with the crew of Ferguson, were rescued by the accompanying vessels and taken on to India, where death and glory awaited. There the 50th would fight with distinction (and considerable losses of officers and men) in the Gwalior campaign of 1843 and the Anglo-Sikh Wars, 1845–46. The remains of the teak-built Ferguson, 555-ton, armed three-masted ship, spelled Ferguson in its Indian Board of Trade registration papers. Ferguson Reef lies on the outer edge of the Great Barrier Reef, 3,040 nautical miles north of Brisbane and 50 nautical miles south of Raine Island, which marks an entrance to the labyrinths of reefs that are a feature of these tropical seas.

A major debate in Australian colonial history during the first half of the 19th century was about the safest and quickest shipping route between Sydney and India via Torres Strait. Some navigators, such as Phillip Parker King, favoured the inner route following the Australian coast inside the Great Barrier Reef, while other equally respected navigators, such as Matthew Flinders, recommended the outer route through the Coral Sea.

Both routes converged near the Raine Island Entrance, where ship captains had the choice to switch from one route to the other depending upon weather and other circumstances. The isolation of the area, the lack of fixed navigational marks (until construction of a beacon on Raine Island in 1841), and the complex nature of the passages through the Great Barrier Reef resulted in the loss of more than 50 ships on Ferguson, Martha Ridgeway, Cockburn, Great Detached and Yule Detached Reefs between 1800 and 1850. Although these isolated reefs have been visited by sports divers, archaeologists from the Queensland Museum and some commercial operators, the wrecks on them remain largely unknown to archaeologists and historians alike. The sites are a resource for the study of transport corridors to Asia, in particular India, and their role in the development of colonial Australia; they encompass themes of exploration and survey, colonial industry and enterprise, emigration and settlement.

The work of the Australian National Maritime Museum’s maritime archaeology team locating and recording some of these historic wrecks, in a major collaboration with project sponsor and partner the Silentworld Foundation, has been reported in detail in previous editions of Signals. Following the fourth expedition with Silentworld Foundation, locating the India-Australia trade ship Royal Charlotte at Frederick Reef in January 2012 (Signals No 98 March–May 2012), the team assessed options to continue its work on early 19th century India-Australia trade and Indian shipbuilding. Based on a number of factors including the availability of safe anchorages, we decided to investigate Ferguson Reef and the Raine Island Entrance, the ocean junction of the Inner and Outer Shipping Routes. The site had been located by well-known Queensland diving identity Ben Gropp.
in the early 1870s and has been visited on a number of occasions since, but a number of questions remained about its extent and the possible presence of another shipwreck close to Ferguson Reef. Our investigations suffered several delays, due to two late-season cyclones pounding the Great Barrier Reef. One of the expedition vessels, *Mineral Explorer*, was held up in the Solomon Islands, leaving a much-reduced project team embarking in Cairns on 20 March on the *Silentworld II* and an alternative charter vessel *Helibuster 2*. The team arrived at Ferguson Reef on 23 March and quickly settled down to work.

Thanks to information supplied by former State Maritime Archaeologist Ed Slaughter and Ben Cropp, the site of the Ferguson shipwreck was quickly located in between 25° and four metres of water approximately 25 metres west of the surf break on the eastern side of Ferguson Reef. Over the next six days the team surveyed the site, recording numerous iron knuckles, iron boxes (possibly field ovens or stoves for the troops), two large anchors lying flat on the reef top, four cannons, numerous iron concretions, rudder fittings and a good scattering of artefacts including glass and ceramic fragments, iron fastenings, rigging and copper-alloy gun components. A large pile of concrete-stud-link anchor chain marked the original position of the Ferguson chain locker.

Just 50 metres north and slightly offshore of the Ferguson site is another anchor complete with iron stock. Attached to it is a long run of stud-link chain stretching 208 metres across the reef top towards the northwest. Scattered along the run of chain are numerous bits of iron concretion, copper-alloy and iron fastenings and what appears to be several pieces of iron ballast. Although very close to the Ferguson wreck, several clues suggested that the anchor and chain are from another, as yet unidentified, wreck or stranding on this reef.

While at Ferguson Reef the team participated in a series of live webcasts into a number of regional NSW high schools. Hosted by ANMM education officers Jeff Fletcher and Anne Duran, the webcasts connected schools through DART (Distance & Rural Technologies – the Connected Classrooms arm of the Department of Education & Communities). Titled *Archaeology in Action*, the webcasts in the form of a video conference focused on the museum’s maritime archaeology collection, how and why archaeologists investigate wreck sites, what shipwrecks can teach us about the past, and the museum’s role as leaders in archaeological investigation. It connected with schools from Year 4 through to Year 12, from areas such as Armidale, Coffs Harbour, Queanbeyan, Armidale and Wollongong. There were also studio audiences from Gorokan High School and Shoalhaven Anglican High.

Leaving Ferguson Reef the team next attempted to locate the wreck of the 135-ton brig *Morning Star*, lost in 1818 some 10 nautical miles inshore of Booby Island. Nothing was heard of Smart or the others for another four years when the three-masted ship *Clandestine* anchored overnight off Murray Island in Torres Strait in September 1818 and picked up Shaik Djamal, a lascar or sailor from the wreck of the *Morning Star*. The longboat, Djimal related, had captured and he alone had managed to get ashore. No more was ever heard of Captain Smart and the other *Morning Star* survivors.

On 31 March to 4 April our team carried out extensive magnetometer and underwater surveys in the area around Quoin Island, Fison Reefs and Eel Reefs, and detected significant magnetic anomalies – possible evidence of ferrous masses such as cannons, anchors or chain – on the eastern side of Eel Reef in 30–42 metres of water. Additional metal detector and visual surveys of the area failed to locate the anomaly and no shipwreck material was located on the surface.

Given the soft, sedimentary nature of seafloor in those areas it is possible that the anomaly is heavily buried. An associate, Frits Breuseker of *SeaSee Pty Ltd*, has agreed to analyse the remote-sensing data and contour the information, which may allow us to more accurately pinpoint the anomaly and, if given the opportunity to re-visit the site at a later date, locate whatever lies beneath.

The Ferguson Reef Project 2013 was a collaborative project with the *Silentworld Foundation*, the University of Sydney and the Australian Research Council and was greatly assisted by Benn Cropp, Warren Delaney, Great Barrier Reef Marine Park Authority, Peter Hidge, James Cook University, Maritime Archaeological Association of Queensland, Mundubarrna Medical Centre Townsville, *Oceanis Maritime Pty Ltd*, *SeaSee Pty Ltd*, Ed Slaughter, Queensland Department of Resource Management, Xanthie Rivett Photographic Services.

01 John Mullen, CEO, *Silentworld Foundation*, goes to work with a metal detector.

02 Anchor chain, possibly from an unknown shipwreck rather than Ferguson Reef itself, laid out in a line across the shallow Ferguson Reef top, on a day of close to ideal conditions.