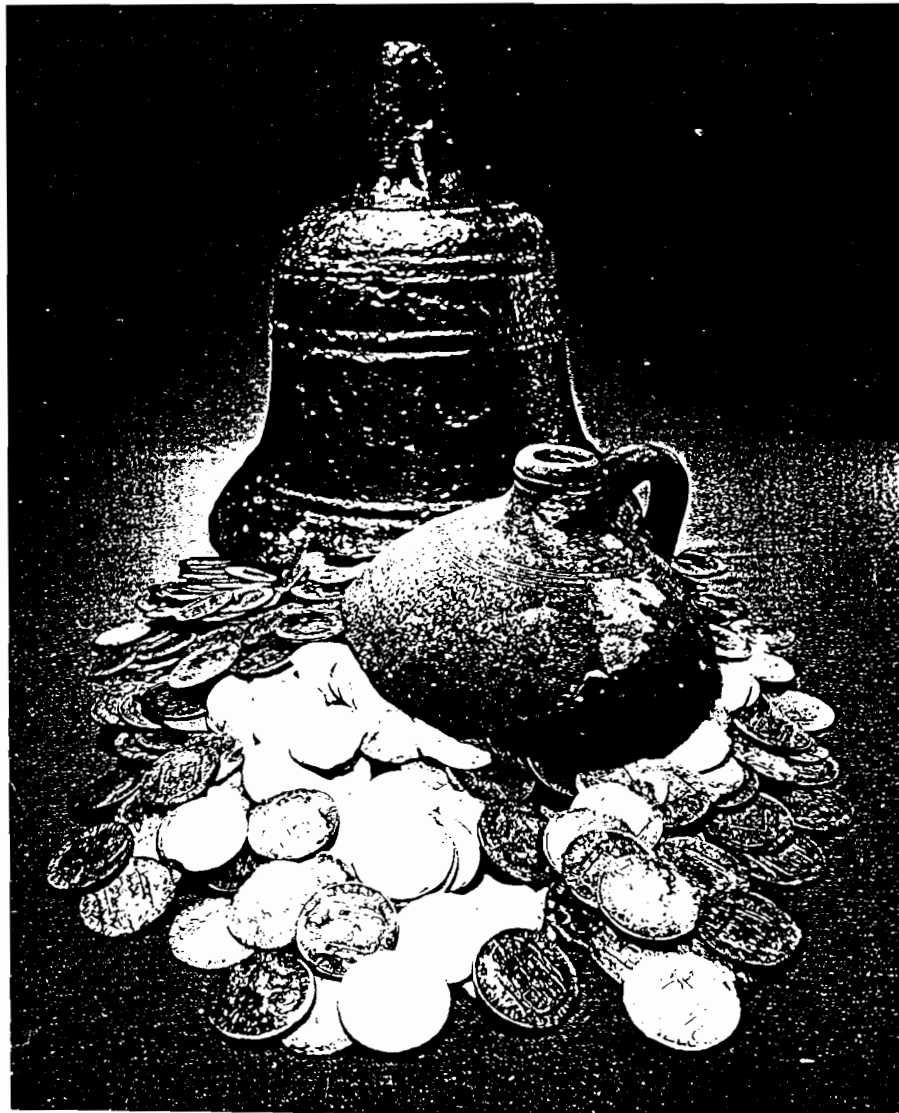


**MANAGEMENT PLAN
FOR THE HISTORIC SHIPWRECK**

RAPID

1807-1811



**Report - Department of Maritime Archaeology
Western Australian Maritime Museum, No. 63.**

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PART 1. BACKGROUND

INTRODUCTION

This document is a plan of management for the historic shipwreck *Rapid*. (1807 -1811).

Scope of the management plan

The scope of this management plan encompasses the wreck site, artefact collections and records relating to the *Rapid*.

Legislation: *Historic Shipwrecks Act 1976*.

The Commonwealth *Historic Shipwrecks Act 1976*, gives legal protection to all shipwrecks declared to be historic, lying in Australian waters below the low water mark. Responsibility for the administration of the Act is vested in DAS. However, under the provisions of the Act, the Minister for DAS has delegated the responsibility for managing the site and its associated materials to the Western Australian Museum.

Responsibilities of the Western Australian Museum

The Museum is responsible for the preservation and interpretation of the site (site management), the conservation, documentation, storage and display of artefacts (collection management) and the documentation of all activities associated with the site (document management).

Responsibilities of archaeologists: legislative–ethical

As custodians of the shipwreck and associated artefacts, archaeologists must comply with the requirements of the *Historic Shipwrecks Act 1976*, the *Protection of Movable Cultural Heritage Act 1986* and the *Museum Act 1969*.

They are required to adhere to the standards of relevant professional bodies such as: the International Council of Museums (ICOM), the Australian Institute for Maritime Archaeology (AIMA), and the Australian Institute for Conservation of Cultural Materials (AICCM), and be guided by: *AIMA Code of ethics*, *Australia ICOMOS charter for the conservation of places of cultural significance*, (*Burra charter*), *Code of ethics for museums*, (ICOM), *Code of ethics and guidance for conservation practice*, (AICCM), *Ownership of cultural property*, (UNESCO) and the *UNESCO Convention on the means of prohibiting and preventing illicit import, export and transfer of ownership of cultural property*.

Responsibilities of the public

Members of the public may not disturb, remove or destroy material from any wreck site that is protected under the Act.

Persons finding a shipwreck or any items associated with a shipwreck are required to report their findings to the Commonwealth Minister for the Arts and Administrative Services. Notification of a discovery in waters off the coast of Western Australia may be made to the Director of the Western Australian Museum.

PART 2. THE *RAPID*

HISTORICAL SETTING

The *Rapid* was built during a period of great political and economic upheaval in the history of the United States of America. The newly independent nation was struggling to maintain a share in world trade against the British and the French.

The *Rapid* was one of many vessels built expressly for the lucrative China trade at a time when New England shipbuilders were entering a period of great innovation and technological achievement.

History of the vessel and its wrecking

The China trader *Rapid* was built in 1807 at Braintree, Massachusetts by Nathaniel Thomas for Andrew Ritchie of Boston. The 366-ton vessel had three masts, two decks, a square stern and a figurehead but no galleries. It measured 104 ft long [31 m], with a breadth of 28 ft 4 in [8.5 m] and a draft of 14 ft 2 in [4.2 m].

Although the vessel was entered in the Boston Customhouse Register on 23 December, 1807, the *Rapid's* first voyage to China did not commence until nineteen months later. The delay was due to the passing of President Jefferson's *Embargo Act of 1807*, which came into effect just one day before the *Rapid* was registered. The embargo prevented American vessels from engaging in foreign trade during the following year.

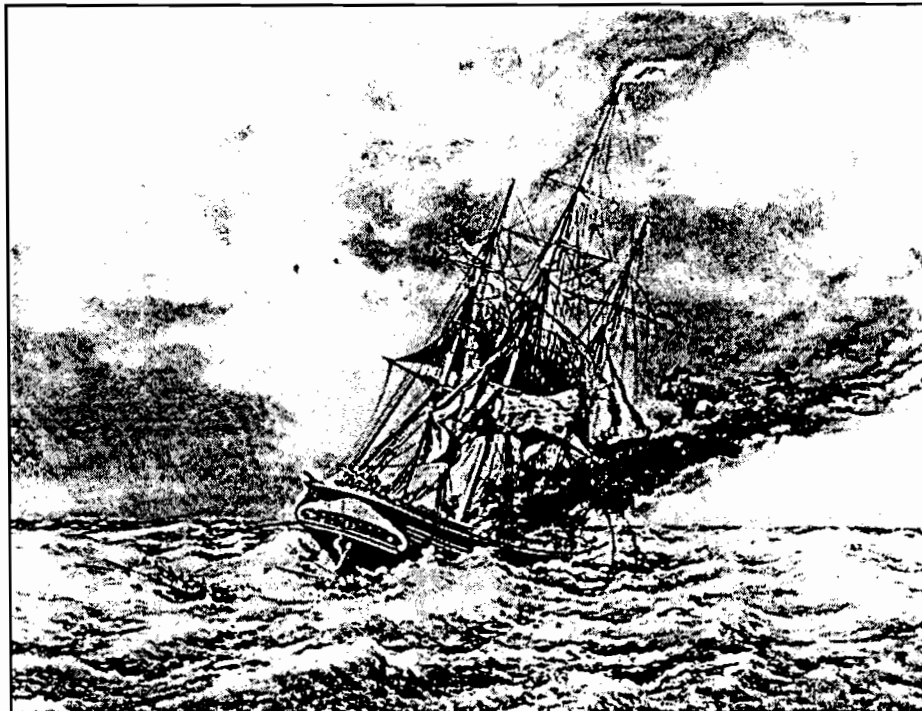


Figure 1. An American ship in distress (Francois Roux, 1860).

The ownership of the *Rapid* changed hands twice before finally setting sail on its first trading voyage to Canton in August 1809 under the command of Captain Henry Dorr, carrying freight to trade and specie to buy China goods.

After a successful first venture, a second voyage was undertaken, with Captain Dorr once again in command. The vessel sailed in ballast from Boston for Canton on 28 September 1810, carrying no cargo except for the substantial sum of 280000 Spanish silver dollars. Eight guns were mounted on the decks as protection for the valuable cargo. The voyage to the Cape of Good Hope and across

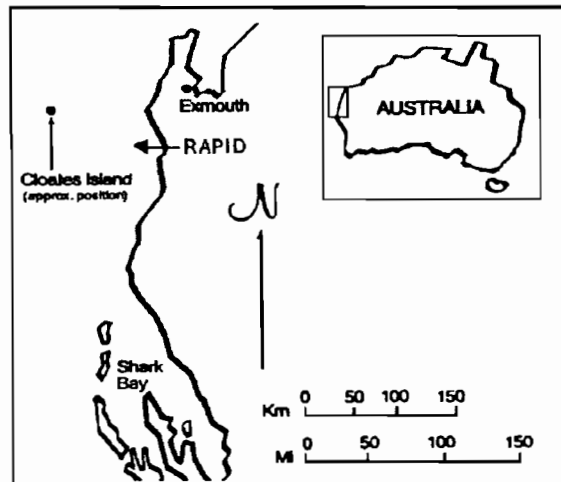
the southern Indian Ocean was swift and uneventful, but disaster struck on the night of 7 January 1811. After steering north-east towards North West Cape, the ship ran aground on the reef at Point Cloates. A storm the following day dashed any hope of freeing the vessel. The *Rapid* was abandoned and burnt to the water-line so that the wreck would not attract the attention of passing ships before Captain Dorr could return to salvage the specie. Seventeen of the crew arrived safely at Bali Straits in two boats, while the Captain, his clerk and three crew made a thirty-seven day voyage to Batavia in the ship's jolly boat. After six weeks at Batavia, they were able to secure a passage back to America aboard the schooner *General Green*, arriving in Philadelphia on 27 July 1811.

Contemporary salvage

On his arrival in Boston, Henry Dorr set about organising the recovery of the specie. An American trader, the *Meridian* was acquired and left Boston for the Orient 27 October 1811 with a cargo of cotton and instructions to visit the wreck and recover the money. After several salvage attempts, all but \$19000 was eventually recovered but it was not until the end of the war of 1812–1815 that the question of legal ownership of the money was finally resolved.

Description of the wreck site: locality–environmental setting–present condition

The *Rapid* wreck site is 1.1 nautical mile, [approximately 2 km] to the south-south-east of Point Cloates. Its exact location was established by a GPS (Global Positioning System) in September 1991 and is given as latitude 22°44.44 south, longitude 113°41.46 east. This is within an area prone to cyclonic storms during the summer months from January to March. For most of the year there are prevailing south-south-easterly winds of around 25 knots with intervals of calm weather.



Map 1. Locality of *Rapid* wreck site, Point Cloates.

The *Rapid* lies on a sea-bed of coral rubble and sand in 3–5 m of water, with wreckage scattered over an area approximately 45 m by 35 m. The wreck is protected somewhat from swells by a reef which runs parallel to its starboard side. A coral head is situated forward of the starboard bow and there is a low reef to the stern. The remains of the hull are canted over to the port side, with the bow orientated towards the west-south-west. The stern timbers and the starboard side have disintegrated, however the keel, bow and port side timbers are in a good state of preservation. The hull remains are now buried under a layer of sand and coral rubble to a depth of approximately 0.5 m. This was done to protect the timbers from the damaging effects of marine organisms and of wave actions during cyclonic storms. Two iron anchors are situated in the bow area, lying at right angles to one another.

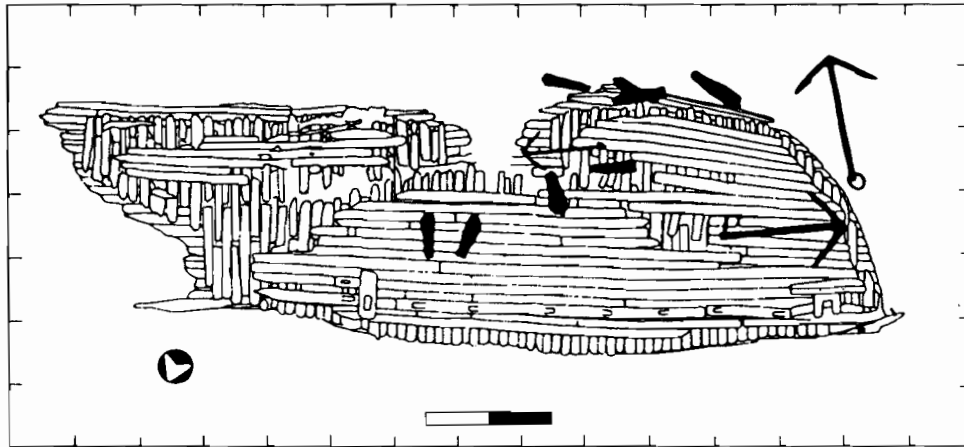


Figure 2. Plan of the *Rapid* site, 1982.

History of the wreck site: discovery–artefact recovery–archival research–archaeological field-work–wreck inspection

In 1978 four men found the wreck while spear fishing off Point Cloates, 1100 km north of Perth and notified the Commonwealth Government of their discovery.

Some 600 Spanish silver coins, glass and ceramic fragments and several copper hull fastenings that had been raised by the finders were handed over to the Western Australian Museum in October 1978. They had also reported seeing a large mound of silver lying exposed on the wreck site, so to deter looters, an expedition was immediately organised by the Maritime Museum to remove the material. In February 1980, the finders, Glyn Dromey, Larry Paterson, Frank Paxman and Barry Paxman, received a reward of \$17500 for their efforts. This amount was later increased to \$30000.

As identification of the wreck was not possible from the initial inspection of the archaeological remains, archival research was necessary to determine the identity of the vessel. In May 1981, the maritime archaeologist in charge of the excavation visited the United States to examine shipping archives, which positively identified the remains as that of the *Rapid*.

During the course of three seasons of excavation (1978, 1980, 1982), 18709 coins were recovered. These include some that would have belonged to the crew, such as American one cent pieces, a Chinese coin and French francs. Silver scrap weighing 65.67 kg and eleven silver ingots with a total weight of 8.156 kg were also recovered. The ship's bell and one of *Rapid*'s three anchors were raised. All eight guns, 4467 ships fastenings and more than 3500 artefacts were surveyed and removed from within and around the hull. A further 938 concreted objects were examined and recorded then returned to the wreck site. The ballast mound of several hundred tonnes of river-worn stones was removed so that the ship's timbers could be measured and recorded. A survey of associated land sites was also conducted. At the completion of the 1982 excavation season, the ballast stones were replaced and the wreck timbers completely covered with sand.

The *Rapid* site was inspected in September 1992 by staff of the WA Maritime Museum.

The wreck inspection report indicates that the site is still well covered with sand and appears to be undisturbed, apart from a small section of exposed timbers approximately 40 cm by 15 cm, situated towards the bow. It is quite probable that these timbers were exposed by cyclonic wave action. Chemical analysis of the exposed wood indicates that the hull timbers are reasonably stable, given the dynamic nature of the wreck site environment. The anchors on the site were examined and corrosion potential measurements taken to determine the corrosion rate of the iron. The measurements indicate that the anchors are still actively corroding, but the rate of corrosion has not changed in the ten years since corrosion potential measurements were first taken.

***Rapid* artefacts: conservation–storage–display–research**

Most of the material recovered from the *Rapid* has undergone any necessary conservation treatments and is presently either in storage or on display. The specie is maintained in a secure storage facility. Some material is still undergoing conservation treatment and is yet to be fully documented. Thirty-five artefacts are on loan to the Australian National Maritime Museum, while the remainder of the collection is in the custody of the WA Maritime Museum. A small number of artefacts have been selected for inclusion in the children's 'hands on' display at the Maritime Museum's Education Centre. A list of artefacts on display is given in Appendix A.

A detailed study of over 3000 *Rapid* fastenings has been undertaken with the aim of identifying the different types of fastenings and their function as part of the ship's construction or as part of the cargo or stores. A quantitative system was devised for measuring the physical characteristics of each fastening to produce a body of comparative data for further statistical analysis. An artefact catalogue for the *Rapid* collection is still to be published.

***Rapid* documentation: archival documents–archaeological records–artefact registers–pictorial collections**

Archival documents relating to the *Rapid* are located in the United States of America. Copies of relevant documents are maintained at the WA Maritime Museum. For a general list of archival documents see Appendix B.

The Maritime Archaeology Department of the Maritime Museum holds archaeological records such as the artefact registers, the pictorial collections (photographs and illustrations) and published and unpublished reports. A final excavation report, bringing together the results of the three seasons of excavations, has yet to be published. For the current list of publications for the *Rapid*, see Appendix C. Unpublished documents are listed in Appendix D.

Conservation reports for artefacts are maintained in the Maritime Museum's Department of Materials Conservation.

The *Rapid* artefact collection has been assembled from three seasons of excavation in 1978, 1980 and 1982. As a result, items have been recorded in several successive registers. As a means of keeping all records together, an artefact register has been created on a database, indicating where each item is displayed or stored. Bibliographic information for all documents held at the WA Maritime Museum is stored on in-house computer databases.

The pictorial collections include photographic and audio-visual materials, maps, plans, sketches and artefact drawings.

The photographic and audio-visual collections are housed in the Maritime Archaeology Department of the WA Maritime Museum and stored in accordance with accepted conservation practice. The collections have been catalogued and indexed and the records can be accessed on-line or via several printed indexes. The photographic collection consists of 2114 colour transparencies and 244 rolls of monochrome film (with proof sheets for each frame), recording all aspects of the work carried out on the *Rapid*. A summary of the Photographic Collection is given in Appendix E.

The audio-visual collection is comprised of 16 minutes of video tape. The video recording of the wreck site was made on 8-9 September 1992.

The collection of 912 illustrations relating to the *Rapid* is stored at the Maritime Museum in map cabinets in accordance with standard archival practice. This collection includes site plans, ship's construction drawings, artefact drawings and photocopies of some archival documents.

A catalogue of the pictorial collection has yet to be collated. A summary of the illustrations is given in Appendix F.

PART 3. EVALUATION

ASSESSMENT OF CULTURAL SIGNIFICANCE

This management plan is based upon an appreciation of the significance of the vessel in terms of its historical, technical, social, archaeological and scientific value, as well as the educational and recreational value for the wider community.

The assessment for significance is based on the criteria outlined in the *Guide-lines for management of Australia's historic shipwrecks*.

Historical significance: concerned with range of context

Significant in the evolution and pattern of history.

Importance in relation to a figure, event, phase or activity of historic influence.

The *Rapid* is significant in the history of Western Australia prior to European settlement.

The associated survivor's camp provides archaeological evidence of one of the few known sites of European contact with the mainland of Western Australia prior to 1829.

The *Rapid* is significant in relation to the history of maritime trading patterns during the late 18th century and early 19th century.

Very little historical information exists about the activities of American trading vessels off the Western Australian coast during this period. The archival research, in conjunction with the study of the archaeological record has contributed to our knowledge of American trade with China and the development of New England maritime ports during the post-revolutionary period.

Technical significance: concerned with technical or creative accomplishment

Significant in possessing or contributing to technical or creative accomplishment.

Importance in demonstrating a high degree of technical or creative achievement for the period in question.

The material remains of the *Rapid* demonstrates a high degree of technical excellence in the design and construction of the vessel.

The archaeological evidence has the potential to yield information on the innovative design and construction techniques employed by American shipbuilders of the early 19th century, a period recognised as the peak of technological achievement.

Social significance: concerned with community regard or esteem

Significant through contemporary associations with a community or communities in Australia for social, cultural or spiritual reasons.

Importance as cultural items or places highly valued for reasons of social, cultural, religious, spiritual, aesthetic or educational associations by a community.

The investigation of the *Rapid* has enhanced our awareness of the considerable American commercial ventures in the Indian Ocean region and the significant contribution made by early American seafarers, to the knowledge of the Western Australian coastline prior to settlement.

The archaeological investigations have attracted international interest and enhanced the prestige of the Western Australian Maritime Museum.

The *Rapid* has also attracted public attention as one of the few 'treasure wrecks' in Western Australian waters.

Archaeological significance: concerned with research potential through investigation of material remains

Significant for the potential to yield information contributing to an understanding of history, technological accomplishment and social developments.

The *Rapid* is of outstanding archaeological significance as it is the only example of an American China trader to be examined from an archaeological perspective. Detailed analyses of the structural remains will provide answers to some of the important questions yet to be resolved, regarding late 18th century shipbuilding techniques. The wreck provides the opportunity to examine an outward-

bound China trade cargo and the ship's stores and the personal items recovered, will give valuable insights into the lives of seafarers in the 1800s.

Scientific significance: concerned with research potential through repeatable measured tests

Significant in the potential to yield information about the composition and history of cultural remains through examination of physical and chemical processes.

Important in the generation or testing of hypotheses concerning the composition of cultural remains, the effects of original use and the effects of other environmental factors.

The site has significant scientific research potential.

The *Rapid* is an appropriate site for inclusion in a comparative study of the relationship between the physical environment and the condition of the wreck.

Educational and recreational significance: concerned with public education values

Significant for its potential to contribute towards public education.

Importance for its potential for public education through on-site (or other) interpretation.

The *Rapid* is significant for its educational and recreational potential.

It receives wide public exposure through the display and interpretation of artefacts at the Australian National Maritime Museum and the WA Maritime Museum.

The educational potential of the site has been enhanced by its inclusion in the North West Cape wreck guide pamphlet, *Wrecks of the Coral Coast*, published by the WA Maritime Museum.

The recreational potential of the wreck site has been enhanced by its inclusion in the recreational zone of the Ningaloo Marine Park.

DEGREE OF SIGNIFICANCE

Rarity or representativeness on a national basis and/or a State basis

Rare: concerned with the uncommon or exceptional

Significant in possessing rare, endangered or uncommon aspects of history.

Importance in demonstrating a distinctive way of life, custom, process, waterway use, function or design no longer practised, is in danger of being lost or is of exceptional interest to the community.

The remains of the *Rapid* provide a rare example of an 18th century American China-trade vessel in Australian waters.

Representative: concerned with the typical or characteristic

Significant in demonstrating the characteristics of a class of cultural items.

Importance in demonstrating the principal characteristics of the range of human activities (including the way of life, philosophy, custom, process, waterway use, function, design or technique).

The *Rapid* is representative of the type of vessels built in New England shipyards expressly for the China trade.

The wreck is representative of the fate of many vessels along the Western Australian coast at a time when navigation aids were unreliable. Representative of the risks involved in the pursuit of the China trade.

STATEMENT OF SIGNIFICANCE

The *Rapid's* considerable significance is reflected in the fact that its discovery merited the highest reward ever given by the Australian Government for the discovery of a shipwreck.

The wreck has received international recognition for its historical and archaeological significance. Its remains have the potential to yield valuable information on the design and construction of early 19th century trading vessels and the ship's stores and personal artefacts provide an insight into the lives of the seafarers who sailed them.

CONSTRAINTS

In the formulation of a Management Plan, consideration must be given to certain environmental, administrative and legislative constraints.

Environmental constraints

Monitoring of the wreck site by the Museum is difficult, due to the isolated location and distance from Perth. However, the location of the *Rapid* wreck in the Ningaloo National Marine Park affords the ideal opportunity for close monitoring of the site by the officers of CALM.

The potential for on-site education and interpretation for recreational divers is limited by the fact that most of the wreck remains are buried.

Significance constraints

There is a precedence of importance in attributes of significance. In the case of the *Rapid*, the historical and archaeological significance of the site will take precedence over the recreational value of the wreck.

Environmental threats

All wreck sites are prone to deterioration by physical forces, chemical corrosion and biological action. Because of the dynamic nature of the *Rapid* site, exposed material would be subject to a high level of abrasive action from moving sand. The high oxygen content of the water provides an environment conducive to active corrosion of metals and the higher temperatures of the northern waters increases biological activity.

Human threats

The protection of historic shipwrecks must be balanced against the requirement to increase community awareness and provide public access to the sites.

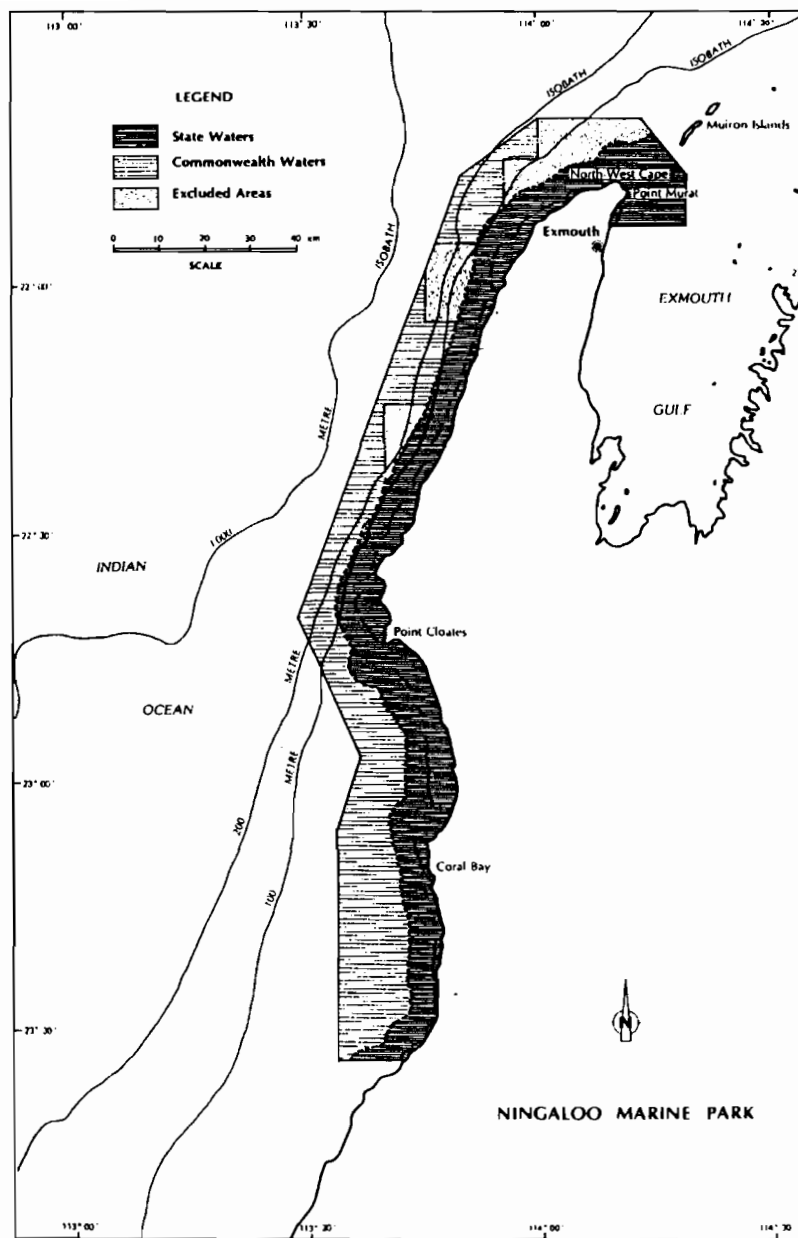
The promotion of the *Rapid* in the Coral Coast wreck guide will probably result in an increase in the number of visitors to the wreck site. Some damage to the fabric of the wreck may occur through the inadvertent actions of fishing parties and recreational divers or from illegal activities such as vandalism or the pilfering of some artefacts. However, with the wreck remains sealed under a layer of ballast stones and sand, the risk of damage is substantially reduced.

Legal, statutory and regulatory constraints

There are no restrictions to public access to the site, however the *Historic Shipwrecks Act 1976* ensures the protection of the fabric of the wreck from undue human intervention.

Sections 13 and 15 stipulate that the wreck site must not be disturbed or material removed by any person without permission from the Minister responsible for the administration of the Act.

The *Rapid* is situated in a Recreational Zone of the Ningaloo Marine Park. Commercial fishing activities are excluded from this area, however recreational diving and fishing is permitted. The marine fauna and flora of the wreck site and the surrounding reefs is protected under the *Conservation and Land Management Act 1984*.



Map 2. Ningaloo Marine Park (Department of Conservation and Land Management, 1989).

RESEARCH POTENTIAL

Comparative studies of the *Rapid* construction with similar vessels of that period can be made. The design of the *Rapid* may be compared with other American or British-built China traders.

Continued monitoring and analysis of the chemical composition of the ship's timbers will provide data that can be used to determine the effects of reburial on the deterioration processes in waterlogged wood.

Scientific analysis of the 4467 ship's fastenings recovered and documented will yield information about hull construction techniques. A study of the wear patterns on the fastenings will aid in the development of a predictive model for corrosion rates of various types of fastenings.

A study of beef and pork bones recovered from the ship's stores will provide information about butchering and provisioning methods employed in the early 19th century.

A study of the hull design and sail plan using computer-aided modelling techniques will advance the knowledge and understanding of the sailing characteristics of the vessel.

PART 4. MANAGEMENT STRATEGIES

MANAGEMENT POLICY STATEMENT

The policy is derived from the statutory requirements of the *Historic Shipwrecks Act 1976* and the Statement of Significance, with consideration given to the constraints outlined above.

OBJECTIVES

Preserve and protect the fabric of the wreck.

- The provisions of the *Historic Shipwrecks Act 1976* will continue to apply to the wreck site and the collections.
- The structural and archaeological integrity of the wreck will be preserved.
- The site will be reserved for passive recreation only.
- No archaeological or conservation procedures will be undertaken that could cause unnecessary disturbance or damage to the fabric of the wreck.
- Activities on the wreck site will be monitored.
- Wreck inspections will be carried out at regular intervals.

Conserve, curate and display artefacts associated with the wreck site.

- Material recovered from the *Rapid* wreck site or any associated land site will be in the custody of the WA Maritime Museum.
- Artefacts will be conserved, curated and displayed according to professional standards.
- Members of the public in possession of *Rapid* relics will be encouraged to pass them on to the Maritime Museum so that the artefacts may be conserved and documented.

Generate, catalogue, store and disseminate documentation regarding the *Rapid*..

- All Maritime Museum activity associated with the site will be documented.
- The documents and pictorial records will be catalogued and stored in such a manner as to be accessible to bona fide researchers.
- The results of archaeological research will be published.
- Documents generated by the Museum will be subject to copyright.

Develop interpretation and education programmes for the community and facilitate public access to historic shipwrecks.

- Responsible community participation in the management process will be encouraged.
- Arrangements will be made for the promotion of public access and enjoyment of the site.
- Interpretive materials will be produced to:
 - (a) Enhance public awareness of the location of the wreck site.
 - (b) Emphasise the historic status of the site and the public's responsibility towards protected wreck sites.

POLICY IMPLEMENTATION

The success of the policy implementation is largely dependent upon the involvement of CALM and local interest groups in the management process, particularly as the wreck site is so remote from Perth.

Enforcement of Regulations

Section 22 of the *Historic Shipwrecks Act 1976* gives the Minister the authority to appoint suitable persons to be inspectors for the purpose of enforcing the provisions of the Act.

It is proposed that officers of the WA Maritime Museum will be appointed as inspectors. At present, members of the Commonwealth and State police forces automatically have authority to act as inspectors.

Site surveillance

As the *Rapid* lies within the boundaries of the Ningaloo Marine Park, surveillance of the wreck site is provided year round by the Rangers of the Ningaloo Marine Park and Fisheries and Wildlife inspectors. An informal arrangement exists between the W. A. Museum and CALM, authorising Rangers to act on the behalf of the Museum for the purpose of reporting persons found interfering with protected ship wrecks. There are no arrangements to empower the officers of CALM or Fisheries and Wildlife to enforce the Act.

Wreck inspection

The WA Maritime Museum will carry out an inspection of the wreck site every five years.

Site conservation

The physical, chemical and biological environment of the site will be monitored. Measurements of sand movements, pH values, electrical conductivity, oxygen saturation, water temperature and marine organism concentrations will recorded and analysed. Only data collection techniques that ensure the maximum information for the minimum disturbance will be employed.

The protective overburden will remain on the hull timbers to minimise the effects of physical and biological degeneration processes.

In situ corrosion reversal techniques will be applied (if necessary), to preserve the anchors remaining on the site.

Collection management

The Museum will actively encourage the public to return relics removed from the site.

Suitably worded notices will be placed in appropriate places, advising the public that;

- It is illegal to keep items from shipwrecks as 'souvenirs'.
- Material taken from shipwrecks will deteriorate and eventually be destroyed without proper conservation treatment.
- Artefacts can be returned to the Maritime Museum anonymously, without fear of prosecution.
- Recovered materials may go on display in the local region if a suitable display venue is available.

The collection will be studied and interpreted and the findings published.

The condition and the visual presentation of the artefacts on display at the WA Maritime Museum will be reviewed regularly.

Document management

The WA Maritime Museum will continue to ensure that all documents associated with the *Rapid* will be collated, stored and catalogued in such a manner as to be accessible to bona fide researchers and that the laws of copyright will be observed. Duplicates of photographs and transparencies from the photographic collection can be made available to other researchers.

Publication

The publication and dissemination of scholarly research relating to the *Rapid* will be encouraged. The interests of the wider community will be met by the publication of popular articles and interpretive materials.

Education and interpretation programmes for the community

Information about the *Rapid* is available in an interpretive publication, *Wrecks of the Coral Coast*. The Exmouth wreck guide pamphlet was produced by the WA Maritime Museum, with the assistance of students from the Exmouth District High School. The *Rapid* is one of 27 shipwrecks that have been incorporated into the guide. The pamphlet gives the reader a brief history of the vessel and includes the wreck site position in degrees of latitude and longitude.

The publication is available to the public from appropriate venues such as CALM offices, dive shops and the WA Maritime Museum. A copy of the pamphlet is included as Appendix G.

Interpretation of the *Rapid* will be enhanced by the creation of a 1:20 scale reconstruction of the vessel. When completed, the model will be displayed at the WA Maritime Museum.

Public access

There are no legal limitations to public access to the wreck for recreational purposes, although access is limited by virtue of the remoteness of the site.

Resources and funding

All of the management strategies outlined above can be implemented by the WA. Museum without the necessity for special resources or funding.

Review Process

An inspection of the wreck site and a review of the Management Plan is to be implemented every five years.

The integrity of artefacts will be reassessed annually and further conservation treatments instigated if necessary.

In the event of future amendments to any relevant legislation, the Management Plan will be reviewed immediately to ensure that it complies with all statutory requirements.

ACKNOWLEDGMENTS

The author greatly acknowledges the advice and assistance of the staff of the WA Maritime Museum.

Particular thanks is due to Mr Graeme Henderson, whose publications on the *Rapid* provided most of the reference material for this document.

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APPENDICES

APPENDIX A. LIST OF *RAPID* ARTEFACTS ON DISPLAY

Artefacts on display at the Western Australian Maritime Museum, Fremantle.

Reg.No	No.	Description
RP001861	1	Tooth brush, ivory
RP002220	1	Domino, wood /ivory
RP003315	3	Dominos, wood/ivory
RP003319	1	Knife handle, bone
RP003404	1	Knife handle, bone
RP003445	2	Knife handle + 1/2, bone
RP003593	1	Knife handle, bone
RP003631	1	Syringe, pewter
RP003771	1	Cutlery handle, bone
RP003867	1	Cutlery handle, bone
RP005127	1	Watch key [poss.] brass
RP005216	2	Buckle, long w/ pronged tang, brass
RP005394	15	Buttons, 9 round, 5 flat; brass
RP005397	1	Keys, bunch, brass
RP005411	19	Buttons, 11 round, 8 flat
RP005414	4	Pins, brass [twist top]
RP005415	1	Buckle, frag [poss.], brass
RP005419	1	Cutlery handle, bone [restored]
RP005420	1	Cutlery handle, bone
RP005442	1	Buckle small, brass
RP005449	1	Buckle small, brass
RP005451	1	Cutlery handle, bone, [restored]
RP005452	1	Watch key, poss., brass
RP005459	15	Barnacles, light
RP005512	4	Barnacles, dark
RP005729	8	Barnacles, light
RP002223	1	Bone, beef,
RP003092	3	Bones, beef
RP003113	1	Bottle, glass
RP003214	11	Bottle necks, glass
RP003248	3	Bones, beef
RP003761	5	Bones, beef
RP003879	1	Bottle, glass
RP003911	8	Bones, beef
RP003952	2	Bone, pig, upper jaw (maxilla) halves
RP004042	23	Almonds
RP004243	1	Barrel, wood, [restored]
RP004286	1	Jar, storage, [reconstructed neck]
RP004301	2	Bones, beef
RP004331	1	Jar, storage, shoulder
RP005045	1	Jar, storage, neck
RP005507	1	Bone, pig, upper jaw [maxilla] half
RP00315	6	Bottle bases, glass
RP004148	1	Anchor, iron
RP005634	1	Syringe, pewter
RP002926	1	Bolt for fish plate, brass
RP005208	1	Spike, brass
RP005318	1	Spike, brass
RP002929	1	Bolt long, brass
RP002189	1	Ship's bell

Rapid coins on display at the WA Maritime Museum.

RP002680	8 Reals, Mexico, 1771
RP002681	8 Reals, Mexico, 1771
RP002682	8 Reals, Mexico, 1781
RP002683	8 Reals, Mexico, 1788
RP002684	8 Reals, Mexico, 1790
RP002685	8 Reals, Mexico, 1791
RP002686	8 Reals, Mexico, 1793
RP002687	8 Reals, Mexico, 1809
RP002688	8 Reals, Mexico, 1809
RP002689	8 Reals, Potosi, 1802
RP002690	8 Reals, Potosi, 1804
RP002691	8 Reals, Lima, 1792
RP002692	8 Reals, Lima, 1803
RP002693	8 Reals, Santiago de Chile, 1796
RP002694	8 Reals, Santiago de Chile, 1798
RP002695	8 Reals, Guatemala, 1777
RP002696	8 Reals, Guatemala, 1808
RP002697	8 Reals, Madrid, 1802
RP002698	8 Reals, Madrid, 1805
RP002699	8 Reals, Seville, 1773
RP002700	8 Reals, Seville, c.1792-1803
RP002701	8 Reals, Seville, 1788
RP002702	8 Reals, Lima, C/S Head of Geo. III, 1792
RP002703	One Cent, USA, c.1805
RP002704	One Cent, USA, c.1805
RP002705	One Dollar, USA, c.1795-1798
RP002706	One Dollar, USA, 1798
RP002707	One Dollar, USA, 1799
RP002708	One Dollar, USA, 1799
RP002709	One Dollar, USA, 1801
RP003131	8 Reals, Mexico [contemporary forgery], 1796

Small pile of concreted coins, number unknown.

Lump of reef containing coins, number unknown

Artefacts on display at the Australian National Maritime Museum, Sydney.

Reg.No	No.	Description
RP004122	1	Bolt, iron
RP004182	1	Bolt, iron
RP005222	1	Bolt, long brass,
RP005257	1	Bolt, long brass
RP005352c	1	Bolt, long brass
RPOOnono	1	Bolt w/ diamond washer, iron
RP002194	1	Jug base, stoneware [part of 5037]
RP002207	1	Bottle base, dark glass
RP003151	2	Case bottle base & neck, green glass
RP003290	1	Jug top, stoneware 'BOSTON' [part of 3290]
RP003297	1	Bottle base, large dark glass 12cm diam
RP003873	1	Bottle neck, dark glass
RP004112	9	Almonds
RP005037	1	Case bottle base, olive glass
RP0055681	2	Pig's skull & mandible bone
RP013533nm	35	Eight Reals coins
RP013567nm	0	Eight Reals coins
RP018442nm	1	One Dollar coin
RP018445nm	1	One Dollar coin

Artefacts on display in the Education Facility, WA Maritime Museum.

Reg No.	No.	Description
RP003655	5	Coal
RP003880	5	Canister shot, iron
RP003944	6	Animal bones
RP005304	6	Hull spikes, copper

APPENDIX B. REPOSITORIES OF ARCHIVAL DOCUMENTS

National Archives, Washington, D.C.

Boston Custom House Register

Philadelphia Passenger List, 1811

Boston Public Library, Boston, Massachusetts

Boston newspapers—shipping news

Captain Henry Dorr—Family records

Boston Marine Insurance Company records

Massachusetts Historical Society, Boston, Massachusetts

Boston Marine Insurance Company papers

Dorr—Family records

Peabody Museum, Salem, Massachusetts

Blunt-White Library, Mystic Seaport, Connecticut

Boston Marine Insurance Company records

APPENDIX C. PUBLISHED DOCUMENTS

Henderson, G. J., 1981, The American China trader *Rapid* (1811): an early Australian shipwreck site identified. *The Great Circle*, 3(2): 125–132.

Henderson, G. J., 1983, Update: the identification of a China trader. *Archaeology*, 36(3): 69.

Henderson, G. J., 1983, The excavation of a shipwreck site off Western Australia. *Indian Ocean Newsletter*, 4(2): 3–4.

Henderson, G. J., 1983, The *Rapid* excavation at Point Cloates in 1982. In W. Jeffrey and J. Amess (eds.), *Proceedings of the second southern hemisphere conference on maritime archaeology*. South Australian Department of Environment and Planning and the Commonwealth Department of Home Affairs and the Environment, Adelaide: 243–247.

APPENDIX D. UNPUBLISHED DOCUMENTS

Department of Maritime Archaeology Artefact Database.

Department of Maritime Archaeology Artefact Register (3 Volumes).

Department of Maritime Archaeology Coin Register.

Department of Maritime Archaeology Files: MA 12/78, Volumes 1–6.

Department of Materials Conservation: Conservation Report: *Rapid*, 1992.

Destructive Analysis Register, Pt. Cloates. (Includes: List of Items Not Retained).

Diaries – Overseas Research (Henderson, 1981).

Field Day Books: 1978, 1979, 1980 and 1982.

Field Registers – Artefacts: 1978, 1979, 1980 and 1982.

Research analysis documentation:

- Copper alloy artefacts, (May)
- Fastenings—Computer statistics.
- Fastening—Statistics—Fastening Study.
- Glass Register, (May, 1978).
- *Rapid* Lines.
- May, S., 1986, A synopsis of research objectives for an archaeological analysis of the fastenings from the *Rapid* wreck site.

Wreck Inspection Reports

Baker, P., 1974, Point Cloates anchors, Unpublished Wreck Inspection Report, Department of Maritime Archaeology, Western Australian Maritime Museum, No. 8.

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- Sledge, S., 1978, *Rapid*, Unpublished Wreck Inspection Report, Department of Maritime Archaeology, Western Australian Maritime Museum, No. 36.

APPENDIX E. SUMMARY OF *RAPID* PHOTOGRAPHIC COLLECTION.

Colour Transparencies

The colour slides have been filed using the notation PC (Pt. Cloates) with a suffix to denote the subject matter. The photographer and the date is recorded on each slide mount. The collection is stored in a metal filing cabinet in accordance with accepted conservation practice.

Notation	Number of slides
PC/A = underwater	963
PC/B = above water	739
PC/C = non-expedition and miscellaneous	39
PC/D = maps, plans and documents	12
PC/O = artefacts	328
Total number of slides	2081

Monochrome film

Underwater excavation, photomosaic and recovery work of the three expeditions accounts for 72 rolls of film and the 1992 wreck inspection is recorded on 4 rolls of film.

Artefacts are recorded on 101 roles and the remaining 67 roles cover record research and archival documents, aerial photographs, site transits, site plans and on-shore expedition work.

No. of Rolls			Topic
	19	U/W	1978 excavation
	32		1980 excavation
	21		1982 excavation
	04		1992 inspection
Total	76		
	09	A/W	aerial photos-Pt. Cloates
	01		painting of burning ship
	01		coins registration
	07		1978 expedition
	13		1980 expedition
	12		1982 expedition
	01		photomosaic
	01		map
	06		archival research
	01		reward presentation
	09		site plans
	01		site transits
	05		structural plans
Total	67		
	49	Artefacts	various artefacts
	02		barrel
	04		bell
	04		ceramics
	12		coins
	18		artefact drawings
	09		cannon
	03		syringe
Total	101		

Total number of rolls of film 244.

APPENDIX F. SUMMARY OF *RAPID* ILLUSTRATIONS

Draw 1.

- 11 site plans–land surveys
- 9 area maps
- 2 hydrographic survey maps
- 2 magnetometer survey maps–underwater
- 1 meteorological chart
- 7 field sketches–and sites

Draw 2.

- 1 artefact distribution map
- 12 ship construction drawings
- 1 ship's lines
- 1 reconstruction plan
- 1 sail plan
- 101 artefact drawings

Draw 3.

- 2 detailed hull construction–site plans
- 3 detailed hull construction–small sections
- 24 detailed hull construction–profiles
- 111 detailed hull construction–photogrammetric survey
- 1 general site plan
- 4 construction drawings–ship's lines
- 4 photographs–excavation Dec. 1978–Feb. 1979

Draw 4.

- 159 underwater artefact distribution sheets
- 86 underwater profile sheets
- 31 hull timbers drawings
- 18 underwater photographs–hull details
- 1 underwater photographs–photomosaic
- 4 aerial photographs–Point Cloates
- 10 aerial photographs–Point Cloates (Negatives)
- 4 carronade X rays
- 6 photographic copies of *Rapid* registration documents

Draw 5.

- 5 fastening distribution plans
- 1 graph - cannon ball dimensions
- 8 artefact drawings
- 116 small artefact drawings stored in 28 envelopes arranged by type of material

Draw 6.

- 116 small artefact drawings stored in 19 envelopes arranged by type of material
- 10 artefact drawings

Draw 7.

- 12 photocopies of original ship's plans–HM Navy 1820
- 1 coin distribution plan
- 1 artefact distribution plan
- 16 small fastening drawings stored in 5 envelopes
- 9 artefact drawings
- 1 illustration
- 2 copper spike/nail distribution plans
- 2 copper tack distribution plans
- 3 copper bolt distribution plans
- 2 copper sheathing distribution plans
- 2 lead sheathing distribution plans
- 1 ceramic distribution plan

APPENDIX G. *WRECKS OF THE CORAL COAST* PAMPHLET