Introduction

In January 1992, Jeremy Green (Department of Maritime Archaeology, Western Australian Maritime Museum, Fremantle) and Paul Clark (Northern Territory Museum of Arts and Science, Darwin) were awarded an ARC grant for a project entitled *The maritime archaeological, historical and ethnographic investigation of maritime technology in the pre-modern period, particular reference to Asian built ships.* The project, included Professor Ken McPherson (Indian Ocean Centre For Peace Studies), Dr Robert Parthesius (Nederland bouwt VOC Retourschip Stichting, Lelystad, Netherlands) and Dr Peter Burns (Department of History, University of Adelaide) as associate investigators. The project employed two part-time research assistants: Tom Vosmer and Karen Millar.

A series of field projects have now been undertaken and this report describes the progress of the work, the aims and achievements and the proposals for the future.

THE PROJECTS

1 Philippines

- Achievements: One three week field project (Vosmer, Clark and Green) investigating shipbuilding centres in the Sulu area and documenting the remaining two Butuan Boats in Mindoro. In addition, a report on the Butuan Two boat was completed (forthcoming Inter*national Journal of Nautical Archaeology*) and an interim report on the 1992 field project has been published.
- Objectives: to complete the publication of the two remaining Butuan Boats 1994 and possibly collaborate with the National Museum on a future excavation of another Butuan Boat site.

2 Maldives

- Achievements: One ten day field project (Millar, Green, Vosmer) documenting boat building in Malé and Alifushi. Publication of interim report by Millar (Bulletin Australian Institute of Maritime Archaeology, 17.1: 9–16).
- Objectives: complete full report on shipbuilding techniques with a comparison of Indonesian parallels in conjunction with Birningham (1994) and possibly an additional field season in 1994 looking at shipbuilding in the southern atols.

3 Sri Lanka

Achievements: Two major field projects in 1992 and 1993 in Galle Harbour. Documentation of twelve sites, two 17th century East India Company ships; training programme for twelve Sri Lankan maritime archaeologists completed; recording of model of a *yatra dhoni* in the galle Museum, recording a chine strake of a par*auwa*; investigation of a site on the Great Basses at the invitation of the Department of Archaeology of Sri Lanka; publication of a book (*Maritime Archaeology in Sri Lanka the Galle Harbour Project—1992*) and an interim report on the 1993 programme (enclosed).

Objectives: Complete a third season in Galle and further investigation of the Great

Basses site (january 1994). Complete a second publication on the project.

4 China

- Achievements: One two week visit to China in conjunction with the Chinese Academy of Social Sciences (Millar, Green, Clark). Establisment of an agreement with the Museum of Chinese History to undertake a major fieldwork programme in 1994. Visits to Fujian Provincial and Municipal Muesum, the Quanzhou Museum of Overseas Communication History, the Xiamen Anthropological Institute.
- Objectives: to conduct a major excavation in Ding Hai on the Baijao site (Clark). To complete the documentation and plans of the Quanzhou site in preparation for a publication (Green). Conduct a boat ethnology project in South China Clark and Green).

5 Oman

Achievements: The completion of a first season of recording boat ethnolgraphy (Vosmer) in Oman. A total of 64 boats were examined, of which 12 were recorded in detail. An interim report has been published.

Objectives: contine in November–December 1993 a second field season.

6 Shipwreck Database

Achievements: a pilot programme has commenced on this project (Millar) and the database programme has been written and some 50 sites entered.

Objectives: To work systematically on this programme with the objective of making this research information available to scholars working in the field.

7 Batavia

- Achievements: while this project is not directly funded from the ARC grant the research is important and relevent to the understanding of cross-cultural techonological exchange. A 1:10 research model is under production (Green and Vosmer) using Commonwealth funds.
- Objectives: Green will vist the Lelystad project, Netherlands on a Academy of the Humanities grant

8 India

Objectives: There is a conference in 1994 which project members will be attending. It is hoped to start a research programme in this region in association with the National Institute of Science, Technology and Developmental Studies.

OVERALL ACHIEVEMENTS SINCE THE START OF THE ARC PROJECT

1. The major achievement of the programme to date has been the ability to network a number of grants and projects under the general objectives of the ARC grant. In particular, the programme has obtained funding to support the ARC project from the Australian Department of Foreign Affairs, the Chinese Academy of Social Sciences Earthwatch, the Channar Foundation. This indicates an important aspect of the policy of ARC acting as a catalyst for the investigators to approach Australian and overseas organizations for additional funds which help to increase the productivity and support the overall programme. For example, Vosmer, a part time research assistant under the grant was able to raise \$14,967 from Earthwatch and \$6323 from Omani and Australian buisness for an ethnographic project in programme in Oman. This work which was directly relevant to the programme, enabled the investigators to reallocate funds to other areas while maintaining Vosmer's employment under the grant and supplying support infrastructure.

- 2. In addition, the highly successful programme in Sri Lanka, which is achieving modest international recognition at the end of the second year, has attracted funds and sponsorship from a number of Australian sources. Importantly, Sri Lankan organizations and institutions have provided major support in this programme, supplying one to one funding and infrastructure. The programme is at present involved in publishing a book to be printed in Sri Lanka, detailing the work of the first years programme (1992). In 1993 the Sri Lankan Department of Archaeology approached the programme for assistance with the management of the underwater archaeological heritage of Sri Lanka; this project will be funded entirely by the department in 1994.
- 3. The Philippines programme has also been very successful. A major publication has been produced on the important area of the Butuan Boats and further fieldwork has been undertaken to complete the data collection. It is expected that this project will be completed, on schedule, before the end of the present project grant.
- 4. Fieldwork operation in the Maldives, undertaken in conjunction with the first Sri Lanka fieldwork season has resulted in the collection of a large amount of data on ship construction in the northern atolls. This project was supported by the Foreign Affairs Investment Bureau and the Department of Fisheries (again allowing savings to be reallocated to other priorities). The research team was fortunate enough to record the construction of a new vessel in the intermediate stage of transition between the old and new technologies. A number of traditional vessels were recorded. This project is in an intermediate phase, requiring data analysis and additional field data from the southern part of the Maldives, the latter is planned to be completed before the end of the project grant.

NEW DIRECTIONS

Since, for the moment, the Philippines part of the project is running down, the group has decided on a series of priorities. Firstly, the Sri Lanka programme should continue as a high priority. However, there is a possibility that a similar programme could be established in India and the possibilities of this will be investigated in 1994 after the third Sri Lanka field programme. Additionally, the relatively low cost Earthwatch sponsored programme will take on a maritime archaeological dimension during the planned 1993 field programme. This may lead to new opportunities to develop a research programme in the west Indian Ocean. We would also like to explore the possibility of conducting maritime archaeological field work in the Maldives as this area is seen to have a high potential for important new sites relevant to the trains-Indian Ocean trade. In addition, there is also an opportunities have complex problems associated with their establishment and development and, while they

are possibilities, there is no certainty that they can become viable. Finally, the project identifies the need to train new young graduate archaeologists to take on the development of this programme. The senior investigator and his associate chief investigator together with the present research team all acknowledge that if Australian maritime archaeology is to maintain its international reputation, then there is a need to establish a special research centre. The two chief investigators each intend to employ a recently graduated maritime archaeologist in a part time capacity using their departmental funds, while at the same time encouraging their involvement in this programme (initially with a one day a week contract). In addition, the two existing graduate assistants who are employed at present on contract have difficulties fulfilling their research programme within their existing part-time employment. It is clear that if this programme is to progress, there is a need for more staff resources to maintain the programme's impetus. While it is acknowledged that within the given funding programme it is unlikely that we will obtain additional funds for 1994, the investigators are anticipating that they will reapply for support from ARC for the programme in 1995. In this application we will be seeking the support for a slight increase in the existing level of field work, but a substantial increase in the level of staff support. At present we have two staff part-time two days a week (i.e. one FTE). We would like to increase this to a ideal level of 2.5 F.T.Es.

One other small matter relating to future developments. The programme utilises a great deal of computer related technology. This comes from the various departmental resources of the chief investigators. There is a need for both centres to have access to dedicated computer-related equipment. At present, both chief investigators maintain an e-mail system and are able to share data and information over a high speed modem link (32-bis) as part of a programme enabling data sharing between the various state maritime archaeological regulatory bodies. The project requires two dedicated computers to support the publication and the data recording programme.

SUMMARY

In the remainder of 1993 and through to the end of the present grant in December 1994 the chief investigators anticipate that a series of important goals will have been achieved. The nature of maritime archaeology related to this programme is one of opportunism. This, in the sense that not every programme is viable or feasible, but that from time to time opportunities occur to gain access to data that will support the broad objectives of the programme. The investigators need to make carefully weighed decisions as to the viability of such programmes. With a massive budget, there is no doubt that we could be involved in a large number of projects, however, it is doubtful if this would be of great value. We see that there are achievable goals within the existing programme grant, we believe that with modest additional funding this project could achieve considerably more, both in terms of significant long-term goals and major research achievements. The programme has through previous ARC funding established an effective centre of excellence in maritime archaeology. The results of the half of the 1992–4 ARC programme have been significant and we have no reason to expect that the current rate of progress will not continue.

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