



## Newsletter 5, Galle Heritage Reconstruction Project

29 March 2005



### Introduction

Nearly three months after the Tsunami destroyed the facilities of the Maritime Archaeological Unit (MAU) in Galle, the MAU team could resume their activities. On 24 March the new building for the MAU was officially opened. Through the commitment of the Mutual Heritage Centre in Sri Lanka, and with the support of the Cultural Emergency Response Fund, the Netherlands Cultural Fund, the Amsterdam Historical Museum, the department of conservation of the Western Australian Maritime Museum, the INAH Mexico, NTNU Vitenskapsmuseet Seksjon for arkeologi, Norway and various other international institutes, the basic infrastructure has been restored and the recovered artefacts placed back in conservation in a safe environment. A team of experts in the field of maritime archaeology, conservation, museology and monuments assisted the Sri Lankian team in assessing the damage caused by the Tsunami and helped with this first phase of rehabilitation.

In the last weeks the humanitarian situation has drastically improved. Although many people are still suffering the consequences of the immense destruction, one can sense the strong will to resume life. Cultural development might

play an important roll in this proces. The UNESCO has offered to help to restore their damaged spiritual centers and so contribute to an important aspect of community building. The director of the Mutual Heritage Centre Sri Lanka, Mr. Balachandra presented at the opening of the new MAU facilities his vision on the development of Galle as a cultural centre. Hopefully he can count on an ongoing international support to implement his plans to develop preserve and present Galle as a unique living monument.



*(top) new MAU from the sea with the VOC hospital in the background*

*The opening of the new building with the traditional lightening of the oil lamp*

### **The inspection of the *Avondster* site**

Important goal for the expert mission was the inspection of the maritime heritage in the Bay of Galle. The first assessment of the *Avondster* was carried out on 14<sup>th</sup> March by Geoff Kimpton, Robert Parthesius, Rasika Muthucumarana, K.D. Palitha Weerasinghe and Bill Jeffery (James Cook University, Australia). Geoff Kimpton, formerly from the Western Australian Maritime Museum has extensive experience as a commercial diver and he implemented the first dive using a float attached to him so the boat crew/safety diver could keep track of his progress. A number of stories had been told of Galle Harbour containing numerous vehicles, possibly with some of the 500 people still missing. Nets and boats had also been washed into the harbor and it was thought that some of this material and the human remains might be encountered on the shipwrecks. Entanglement in nets was also considered a possible problem. In addition, the Police had been contacted regarding what procedures they required us to follow in the event of discovering human remains.



*The first dive after the Tsunami*

### *An 'untouched' surveypoint*



The site is about 80 metres off the beach, in 4-5 metres of water, and many of the adjacent buildings on land had been destroyed, so it was envisaged the shipwreck site would have been impacted. What was the first surprise was that the five mooring buoys placed around the site in November 2004 were still in position. Underwater, it was a similar surprise, the survey poles were in place, still with the guide ropes between them and the trench that was being excavated in November/December 2004 was still delineated with the horizontal grid, including the measuring tape that had been fixed to it. The majority of the shipwreck was covered with sand, but a small section of the bow timbers, the galley bricks and the section of the stern post that had the highest relief off the seabed (1-2 metres) looked untouched! A number of

locals from Galle reported that they had seen possible the *Avondster* and a nearby shipwreck site when the tide went out before the Tsunami hit, and others reported a large whirlpool as part of its impact, but unless the sand is covering damage, which is a possibility, the shipwreck has fared very well. Three other sites in Galle Harbour were inspected during the March mission and they also showed no signs of impact from the Tsunami.



*Two of the site/mooring buoys with the destroyed waterfront in the back*

### The Maritime Archaeological Collection

Three international consultants assisted the head of conservation Anusha Kasturi and Gamini Saman in the assessment and first conservation of the collection. Ian Godfrey (head of department of conservation Western Australian Maritime Museum) Inger Nyström (Conservation Studio Western Sweden) and Patricia Meehan (Coordinación Nacional de Conservación del Patrimonio Cultural-INAH, Mexico) have inspected the recovered artefacts and advised on further treatments. Apart from the absolute loss of parts of the collection (60%), some of the recovered artefacts suffered from physical damage. In addition, an intellectual loss was sustained to some of the artefacts through the separation of their registration numbers. In the coming months three registration staff members will try to trace down the original registration numbers.

Associated with the loss of most of the collection was the loss of all conservation documentation that was in paper or book form. The loss of this information has, and will continue to complicate tracing the full history of recovered artefacts. This is particularly the case where objects were being treated in groups and consequently were identified by group, rather than individual registration number. The treatment assessments that were completed in December 2004 did help however, in the current assessment of artefacts.



*The barber's bowl before and after the Tsunami.*

During the mission the conservation tank for large iron objects was moved to the new facilities. This caustic treatment facility was moved on March 23 but was not without drama. The crane used for lifting the tank and its contents was incapable of doing the job, resulting in the need for the anodes and the cannon to be removed from the tank. In doing this, and despite the protestations of conservation staff the cannon was lifted, but not horizontally. When it was being lowered to the ground, the cannon slipped on its cradle and was only stopped from crashing to the ground when one of its trunnions lodged against the cradle. Fortunately only minor surface damage was done to the trunnion. During draining and movement, water absorbent covers and water spray were used to keep the cannon and anchor wet. The tank was lifted and transported to the new MAU site inside the Galle Fort but only after the contractors fought a long battle with overhead trees, the roof of the former MAU building and the wall of the concrete bunding that previously surrounded the tank. Reinstatement of the tank and placement of the anodes and cannon back in



*Transport passing the Dutch Warehouse*

the treatment tank were completed after nightfall, with car headlights used to illuminate the site. The anchor and the canon from the *Avondster* are back in conservation. It is anticipated that the treatment will be finished before the end of this year.



*Arrival at the new location*

### **The future of the maritime archaeology program in Sri Lanka**

It is planned to use 2005 to re-establish the maritime archaeology infrastructure in the new headquarters and to consolidate the maritime archaeology staff required to implement the program. In addition, due to the limited visibility encountered on the *Avondster* site on the 14<sup>th</sup> and 18<sup>th</sup> March, it has planned to implement further inspections when the visibility has improved, to get a better overall assessment. At the same time vertical measurements from the tops of the survey poles, the stern trench poles, the galley and the sternpost will be made, on an ongoing basis to provide some information on the movement of the sediments. It has also been thought at this stage not to open up the stern trench to see if the ship's structure has been impacted. It is considered better at this stage to establish a regular bi-weekly monitoring program throughout 2005 to watch the movement of the sand and react subject to this movement. Possible reactions could be to commence an appropriate stabilisation program on areas that are being uncovered along with the recording of the uncovered cultural material, or a survey and excavation project. Given the present state of the MAU's facilities and program and that it needs to re-establish a new headquarters, re-equip itself and to care for the artefacts that survived the Tsunami, it is not recommended that an excavation project should be implemented during 2005 if cultural material becomes uncovered. It has been recommended that the recording and stabilisation program be implemented.

2005 will also be used to inspect and monitor the other sites in Galle Harbour, to assess if they were damaged by the Tsunami and to develop their expertise in the 'Site Recorder' program which was introduced to the team. The team is also keen to develop a strategic plan for the next three years. Two issues that could play a significant part in such a plan are the development of an academic framework for maritime archaeology and maritime archaeology conservation in association with PGIAR in Colombo and James Cook University in Queensland, Australia, and the development of the UNESCO Regional Training Centre in maritime archaeology.



*MAU staff with part of the donated equipment*

### **The new MAU**



The Sri Lankan MAU team members were very keen to re-build their facility. Fortunately they got permission to establish the new MAU in an annex to the 17<sup>th</sup> century hospital in the fort. The expert team brought equipment to help, including a diving kit for six divers, underwater survey equipment and equipment for caring for the remaining artefacts. The Netherlands Cultural Fund provided the funding for this equipment and the funds for the foreign team's travel and accommodation. In addition, a Disaster Emergency Relief Fund was accessed which allowed for the refurbishment of another building and other urgent matters to resume the work of the MAU. Most of the institutes lending experts for the mission also donated equipment and tools. In general there was an overwhelming

*(middle) joint forces to renovate the new building,  
(right) donations for the 'restoration' of the conservation capacity.*



## The Maritime Museum



*The Dutch warehouse proposed location for the future New Maritime Museum*

Museum facilities will play an important role in the rehabilitation of Galle as a cultural centre. Roelof Munneke was asked to investigate the possibilities to establish a first museum display in anticipation of a New National Maritime Museum as future development

Based on the available materials, collection and capacity a planning has been made for the opening of a maritime archaeological display in March 2006. A project team has been formed lead by Rasika Muthucumarana (maritime archaeologist) and Roelof Munneke (museum consultant). They hope to identify (and get permission to use) a suitable location to house this exhibition before June 2005.

This pilot project will explore the contents of a future display doing justice to the rich maritime past of Sri Lanka and will build capacity within the team of maritime archaeologist and conservators to take on their as future curators National Maritime Museum. Basic funding will be provided by the Avondster-project, but additional funds might be required. Already we received a lot of support for the museum rehabilitation. We hope to be able to consolidate a network of international cooperation.

### **First impression on the tsunami effect on the city of Galle by Harry Boerema**

The damage to the ramparts, caused by the tsunami on the east side of the city is considerable. However the damage on the south and on the west is less severe as the waves did not go over the ramparts. Between the Sailors Bastion and the Aurora Bastion (east-side), three sections have been smashed off the top of the rampart wall. On these locations, the wall thickness is only 1.25 metres and there is no supporting mud layer behind it. These top layers of the ramparts are not the original 17<sup>th</sup> century ones but of relatively recent date. This can be seen on the materials used and on the type of masonry work. Behind the damaged wall, a number of buildings have been heavily damaged by the force of the incoming water. No new damage was caused on the Star Bastion, by the Tsunami. The slope is covered by plants, holding the mud together preventing further erosion. The Sailors Bastion suffered considerable damage, due to a combination of factors. Much of the pointing had already been washed out before the Tsunami struck. During the Tsunami, a few sections directly above the waterline collapsed and were washed away. Also the temporarily repaired north- east corner of the bastion was undermined.

The damage on the east compared to the damage on the south and on the west of the city gives the impression that the Tsunami waves folded from the east. However, it should be noted that the coral reefs on the south and on the west of the city have always given the ramparts better protection against the force of the sea. On the east side, the Sailors Bastion is missing the protection of a coral reef. Here, the sea is constantly beating at the bastion. This bastion has therefore always been the most vulnerable one of the ramparts.



*Between the Sailors Bastion and the Aurora Bastion*

Because of the high level of the location within the city, the recently restored Dutch Reformed Church has not been affected by the Tsunami. The Dutch Warehouse is located near the old harbour on the lower level of the city. This very long warehouse (175 metres) is part of the rampart wall and the old city gate is located within its mid-section. The Tsunami waves were forced through the city gate, and filled up the lower area of the city. The water reached a level of 2.2 metres in the warehouse causing little structural damage. Investigation has been done on the effect of the salt water on the walls. The area near the warehouse could drain rather quickly again through the city gate but the water in the southern region of the city was blocked between the ramparts and the natural higher regions of the city. The sewage became blocked by sand, preventing the water running out again. Due to the high waves, huge pressure was built up in the sewers from the outside, causing damage to the streets and to the ramparts. Sewer lids were pushed off and water and sand were spouting out of the sewer drains into the streets. Behind the Flag Rock, a big gab appeared in the mud-section of the rampart. This phenomenon occurred with big bangs and many inhabitants were worried about shooting incidents.



*Sewer drain on the outside of the ramparts.  
One of the two sewer drains is more or less blocked.  
The other sewer drain washed clean again.*



*At the Flag Bastion, a hole of 3 meter in diameter is blown in the mud section behind the rampart wall. This is caused by the huge pressure being build up in the sewer system by the tsunami.*

## **Colophon**

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Galle Heritage Reconstruction Project.

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### *Donation coordination point in Australia:*

Ross Anderson, Maritime Heritage Unit Victoria and Mack McCarthy Department of Maritime Archaeology WA Maritime Museum are coordinating the donations through the AIMA: [ross.anderson@dse.vic.gov.au](mailto:ross.anderson@dse.vic.gov.au)

Donations of publications for the library are coordinated through Christine Ketel: [cvdpketel@yahoo.co.uk](mailto:cvdpketel@yahoo.co.uk)