

THE WRECKSITE OF TITANIC

JOINT NATIONAL MARITIME MUSEUM/INTERNATIONAL CONGRESS OF MARITIME MUSEUMS REPORT : MARCH 1997

INTRODUCTION

The writing of this report was agreed at a meeting in New York in early December 1996. Discussions and evidence collection was undertaken during a visit to Toulon and London between 9th and 14th February 1997, financed by the National Maritime Museum. The team was composed of:

Dr Roger Knight (Deputy Director, National Maritime Museum, UK)
Gillian Hutchinson (Curator of Archaeology, National Maritime Museum, UK)
Dr Kevin Fewster (President of the International Congress of Maritime Museums and
Director of the National Maritime Museum, Australia)
Dr James Delgado (Executive Director, Vancouver Maritime Museum and ICMM Executive
Council liaison with the Archaeological Sub-Committee)
Larry Murphy (Archaeologist, National Parks, USA)

George Tulloch, President of RMS Titanic Inc., was to have joined the team, but was prevented from doing so by illness.

PURPOSE

- to evaluate the standards of recording and excavation
- to examine the problems in writing an archaeological report, define what it should contain and how it should be done
- to make general recommendations on the way ahead

METHOD

The purpose of going to Toulon was to examine the IFREMER records and to talk to their scientists about their methods, and also to see PH Nargeolet, the commander of the Titanic dives and until very recently an employee of IFREMER. In the event, the management of IFREMER became suspicious of our intentions and, at the last minute, withdrew from arrangements to talk about the subject with their scientists. They did allow an inspection of the workshops and of *Nautilie*, the deepsea submersible which made the 1987, 1993, 1994 and 1996 dives on the wrecksite. Though it was useful for the team to see the professionalism and advanced technical expertise of the organisation, nothing of substance was discussed.

By contrast, the discussions with PH Nargeolet, which lasted a day and a half, were very fruitful. He is now Executive Director of AQUA PLUS, but is no longer in contact with IFREMER. He holds a substantial amount of video and paper records of all four expeditions.

FINDINGS

Data Recording

At the New York meetings, it was unclear whether the level of the accuracy of data recording was sufficient to allow production of a scholarly scientific archaeological report. The recent meetings with IFREMER and PH Nargeolet indicate that extant data collected is adequate for report production. We were delighted to find that sufficient data quantity and quality exists to produce a professional, scientific report.

The Archive

As can be seen by Appendix 3, the archive is scattered, disorganised and at risk. An immediate effort should be made to centralise the archive in an institution, after which it should be inventoried and put into archival quality media. (Confidentiality of the records can still be maintained and access to them can be tightly controlled.) This process must have started before the commencement, and be part, of the writing of the archaeological report.

The Archaeological Report

Since a large proportion of the data is digital, it follows that two products may be appropriate. Firstly, there is the conventional, scholarly report. The second is a compilation of materials in digital format and accessible through a Geographical Information System (GIS). This system allows a comprehensive presentation that is analytically useful. (The conventional report would need to be based on the type of data manipulation which GIS provides.) GIS would expedite analysis of natural and cultural data collected and provide a cumulative framework for future work. In addition, GIS would significantly enhance future data collection directed towards scientific questions and augmentation of current data. (GIS also has commercial development possibilities for the Titanic project since it presents data in an engaging and user-friendly package.)

Long-term Site Protection

Provided these initiatives are successful, the institutions represented in this report would work with RMS Titanic Inc. as the Salvor-in-Possession to develop long-term site protection on an international scale. We will accelerate our best efforts to achieve an international agreement between Great Britain, France, Australia and the United States as a collective international cultural heritage of mutual interest.

SUMMARY OF CONCLUSIONS

To continue organisational affiliation with the maritime museum community in general, as represented by the ICMM, and specifically the National Maritime Museum, we seek RMS Titanic Inc.'s commitment to carry out the following actions:

1 Reaffirm publicly that the collection will remain intact (This was agreed by George Tulloch in New York)

Timescale: immediate

2 Assemble comprehensive archive

Timescale: commencing immediately - completion by end of 1997

3 Compile archaeological report

Timescale: commencing once initial data assembled - completion within a year of start

4 Complete the conservation of all material recovered

Timescale: ongoing process - timetable to be disclosed.

DISCUSSION - THE ARCHAEOLOGICAL REPORT

Contents of report

Minimally, an archaeological report, which in this case is an interim report, should address and detail the following:

1 Site description: cultural and natural factors, including a site map and detailed environmental context, including remote sensing data.

2 Methodology: equipment, data collection, recording, dive operations, navigation, artefact recovery, handling and documentation, sample collection, map of dive plots.

3 Site analysis: seabed distribution, formation processes, both wreck event and post-depositional deterioration.

4 Artefact collection: selection criteria, positioning, documentation.

5 Artefact analysis: by material, association, systematic context, map.

6 Conservation: onboard procedures, laboratory procedures by material, results, documentation current status.

7 Archaeological discussion, including research questions and potential.

8 Recommendations for future research and preliminary research design.

- Appendices: a. artefact list (catalogue) with provenience
- b. supporting reports eg sediment, oceanographic, biological, hull fabric etc

Resources, tasks and methods

1 The principal investigator should be a professional archaeologist fluent in French and English, and ideally with direct experience in underwater archaeology, computer systems, navigation, aspects of deep ocean engineering, late nineteenth- and early twentieth-century maritime culture and project administration.

2 It is essential that key parts of the archive be assembled and available to the principal investigator before the start of compiling the report. Collating the various archives into a single repository will involve a significant interaction with PH Nargeolet, IFREMER and RMS Titanic Inc. representatives in Toulon, Brest and New York. Report completion entails manipulation and analysis of written, graphic, and digital materials. Consequently, computer hardware and electronic storage medium capabilities must be available.

3 Computer capabilities. Initially, an electronic database should be compiled and spatially referenced. Database categories will be developed as a natural result of archival compilation. To the extent that the data can be reliably spatially referenced, it is directly applicable to Geographic Information System (GIS) presentation and manipulation. Database categories, eg sub position, date and artefact classification, can be presented as themes, which can expedite site map production and site analysis. In addition, the GIS becomes a comprehensive, cumulative repository for future work that becomes a dynamic analytical tool for future site research. Ultimately, all records can be digitized and incorporated into the database. Archival electronic data storage is presently best accomplished by CD-ROM media, which requires a CDR (CD writer) hardware and software. It should be noted that the GIS is made up from off-the-shelf software programmes.

4 In order to access the corpus of electronic data, a specialist in computer operations, necessarily with GIS experience, should be part of the report writing team. The computer specialist should be directly supervised by the principal investigator. Timely report completion may require additional personnel, including a computer technician or assistant to digitize documents and other non-digital records and images.

5 Video. The video record is currently on Beta and SVHS format images, which has about a two-decade shelf life under ideal storage conditions. There is image degradation each time the tape is played, consequently it is important that the tapes be archived as soon as possible. They will be needed for the archaeological report. These original datatapes should be copied on digital Beta (which is of archival quality) timecoded for reference and catalogued. They can also be tied to the GIS and used as a source for additional site and artefact images. This archival task could be contracted.

6 Still photography. Still photography of the site, including the hull remains, features and individual artefacts, as well as site operations, were not viewed or assessed by the team. These images, which reportedly number tens of thousands, need to be collated, assessed, spatially referenced, and relevant images selected for the report.

7 Written documents. A number of reports, dive logs, and observations need to be collated and assessed. These documents, with the digitized data, still photography and video, form the bulk of the material required for the completion of the archaeological report.

FINAL SUMMARY

The reporting team are aware that they are recommending a course of action which is expensive, perhaps as much as the cost of two or three dives to the site. It involves at the least, two highly skilled people, together with an assistant, and investment in computer hardware and software, for a considerable amount of time. However, there is such a backlog of vital, unprocessed information that the only possible way to deal with it is by sophisticated computer technology.

However, RMS Titanic Inc. and IFREMER have dived on the site 96 times over eleven years and several thousand artefacts have been recovered. The first major exhibition of artefacts goes on display in the USA imminently. Professional maritime archaeologists have, for the first time, a clear view of what has been achieved and what remains to be done to ensure a future for site, the collection and the information which has been gained so far. The archive is dispersed and at risk. The State Department has produced a draft intergovernmental agreement for the future protection of the wreck site.

This is clearly a defining moment. If further dives take place without bringing this information together, and using it to make a logical and scientific research plan, then none of this team can believe any further in the higher motivations of RMS Titanic Inc. And at the very least, and even without archaeological considerations, the submersible will be retracing its steps on the seabed, wasting time and money.

In the words of the independent maritime archaeologist, the position recording and artefact recovery was 'accurate and sophisticated'. However, if nothing is done to record and collate this data now, it might as well never have been collected in the first place.

We remain optimistic that RMS Titanic Inc. will agree to this report and take immediate and public steps to implement the four major areas to be resolved.