



## IKUWA 3 Professional Development Field School

***Exploring strategies and methodologies for recording boat and ship remains***

**7th - 9th July 2008**

**Venue: Fort Cumberland and Horsea Island, Portsmouth**

### **Summary**

The IKUWA3 fieldschool will focus on the current debate in UK archaeology on what, how and why archaeologists record the remains of boats and ships. In 2007 a session held at the *Institute of Archaeologists* Annual Conference stimulated much debate on the need for a national strategy for recording the remains of boats and ships. Following on from the conference in October 2007 the IFA formally endorsed a guidance document entitled "*Standards and Guidance for Nautical Archaeological Recording and Reconstruction*". The IKUWA3 fieldschool will continue to explore this theme and through practical sessions will demonstrate the range of new recording methodologies available to maritime archaeologists.

Although reference will be made to a variety of boat and ship remains including the *Newport Ship* and the *SS Great Britain*, the fieldschool will focus on the remains of the *Princes Channel Wreck* or *Gresham Ship*, a Tudor ship dating to around 1574 that was discovered in the River Thames in 2003.

The practical sessions will explore the use of state of the art survey methodologies being utilised for archaeological timber recording – 3-dimensional digitising, laser scanning and photogrammetry. These sessions will be undertaken on a composite hull section of a vernacular boat from the River Itchen, Southampton, as well as on hull timbers from the *Gresham Ship*.

The IKUWA3 fieldschool will be non-diving, but there will be an opportunity for delegates to dive in Horsea Island Lake to see composite sections of the hull of the *Gresham Ship*.

The fieldschool is aimed at students of archaeology, field technicians and general practitioners of maritime archaeology who have already received a basic level of training and have some practical experience on archaeological projects.

For information on the *Gresham Ship / Princes Channel Wreck*:

<http://www.wessexsearch.co.uk/projects/marine/thameswreck/index.html>

<http://www.ucl.ac.uk/archaeology/project/gresham-ship/index.html>

### Timetable (subject to change)

**Monday 7<sup>th</sup> July 2008**

Venue: Fort Cumberland, Portsmouth

**Subject: Recording ship and boat remains**

#### **Session Summary**

Day 1 of the IKUWA3 fieldschool will begin by exploring the development of standards and guidance for the recording of ship and boat remains and will provide an insight into the work already undertaken and continuing to be carried out on the *Gresham Ship*, before stressing the importance of understanding the raw material in any archaeological study of ship and boat remains.

**Session Leaders: Gustav Milne, University College London**

09:00-09:30	Introductions and welcome
09:30-10.15	Standards and strategies for recording ship and boat remains
10.15-10.45	<i>The Gresham Ship Project</i> case study
10.45-11:15	Break
11:15-12:00	A recording strategy for working in the Thames
12:00-12:30	Dating the <i>Gresham Ship</i> – Dendrochronology
12.30-13:30	Lunch
13.30-14.30	The <i>Gresham Ship</i> hull study
14.30-15:00	Understanding the raw materials
15:00-15.30	Break
15.30-16.15	Introduction to 3D digital recording using the <i>Faro Arm</i> on the <i>Newport Ship</i>
16.15-16.45	Discussion and close
<b>16.45-19.30</b>	<b>Travel to Horsea Island for optional dive of the <i>Gresham Ship</i> (transportation will be provided)</b>

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**Tuesday 8<sup>th</sup> July 2008**

Venue: Fort Cumberland, Portsmouth

**Subject: Methodology: 3D digital recording using the *Faro Arm***

#### **Session Summary**

Day 2 of the IKUWA3 fieldschool will focus on the use of 3-dimensional recording capabilities of the *Faro Arm*, combined with *Rhinoceros* software. In the session consideration will be given to cost effectiveness, availability of technology as well as the advantages for analysis and presentation and will aid discussion on how to deliver acceptable standards of recording of boat and ship remains.

**Session Leader: Nigel Nayling, University of Wales, Lampeter**

#### **Timetable**

09.00-09.30	Meet at Fort Cumberland
09.30-13:30	Practical session using the <i>Faro Arm</i>



13:30-14:30 Lunch Break.  
14:30-17:00 Practical session on processing data from the *Faro Arm*  
17:00-17:30 Discussion and Close

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### **Wednesday 9<sup>th</sup> July 2008**

Venue: Fort Cumberland, Portsmouth

#### **Subject: Methodology: Laser scanning and photogrammetric surveying**

##### **Session summary**

Day 3 of the IKUWA3 fieldschool will focus on the use of 3D laser scanning technology to record vessel remains in 3-dimensions. This technique uses a low-powered laser to measure the position of a point on an object in 3-dimensions. As time progresses, many measurements are taken, building up a complex and highly accurate 3-dimensional map of the surface of the object. Students will not only be introduced to the principles of 3D laser scanning but also take part in a survey ships timbers. This technology has to date been used on a couple of maritime structures including a stern carving from HMS *Colossus* ([www.archaeoptics.co.uk](http://www.archaeoptics.co.uk)) and the remains of the *Sub Marine Explorer* in Panama (IJNA 35.2, 230-252).

As in Day 3, this session will give consideration to cost effectiveness, availability of technology as well as the advantages for analysis and presentation and will aid discussion on how to deliver acceptable standards of recording of boat and ship remains.

The IKUWA3 fieldschool will end with a discussion on the need to tailor archaeological survey techniques and the fundamental requirement to understand a methods strengths and weaknesses to achieve the required standard of recording.

#### **Session Leaders: Wessex Archaeology and Downland Partnership**

##### **Timetable**

09.00-09.15 Meet at Fort Cumberland  
09.15-09.45 Laser scanning and photogrammetric surveying in archaeology  
09:45-12:30 Practical session with laser scanning and photogrammetric surveying  
12:30-13:30 Lunch Break.  
13:30-15:45 Practical session processing laser scan data  
15:45-16:00 Break  
16:30-17:00 Recording boat and ship remains – *seeking agreement on how.*  
17.00-17:30 Discussion and close

##### **Cost:**

All 3 days: £175.00 per delegate

Costs do not include accommodation.

NAS Part 3 points awarded: 6 point (Survey module) 6 points (Recording module) and 3 points (Managing Archaeology module), 3 points (Research and IT module).



Nautical  
Archaeology  
Society

The IKUWA 3 fieldschool has been kindly supported by:

Wessex Archaeology



The University of Wales, Lampeter



The Nautical Archaeology Society



The University of Southern Denmark



University College London



Hampshire and Wight Trust for Maritime Archaeology



Downland Partnership  
[www.exactsurvey.com](http://www.exactsurvey.com)



*The Downland Partnership are leaders in recording historic sites and objects. We use a range of contemporary technologies including laser scanning and digital photogrammetry at locations across the UK, Europe and North America. Recent surveys include the SS Great Britain in Bristol and The Newport Ship in South Wales as well as many important buildings such as Westminster Abbey, Hampton Court Palace and Kings College Cambridge.*