

Ancient Monuments Laboratory  
Report 56/97

WALL PAINTING CONDITION AUDIT,  
UPNOR CASTLE, KENT

J Davies  
S Stewart

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**WALL PAINTING CONDITION AUDIT,  
UPNOR CASTLE, KENT**

J Davies  
S Stewart

**Summary**

This condition audit of wall paintings at Upnor Castle includes a wall painting record, general audit information, documentation of original materials and execution of the painting, and deterioration and damage including previously used materials and treatment, as well as proposals for treatment and monitoring strategies.

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## Upnor Castle Kent

The following report has been generated by the Wall Painting Section database. This archival system provides a computerised record of all wall paintings in English Heritage Historic Properties and is intended to comprehensively document the collection. Each report has been subdivided into four sections to present the data in a clear format. These include:

**1 Wall Painting Record:**

Includes a description of the site and paintings, as well as archival information, such as bibliographic references and photographic records.

**2 General Audit Information:**

Describes any monitoring undertaken and a synopsis of future conservation requirements.

**3 Technique:**

Documents the nature and condition of the original materials and execution of the painting which is described according to its stratigraphy and any related analysis.

**4 Deterioration and damage, added materials, treatment:**

*Deterioration and damage* lists the types of alterations which may have occurred, that is either deterioration (natural alterations such as cracking or delamination) or mechanical damage (such as graffiti).

*Added Materials* documents all non-original materials present on or within a painting. These may include naturally occurring substances (accretions, such as dirt and dust) or deliberately added materials (coatings, coverings and repairs).

*Treatment* documents previous interventions and proposed treatment and monitoring strategies.

Throughout each section, an area of painting is assigned a number between 1 and 4 which is intended as a general indication of present condition. These are: 1 good, 2 fair, 3 poor, 4 unacceptable.

This report is based on information gathered prior to March 1996 and does not include any changes in condition, further research or treatment undertaken after this date. Amended editions will be produced as necessary.

# Contents

**1** Guard-room, second floor

**2** Clock-room, second floor



Second floor, Clock room



Second floor, Guardroom



# 1 Wall Painting Record

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Property name	UPNOR CASTLE		
Region	South East	County	Kent
Location of painting	Guard-room, 2nd floor		
Orientation	NORTH, EAST, WEST, SOUTH.		
Century 17 <sup>th</sup>	Date	1601	Height (cm) 250      Width (cm) 1000
Subjects included	Various decorative motifs		

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## Description

In 1560 Queen Elizabeth and the Privy Council ordered a Bulwark built at Upnor. The building was designed by Sir Richard Lee and the building accounts, kept by Richard Watts, still exist. Between 1599-1601 enlargements and additions including the construction of a defensive ditch, timber palisade, drawbridge and gatehouse, which contains the guard-room, were undertaken under the direction of Sir John Leveson. In 1653 a fire in the gatehouse destroyed five soldier's rooms and scorched the stonework of the first floor walls. Subsequently the Governor of the castle petitioned the Admiralty for the repair of the gatehouse, and repairs and additions were undertaken, including the heightening of the gatehouse. The Dutch raid of 1667 led to a revision of coastal defences, with new forts downstream at Gillingham Fort and Cockham Wood. These reduced Upnor's strategic importance, and in 1668 Upnor was converted into 'a Place of Stores and Magazine', which supplied munitions to the navy. In 1718 new barracks were built to the south west of the castle. The South Tower was allowed to the Governor as private quarters. However it was never occupied, due to the poor condition of the building. In c.1809 the clock was installed in the gatehouse. In 1827 Upnor ceased to be a magazine and was fitted up as an Ordnance Laboratory, and by 1840 no gunpowder or explosives were stored in the castle. In 1891 Upnor was transferred from the War Office to the Admiralty. In 1945 the castle was recognised as a museum and by 1961 the castle was maintained as a national monument.

The painted decoration within this room is comprised of black band, geometric and strapwork 'stencil' pattern. Originally it is likely to have extended over the entire wall surface, but is now lost on the north wall, with the remainder limewashed over. Small areas of the design are visible within the fireplace and on the chimney breast. In the late 1940's two sections of the decoration were uncovered, one on the south wall, and the other to the left of the fireplace but both have unfortunately been waxed. The dimensions given are those of the wall height and the continuous length of walls.

## Photographic Record

29/6/94 EH 'current' contact photo files; no images of wall paintings.

DOE negative search;  
Upnor Castle; no relevant DOE negatives found.

## Bibliography

B.H. O'Neil and S. Evans, 'Upnor Castle, Kent', *Archaeologia Cantiana*, 65, (1952), 1-11.

F.W. Reader, 'Tudor domestic wall-paintings', Part 1, *Archaeological Journal*, 92, 1935.

A.D. Saunders, *Upnor Castle, Kent*, EH guidebook, HMSO, 1967.

## 2 General Audit Information

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<b>Property name</b>	UPNOR CASTLE	<b>County</b>	Kent
<b>Region</b>	South East		
<b>Location</b>	Guard-room, 2nd floor		
<b>Orientation</b>	NORTH, EAST, WEST, SOUTH.		
<b>Century</b> 17 <sup>th</sup>	<b>Date</b> 1601	<b>Height (cm)</b> 250	<b>Width (cm)</b> 1000
<b>Auditor(s)</b>	SS/JD	<b>Start date</b>	20/06/94

**Overall condition score** 3

### Recommendations

The condition of the plaster varies. Much is reasonably sound, but there are fragile areas particularly below the window and on the chimney breast. An overall treatment programme is therefore required. This should include: removal and replacement of unsuitable cement edging repairs; flake fixing and surface cleaning. Testing should also be undertaken to assess the feasibility of reducing areas of wax coating which is contributing to flaking. [Timescale: 2 conservators, 3 weeks within 3 years].

In addition it is highly likely that extensive areas of original decoration could be uncovered. This would be a desirable intervention in terms of protecting the decoration from accidental damage and would also allow an overall assessment of the condition of the decoration throughout the room. A testing phase should therefore be made to ascertain the most suitable uncovering methods and materials and from which to assess the time required [Timescale: 1 conservator: 1 week].

It is understood that the responsibility for the care of the building is to be passed to the City of Rochester.



### 3 Audit Information: Technique

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Property name UPNOR CASTLE  
Region South East County Kent  
Location Guard-room, 2nd floor  
Orientation NORTH, EAST, WEST, SOUTH.  
Century 17<sup>th</sup> Date 1601 Height (cm) 250 Width (cm) 1000  
Auditor(s) SS/JD Start date 20/06/94

**Overall Condition Score 3**

#### Stratigraphy

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Layer type Support Layer Specific condition Score 2

**Thickness**

**Comments**

Timber (roughly sawn), stone and brick are the support materials. Chisel marks are visible in the stonework.

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Layer type Render Layer 1 Specific condition Score 3

**Thickness**

**Comments**

Lime/sand/hair plaster render, thickness unknown. Charcoal inclusions were noted.

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Layer type Ground Layer 1 Specific condition Score 3

**Thickness**

**Comments**

There appears to be a limewash ground.

---

Layer type Paint Layer 1 Specific condition Score 3

**Thickness**

**Comments**

Black pigment, thinly applied.

Identified pigments Colours  
CHARCOAL BLACK

## 4 Audit Information: deterioration and damage, added materials, treatment

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Property name	UPNOR CASTLE		
Region	South East	County	Kent
Location	Guard-room, 2nd floor		
Orientation	NORTH, EAST, WEST, SOUTH.		
Century 17 <sup>th</sup>	Date	1601	Height (cm)250
			Width (cm) 1000

### DETERIORATION AND DAMAGE

#### Deterioration phenomena

**Type** delamination (paint layer)

**Location** General

**Comments** Flaking of the paint layer is being accelerated by the presence of the wax coating.

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**Type** delamination (render layer)

**Location** Extensive, particularly noticeable above fireplace.

**Comments** Hollow patches and fragile areas were noted.

---

**Type** flaking

**Location** Throughout

**Comments** Areas of overlying limewash are flaking.

---

#### Mechanical damage

**Type** cracking/fracturing

**Location** General, in particular to south east corner.

**Comments** Cracking of the plaster has occurred.

---

## ADDED MATERIALS

### Accretions

**Type** dust

**Location** General

**Comments** Some surface dust is present.

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### Coatings/Coverings

**Type** wax

**Location** Exposed decoration.

**Comments** Many areas are very heavily waxed, 1-2 mm. The wax is now very discoloured. Lower areas are beginning to flake.

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**Type** limewash

**Location** Throughout.

**Comments**

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### Repairs

**Type** cement

**Location** General

**Comments** Edging repairs have been carried out using hard unsuitable cement mortar.

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**Type** cement

**Location** Ceiling

**Comments** Ceiling has been replaced with a cement render (?).

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## TREATMENT

### Past Treatment

**Type** APPLICATION OF COATING                      **Date** 01/04/49  
**Person** Charles Mitchell and Charles Robinson  
**Comments** Wax 'preservative' has been applied to exposed areas of decoration. As the practice of waxing paintings generally ceased after 1953 it seems likely that the paintings were waxed soon after they were uncovered in 1949.

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**Type** UNCOVERING    **Date** 01/04/49  
**Person** Charles Mitchell and Michael Robinson  
**Comments** Attribution of work to Mitchell and Robinson is based on a hand written note by C.B. in site file.

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### Proposed Treatment

**Type** CLEANING    **Date** 20/06/94  
**Person** SS/JD  
**Comments** Surface cleaning is required.

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**Type** FILLS/REPAIRS INSERTION                      **Date** 20/06/94  
**Person** SS/JD  
**Comments** Replacement of unsuitable repairs should be considered.

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**Type** FILLS/REPAIRS REMOVAL                      **Date** 20/06/94  
**Person** SS/JD  
**Comments** Unsuitable repairs should be removed as necessary.

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**Type** FLAKE FIXING    **Date** 20/06/94  
**Person** SS/JD  
**Comments** Flake fixing is urgently required in waxed areas.

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**Type** GROUTING    **Date** 20/06/94  
**Person** SS/JD  
**Comments** Grouting of hollow areas should be considered.

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**Type** TESTING    **Date** 20/06/94  
**Person** SS/JD  
**Comments** Testing to ascertain the feasibility/desirability of reducing the wax should be undertaken as part of an overall treatment programme.

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**Type** UNCOVERING    **Date** 20/06/94  
**Person** SS/JD  
**Comments** Further areas of decorative painting may be present below limewash layers.

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# 1 Wall Painting Record

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<b>Property name</b>	UPNOR CASTLE		
<b>Region</b>	South East	<b>County</b>	Kent
<b>Location of painting</b>	Clock-room, 2nd floor		
<b>Orientation</b>	NORTH-EAST CORNER		
<b>Century 17<sup>th</sup></b>	<b>Date</b>	<b>Height (cm)</b> 50	<b>Width (cm)</b> 50
<b>Subjects included</b>			
Ship			

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## Description

In 1560 Queen Elizabeth and the Privy Council ordered a Bulwark built at Upnor. The building was designed by Sir Richard Lee and the building accounts, kept by Richard Watts, still exist. Between 1599-1601 enlargements and additions including the construction of a defensive ditch, timber palisade, drawbridge and gatehouse, which contains the guard-room, were undertaken under the direction of Sir John Leveson. In 1653 a fire in the gatehouse destroyed five soldier's rooms and scorched the stonework of the first floor walls. Subsequently the Governor of the castle petitioned the Admiralty for the repair of the gatehouse, and repairs and additions were undertaken, including the heightening of the gatehouse. The Dutch raid of 1667 led to a revision of coastal defences, with new forts downstream at Gillingham Fort and Cockham Wood. These reduced Upnor's strategic importance, and in 1668 Upnor was converted into 'a Place of Stores and Magazine', which supplied munitions to the navy. In 1718 new barracks were built to the south west of the castle. The South Tower was allowed to the Governor as private quarters. However it was never occupied, due to the poor condition of the building. In c.1809 the clock was installed in the gatehouse. In 1827 Upnor ceased to be a magazine and was fitted up as an Ordnance Laboratory, and by 1840 no gunpowder or explosives were stored in the castle. In 1891 Upnor was transferred from the War Office to the Admiralty. In 1945 the castle was recognised as a museum and by 1961 the castle was maintained as a national monument.

The castle was damaged by bombing in 1941 which disturbed the plaster on the archway in the South Tower, revealing two dates and two initials incised into the stone. The painting was also discovered at this time [Archaeologia Cantiana, p.8] and depicts a ship, sketched in red directly on the plaster background.

The painting was examined (and possibly fully uncovered and treated) in April 1949 by Charles Mitchell of the Warburg Institute and Michael Robinson of the National Maritime Museum who describe the decoration as follows:

'There is a quite clear spritsail topmast which could not appear in big ships after 1720. The curved shape of the head would pass for anything after 1660. There is one obscurity. The figurehead has the appearance of the fiddle head type which means a date about 1800. In the late seventeenth or early eighteenth century there would have been a lion figurehead, but this is a crude drawing and what looks like a fiddle head is very probably shorthand for a lion figurehead. There is one other explanation, namely, that this is a consciously archaic but inaccurate drawing of an older ship drawn by a man who lived in the days of the fiddle head, but that is a remote and unlikely possibility. The spritsail topmast would have passed from the memory of most practical seamen by 1800. We incline to date the drawing about 1700'.

[From Archaeologia Cantiana, p.8].

## Photographic Record

29/6/94 EH 'current' contact photo files; no images of wall paintings.

## Bibliography

B.H. O'Neil and S. Evans, Upnor Castle, Kent, Archaeologia Cantiana, 65, (1952), 1-11.

A.D. Saunders, Upnor Castle, Kent, EH guidebook, HMSO, 1967.

## 2 General Audit Information

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Property name	UPNOR CASTLE	County	Kent
Region	South East		
Location	Clock-room, 2nd floor		
Orientation	NORTH-EAST CORNER		
Century 17th	Date	Height (cm) 50	Width (cm) 50
Auditor(s)	CB/SS/JD	Start date	07/01/94

**Overall condition score**        **3**

### Recommendations

A full condition survey could not be undertaken due to the presence of the glass cover. However, it is clear that the painting has undergone considerable deterioration. A general programme of treatment is therefore necessary, subject to a full condition survey after the removal of the cover. This should include flake fixing, stabilisation of plaster as necessary, possibly removal and insertion of repairs, as well as cleaning tests to assess the feasibility/desirability of cleaning to remove wax [Timescale: 2 conservators, 3 weeks, within 2 years]. In addition the painting should be photographed, and the condition recorded and monitored at regular intervals.

Not only is the cover unsightly but it can also be presumed to be creating an adverse micro-climate in direct contact with the painting. However, it may also be protecting the painting from inadvertent mechanical damage. A programme of conservation should therefore consider modifying the existing cover, for example by providing increased ventilation and/or increasing the gap between the glass and the surface of the painting.

It is understood that the responsibility for the care of the building is to be passed to the City of Rochester.

### 3 Audit Information: Technique

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**Property name** UPNOR CASTLE  
**Region** South East **County** Kent  
**Location** Clock-room, 2nd floor  
**Orientation** NORTH-EAST CORNER  
**Century** 17<sup>th</sup> **Date** **Height (cm)** 50 **Width (cm)** 50  
**Auditor(s)** CB/SS/JD **Start date** 07/01/94

**Overall Condition Score** 3

#### Stratigraphy

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**Layer type** Support Layer **Specific condition Score** 2

**Thickness** 20 cm

#### **Comments**

Support layer is not visible, however it appears to be of the same type as in the adjacent garderobe.

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**Layer type** Render Layer 1 **Specific condition Score** 3

**Thickness**

#### **Comments**

Appears to be a lime/hair plaster.

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**Layer type** Paint Layer 1 **Specific condition Score** 3

**Thickness**

#### **Comments**

The painting is lightly sketched in red directly on the plaster render layer.

**Identified pigments** **Colours**

--- red



## 4 Audit Information: deterioration and damage, added materials, treatment

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Property name	UPNOR CASTLE		
Region	South East	County	Kent
Location	Clock-room, 2nd floor		
Orientation	NORTH-EAST CORNER		
Century 17th	Date	Height (cm) 50	Width (cm) 50

### DETERIORATION AND DAMAGE

#### Deterioration phenomena

Type flaking

Location General

Comments Flaking is exacerbated by the wax coating which has also darkened considerably.

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#### Mechanical damage

Type nail holes

Location Wooded frame area

Comments A glazed wooded frame has been bolted over the painting.

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Type cracking/fracturing

Location Repairs

Comments Repairs have been made to plaster adjacent to the painting. These are now cracked and in a fairly poor state.

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## **ADDED MATERIALS**

### **Coatings/Coverings**

**Type** wax

**Location** general

**Comments** Wax was probably applied by Mitchell and Robinson during 1949.

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### **Repairs**

**Type** modern plaster

**Location** adjacent to painting

**Comments** Repairs have been made to adjacent plaster. These are now cracked and appear to be in a poor state.

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## TREATMENT

### Past Treatment

**Type** APPLICATION OF COATING      **Date** 01/04/49  
**Person** Charles Mitchell and Michael Robinson  
**Comments** The painting appears to be waxed.

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**Type** UNCOVERING      **Date** 01/04/49  
**Person** Charles Mitchell and Michael Robinson  
**Comments**

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### Proposed Treatment

**Type** FILLS/REPAIRS INSERTION      **Date** 01/04/92  
**Person** CB  
**Comments** Removal and replacement of unsuitable and unstable repairs should be considered as part of an overall treatment programme. The plaster may also require further stabilisation.

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**Type** FILLS/REPAIRS REMOVAL      **Date** 01/04/92  
**Person** CB  
**Comments** Removal and replacement of unsuitable and unstable repairs should be considered as part of an overall treatment programme.

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**Type** FLAKE FIXING      **Date** 01/04/92  
**Person** CB  
**Comments** Fixing should be included in an overall treatment programme subject to testing.

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**Type** MONITORING CONDITION      **Date** 01/04/92  
**Person** CB  
**Comments** Regular inspections are required.

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**Type** RECORDING AND DOCUMENTATION      **Date** 01/04/92  
**Person** CB  
**Comments** The glass cover should be removed and a thorough condition survey undertaken prior to an overall treatment programme.

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**Type** TESTING      **Date** 01/04/92  
**Person** CB  
**Comments** Testing to ascertain the feasibility/desirability of reducing the wax should be undertaken as part of an overall treatment programme.

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