

Ancient Monuments Laboratory  
Report 48/97

WALL PAINTING CONDITION AUDIT,  
HURST CASTLE, HAMPSHIRE

T Manning  
S Stewart

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HURST CASTLE, HAMPSHIRE**

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**Summary**

This condition audit of wall paintings at Hurst 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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## Hurst Castle Hampshire

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.

# 1 Wall Painting Record

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<b>Property name</b>	HURST CASTLE		
<b>Region</b>	South East	<b>County</b>	Hampshire
<b>Location of painting</b>	Theatre		
<b>Orientation</b>	WEST WING BATTERY, WEST WALL		
<b>Century</b> 20 <sup>th</sup>	<b>Date</b>	<b>Height (cm)</b> 350	<b>Width (cm)</b> 378
<b>Subjects included</b>	Figurative		

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## Description

### The Castle

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'Hurst Castle... is the most powerful of the defences established since the 16th century to guard the western entrance to the Solent. The Tudor castle, built between 1541 and 1544, was extensively modernised during the Napoleonic wars. Its defences were updated again in the 1850s and most spectacularly in the 1860s and 1870s by the addition of the two massive casemated wings which dominate their surroundings. The castle was garrisoned in both world wars.' [Coad1985: frontispiece]

### The Theatre

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'The small theatre was installed by soldiers who were stationed at Hurst castle during World War II, and is located in the west wing battery. The wall painting, possibly the background to a theatre production, [is located at the west end of the room and] covers the east face of a concrete traverse.' [Burbidge and Rickerby 1994: 1]

### Description of the wall painting

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'The painting is delimited by the barrelled vault of the gun battery and a line, 42 cms above floor level, which indicates the level of the original wooden stage that is now missing. On the right side of the painting is an opening which leads to the next gun battery.'

'The painting depicts the romantic scene of a kneeling male figure, hat clasped against his chest, addressing a standing female figure. Both are in period dress. A castle is intimated in the background.' [Burbidge and Rickerby 1994:1]

'The romantic figures of the male kneeling before a female, both in dress similar in style to the Stuart period, and with a castle in the background, could allude to the period of imprisonment of Charles I within Hurst Castle.' [Burbidge and Rickerby 1995:3]

Surrounding the wall painting is a wooden structure, the proscenium arch, which is also painted in blues and reds, with decorative motifs and the arms of the Royal Artillery. As this structure is composed of pine, chipboard, and metal, this has not been included within this audit as it is technically beyond our remit. Some remedial work was carried out on this structure during the 1995 treatment, and further work could be considered here as part of an overall programme of presentation.

## Photographic Record

## **Bibliography**

J. Burbidge and S. Rickerby, 'Conservation of the proscenium arch and wall painting, Gunners' Theatre, West wing battery, Hurst Castle, Hampshire: Report and estimate for treatment' 9 February 1994.

J. Burbidge and S. Rickerby, 'Conservation of proscenium arch and wall painting, Gunners' Theatre, West Wing Battery, Hurst Castle, Hampshire: Treatment Report', 20 March 1995.

J. G. Coad, Hurst Castle, English Heritage guidebook, HMSO, 1985.

J. G. Coad, Hurst Castle: The Evolution of a Tudor Fortress 1790-1945, *Post-Medieval Archaeology*, 19, 1985, 63-104.

O.E. Craster, Hurst Castle, London, HMSO, 1949.

## 2 General Audit Information

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<b>Property name</b>	HURST CASTLE	<b>County</b>	Hampshire
<b>Region</b>	South East		
<b>Location</b>	Theatre		
<b>Orientation</b>	WEST WING BATTERY, WEST WALL		
<b>Century</b> 20 <sup>th</sup>	<b>Date</b>	<b>Height (cm)</b> 350	<b>Width (cm)</b> 378
<b>Auditor(s)</b>	SS, TM	<b>Start date</b>	22/03/96

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

### Recommendations

The wall painting in the Gunners' Theatre, Hurst Castle, has been treated fairly recently by Burbidge and Rickerby (1995). However, the current audit found that flaking and salt efflorescences had recurred in limited areas. Recommendations therefore include:

- (1) Consolidation of the flaking paint, especially in the lower areas, is urgently required in order to avoid further loss of the paint layer. [Timescale: 1 conservator, 2 days]
- (2) Analysis of the environmental monitoring data which has already been gathered would be useful in understanding the behaviour of soluble salts. This may also aid in assessing the effects of the closure of the adjacent window ('No. 1 Fighting Light').
- (3) Further options for the presentation of the room (including the proscenium arch), are outlined in Burbidge and Rickerby (1995). Traces of paint survive on the surrounding walls of the room, and the level of reintegration and/or reconstruction should be considered.

### 3 Audit Information: Technique

<b>Property name</b>	HURST CASTLE		
<b>Region</b>	South East	<b>County</b>	Hampshire
<b>Location</b>	Theatre		
<b>Orientation</b>	WEST WING BATTERY, WEST WALL		
<b>Century</b> 20 <sup>th</sup>	<b>Date</b>	<b>Height (cm)</b> 350	<b>Width (cm)</b> 378
<b>Auditor(s)</b>	SS, TM	<b>Start date</b>	22/03/96

**Overall Condition Score 3**

#### Stratigraphy

<b>Layer type</b>	Support Layer	<b>Specific condition Score</b>	1
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**Thickness** cm

**Comments**

Support not visible from the interior, but presumably composed of brick. Thickness unknown, possibly more than 3 metres thick in places.

<b>Layer type</b>	Render Layer 1	<b>Specific condition Score</b>	1
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**Thickness** cm

**Comments**

Cement render, thickness unknown: in areas of loss it appears to be c. 3 cms thick. The render is extremely hard and solid, regardless of past salt damage. Some small losses remain where fixtures were inserted into the wall.

<b>Layer type</b>	Ground Layer 1	<b>Specific condition Score</b>	2
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**Thickness**

**Comments**

Very thin layer of whitewash or white paint over entire surface.

**Identified pigments Colours**

--- white

<b>Layer type</b>	Ground Layer 2	<b>Specific condition Score</b>	2
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**Thickness**

**Comments**

Yellow (mustard-coloured) ground layer applied over entire surface.

**Identified pigments Colours**

--- yellow

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<b>Layer type</b>	Paint Layer 1	<b>Specific condition Score</b>	4
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**Thickness**

**Comments**

The painting has been executed using a limited palette, in a very stylised and unsophisticated manner using blocks of colour almost as if a stencil were used. Colours include cream, red, brown, green and black. A pale grey has been used to outline the female figure's face. Some pencil has been noted throughout, possibly part of a preliminary underdrawing, or a later addition.

'The paint is very weakly bound with a matt appearance and could be a form of pigmented limewash or a distemper. The palette was limited to red (burnt sienna?), yellow/brown, blue and black. A pink colour was also used for small details such as the outline of fingers...

Some areas of the painting appear of a higher standard than others. This may have been the result of more than one soldier being involved in their execution... the outline of the design is created by the background colour showing between the blocks of colour. Some details have then been superimposed such as the division of the fingers of the female figure... It is very possible that this design was taken from a widely available source, such as a magazine.' [Burbidge and Rickerby 1994:1]

<b>Identified pigments</b>	<b>Colours</b>
---	red
---	brown
---	green
---	black
---	grey

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<b>Layer type</b>	Paint Layer 2	<b>Specific condition Score</b>	4
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**Thickness**

**Comments**

There are several areas of later repainting. Parts of the female figure's skirt have been repainted in a brighter blue, and the hands have been repainted with a cream colour.

<b>Identified pigments</b>	<b>Colours</b>
---	white
---	blue



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

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Property name	HURST CASTLE		
Region	South East	County	Hampshire
Location	Theatre		
Orientation	WEST WING BATTERY, WEST WALL		
Century 20th	Date	Height (cm) 350	Width (cm) 378

### DETERIORATION AND DAMAGE

#### Deterioration phenomena

Type losses (paint layer)

Location North side and upper south side

Comments Large area of abrasion and loss to north side and upper south side.

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Type flaking

Location Skirt of female figure, lower edge

Comments Paint layer is seriously lifting away from the ground, especially at low level.

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Type pitting (surface)

Location Throughout

Comments Pitting throughout the surface, possibly due to past salt damage.

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Type staining

Location Throughout

Comments General drip-marks and smudging due to faulty original technique.

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Type loss of cohesion

Location Paint layer

Comments The paint layer is slightly friable in places. Consolidation of the paint layer (see Past Treatment section) was carried out in 1995.

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#### Mechanical damage

Type scratches

Location Throughout

Comments

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Type nail holes

Location Throughout

Comments Several small losses due to fixtures related to theatre productions.

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## ADDED MATERIALS

### Accretions

**Type** salt efflorescences

**Location** North side, hat of male figure

**Comments** Tiny pockets of small fluffy efflorescences were observed during the current audit.

These had been analysed in 1994 (before the 1995 treatment of the paintings) by Helen Howard of the Courtauld Institute, and were found to be mirabilite (a sodium sulphate) and calcium sulphate.

'The sulphur is very likely to be contamination from explosives. The sodium could be from the concrete. However, what is striking is the total lack of chloride ions present. Mirabilite is known to be highly hygroscopic.' [Burbidge and Rickerby, 1994:2]

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### Coatings/Coverings

**Type** repainting

**Location** Limited areas, especially blue

**Comments** Some repainting has been carried out in the past, especially in the area of the female figure's blue skirt.

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**Type** Sympathetic retouching of losses

**Location** Limited areas

**Comments** According to Burbidge (1994), some limited retouching was carried out using dry pigment bound in a synthetic resin. These areas are not readily visible to the naked eye.

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**Type** synthetic varnish

**Location** Throughout

**Comments** According to Burbidge (1994), the painting was sprayed with a solution of Paraloid B72, a conservation-grade synthetic resin.

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## TREATMENT

### Past Treatment

**Type** APPLICATION OF COATING      **Date** 20/03/95

**Person** John Burbidge and Stephen Rickerby

**Comments** 'When the wall was considered sufficiently dry, the paint layer was repeatedly sprayed with a solution of Paraloid B72, until an optimum visual quality was achieved. The slight darkening of the paint layer which occurred was considered advantageous... As further protection, oxidized ferrous nails embedded in the wall were coated with an additional layer of Paraloid B72.' [Burbidge and Rickerby 1995:2].

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**Type** FLAKE FIXING      **Date** 20/03/95

**Person** John Burbidge and Stephen Rickerby

**Comments** This aspect of the 1995 treatment included: 'Laying lifting and flaking paint over the entire surface of the wall painting using de-ionised water through a protective layer of eltoline tissue.' [Burbidge and Rickerby 1995:2].

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**Type** PRESENTATION/REINTEGRATION      **Date** 20/03/95

**Person** John Burbidge and Stephen Rickerby

**Comments** 'Some retouching was considered necessary to reduce the appearance of the original fixing tests. This was achieved using Paraloid B72 in xylene and pigments.' [Burbidge and Rickerby 1995:2].

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**Type** SALT REMOVAL      **Date** 20/03/95

**Person** John Burbidge and Stephen Rickerby

**Comments** This aspect of the 1995 treatment included: 'Removal of crystallized salts from the surface of the painted area using a soft brush and vacuum cleaner. The majority of the salt was removed from areas of paint loss where the concrete support was exposed. Crystallized salt was also removed from the brick vaulting above the painting and from the floor where salt had dropped and accumulated.' [Burbidge and Rickerby 1995:1-2].

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### Proposed Treatment

**Type** FLAKE FIXING      **Date** 22/03/96

**Person** SS/TM

**Comments** Emergency fixing of the paint layer is necessary in limited areas [one conservator, 2 days]. This should take place within 1 year.

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**Type** MONITORING CONDITION      **Date** 22/03/96

**Person** SS/TM

**Comments** After treatment in 1995, the nearby gun emplacement was sealed up. It is important to monitor the effect this may have on the interior environment, and consequently, the condition of the wall paintings.

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**Type** PRESENTATION/REINTEGRATION **Date** 22/03/96

**Person** SS/TM

**Comments** Cleaning and consolidation of the surrounding proscenium arch, and information boards describing the paintings and their history, would help improve the appearance of this area and would be of benefit to the general public.

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**Type** SALT REMOVAL **Date** 22/03/96

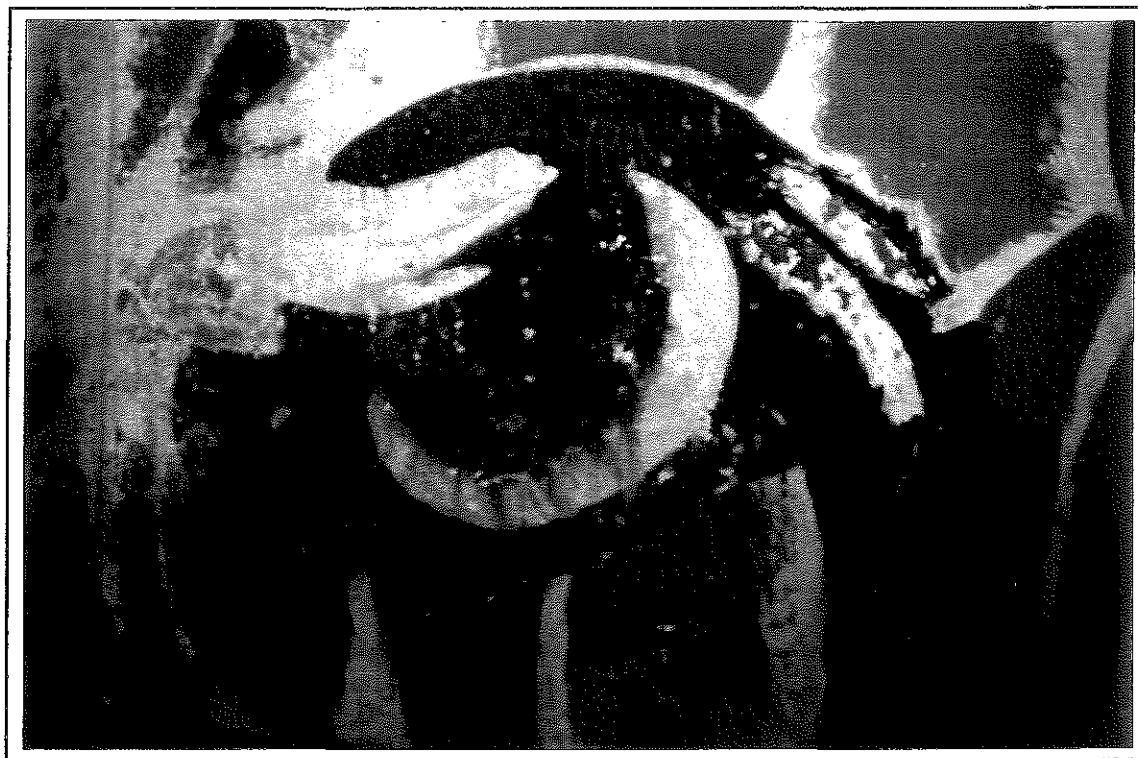
**Person** SS/TM

**Comments** Further salt removal is necessary, and should take place before the treatment of flaking paint (within 1 year).

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General view of theatre



Detail of paint layer