## ANCIENT MONUMENTS LABORATORY REPORT

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TECHNOLOGY

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Peb 1984

Examination and analysis of some brocches from Nor Nour, Isles of Scilly

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## ANCIENT MONUMENTS LAB. REPORT NO. 4153

## EXAMINATION AND ANALYSIS OF SOME BROOCHES FROM NORNOUR, ISLES OF SCILLY Justine Bayley February 1984

All the brooches were analysed qualitatively by energy dispersive X-ray fluorescence. The results are given in the table. Some of these brooches will also be sampled for atomic absorption analysis which will give quantitative results. The brooches have not been conserved so details of the decoration are difficult to see; further information should become available after conservation.

620615 The paired enamel fields are alternately translucent turquoise and opaque red. Cleaning may reveal parcel tinning.

620620 The surviving enamel includes some that is turquoise/green; cleaning is needed to show the design.

620635 Enamel is opaque turquoise. The red spots are probably just due to corrosion of the underlying metal.

620636 Conservation would show whether the brooch is enamelled.

620703 Some of the enamel is red; some looks pale coloured but this could just be a weathering crust over further red enamel.

620713 Lozenge on bow are blue. The rest of the enamel needs cleaning - ring and spot on headstud and triangles bordering the lozenges.

620717 Disc on how contains enamel of unknown colour. There may be traces of silver foils, or the solder that **held** them on, on the trumpet head, around the enamel and/or on the lower bow, over the catchplate. XRF did detect silver, but very weakly.

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<u>621088</u> Enamel in 6-pointed star looks "black" on top of red. The fields between the points contain turquoise enamel.

<u>621111</u> A small fragment of the applied (embossed) plate survives but is covered by a layer of consolidating tissue.

<u>621126</u> Most of the enamel is now lost. What survives appears pale green, probably not its original colour.

Brooch 297 Two triangles on the bow contain enamel. That nearer the head is translucent turquoise. The lower one is badly corroded; no colour can be made out at present.

Brooch 242 The upper triangular field contains turquoise enamel while the lower one is orange.

Together with the brooches were a number of other objects. One of them (AM 620604), a circular seal box lid, was enamelled. The outer band of enamel was of alternating blocks of 'black' (actually olive-brown) and turquoise; both colours being translucent. The inner band was of opaque orange enamel and no enamel survived in the centre spot.

## TABLE - X-RAY FLUORESCENCE ANALYSES

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| AML No. | Cat. No. | Bulk Metal               | Decoration  |
|---------|----------|--------------------------|---|
| 620602  | 296      | Low tin bronze           | Mercury gilding   |
| 620615  | 133      | Gunmetal                 | Enamel and ? tinning  |
| 620620  | 199      | Gunmetal                 | Enamel  |
| 620635  | 171      | Leaded gunmetal          | Enamel  |
| 620636  | 172      | Leaded bronze            | ? Enamel  |
| 620703  | 2        | Leaded gunmetal          | Enamel  |
| 620713  | 105      | (Leaded) gunmetal        | Enamel  |
| 620717  | 111      | Leaded bronze/gunmetal   | Enamel and? applied silver foils                            |
| 621088  | 52       | Bronze                   | Enamel  |
| 621111  | 184      | Leaded bronze            | Applied plate of ? brass<br>held on with lead-tin<br>solder |
| 621126  | 168      | Leaded bronze            | Enamel  |
|         | 297      | Leaded bronze            | Enamel  |
|         | 243      | (Leaded) bronze/gunmetal | -   |
|         | 242      | Leaded bronze            | Enamel  |

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