Remaking the Sutton Hoo Stone, by Brian Ansell, stonemason and stone sculptor.

A talk given to SIAH on 11th March, 2017

This talk coverered the art of stonemasonry over many periods and focussed on the creation of a replica of the Sutton Hoo Stone, the "sceptre" discovered in the ship-burial of 1939, using the sort of tools and materials that would have been used for the original. A full account is available in the book, "Remaking the Sutton Hoo Stone – The Ansell-Roper Replica and its context", by Paul Mortimer and Stephen Pollington.

In 2008, Angus Wainwright of the National Trust invited Brian Ansell to create a replica of the Sutton Hoo stone. The first requirement was to source the stone from which a replica could be carved. This turned out to be a carboniferous millstone grit known as Greywacke, (pronounced greywacker), from Tarmac's Arcow quarry just north of Settle in North Yorkshire.

The stone block from the quarry measured 2 cubic feet and was 320 lbs in weight, and only two usable, shake-free, pieces could be won from it. Greywacke is a 'freestone', meaning that it has no strata, and is the same in all directions. Each centimetre of thickness denotes the passing of a million years in its creation.

Existing descriptions of the stone were mostly inadequate for making a replica, and so Brian scaled up his working drawings from the British Museum detailed report of 1978. The stone is curved from end to end, and is also curved on each surface. The arc of the main body of the stone is one twenty-eighth of a segment of a circle of diameter of sixteen feet four inches, or one rod in pre-decimal measures. The top of the stone is carved with three female faces and one male face. The bottom of the stone has four male faces with beards. Each face is only one inch long, and only a stone as hard as greywacke could carry the level of detail needed in such a small space.

The chisels needed to work on this project were of tempered iron, and although the stone is harder than the iron, it can be worked by the correct angle of attack, and by fine taps from a bronze headed hammer. The final smooth surface is achieved by abrasion from a second smaller piece of greywacke, using water as a lubricant.

Once Brian Ansell had created the replica stone, it needed to have the bronze finials added to top and bottom, and the iron ring surmounted by a horned stag at the top. The metal fittings were produced by David Roper of Ganderwick Creations. These required fitting using heat shrinkage, and it was found that this method discoloured the head of the stone, which was also a feature of the original.

The making of the replica revealed some of the ideas behind the making of the original. This was the first replica to be made in the correct materials and it was found that, unlike a plaster

replica, it could stand on its end quite happily. Previously this had not been thought possible. Also the stag could be rotated to point in different directions.

Production of the replica was a three year project from start to finish, but the actual work was undertaken in a six month timescale. The time spent in stone-cutting was 90 hours, but at every stage there was a break for documentation and photography.

Although the shape is reminiscent of a whetstone, it seems to be too large for practical use. The stone bar is about 58 centimetres in length, and together with its fittings it is 82 cm long and weighs about 3 kilos. The 'normal' size for a whetstone seems to have been more or less palm sized.

Making the replica was a piece of experimental archaeology, but one which required craftsmanship of the highest order to achieve. The audience were left in awe of the skills needed to make both the original in the 7th century and the modern replica.