

Report  
1808  
Site File 3A) Plank E 1 for HAR 512

1 Oct. 1973 At Fortress House. Section (wet) cut (with Mr. Cross) from Plank East 1, about 9 ft long and  $8\frac{1}{2}$  to  $10\frac{1}{2}$  ins wide.

This section was  $10\frac{1}{2}$  ins long and some 2 ins deep.

At Keble Road, Oxford. Tree-ring examination showed that the plank was NOT quarter-sawn, but had been cut 'through and through'.

A piece of heartwood (weight, wet, 34 gm) was cut near the centre of the bottom edge and passed to AERE Harwell on 8 Oct. 1973 for C 14 analysis. The sample covered about 15 annual growth rings and the growth allowance was estimated to be  $65 \pm 10$  years. Wt. of benzene produced at AERE 4.56 grams.

B) Plank E 2 for HAR 513

8 Oct. 1973 A section was cut at Fortress House from the wet plank. It was faster grown than Plank E 1, (average width of rings, 2 mm). At Oxford, it was allowed to dry out slowly.

19 June 1974 Piece (dry weight 4 oz) sent to AERE, Harwell for C 14 analysis. Growth allowance  $40 \pm 10$  years. Wt. of benzene produced at AERE 4.48 grams.

C) Treatment of Radiocarbon Results

These require correction for the half-life of C 14 (5730, not 5568 y), calibration for secular C 14 variations together with adjustment for the growth allowance.

HAR	Radiocarbon Age		After Calibration	Adjusted for	
	As Given by <del>mix</del>	"A <sub>calc</sub> " t <sub>1/2</sub> 5730		Growth Allowance	Mean
512	755 ad	$720 \pm 63$	$780 \pm 70$ A.D.	$845 \pm 70$ A.D.	} $830 \pm 50$ A.D.
513	750 ad	$715 \pm 70$	$775 \pm 75$ A.D.	$815 \pm 75$ A.D.	

pk  
Calibration is by the tables of P. Damon (Lower Hutt Radiocarbon Conference, New Zealand, 1972). By the MASCA tables or by Switsur's table the mean date <sup>the same</sup> would be within ten years. The value of the  $\pm$  term is important. Although the mean date of this well is identical with that of North Elmham (Current Archaeology No. 36, Jan. 1973) the  $\pm$  term is larger, partly because the counting uncertainty is higher, partly because there were only two (rather than four) samples. The agreement between the sample left wet (for HAR 512) and that dried out (HAR 513) is good.

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— " *J. Rusty, Chief Laboratory Officer, D. J. Burman*