

THE TARLTON, OHIO INDIAN EFFIGY CROSS MOUND H. Povenmire Florida
Institute of Technology 215 Osage Drive Indian Harbour Beach, FL 32937

Abstract – This astronomically significant, unique effigy mound is shown to be part of a much larger complex of earthworks connected by a 100 km length Indian Highway.

In recent years we have learned that effigy Indian mounds have religious and astronomical significance (1). Most effigy mounds are in the shape of animals. A curious exception to this is the Tarlton, Ohio Cross Mound. It is in the shape of a cross with two equal length arms. The arms are approximately 29 meters in length and about 3 meters in width. There is a central depression at the center of the cross. The height is approximately 0.8 meter but was probably higher in the past. Although this mound was excavated in the past, it is believed to be very much understudied. There is a small stone mound near the western arm of this mound and nearby are several small, typical burial mounds. This mound is in a small State park. This mound is located on the USGS 7.5 Stoutsville, Ohio 1992 quadrangle. The mound itself has the approximate coordinates of long. 39° 33' 44" W. and lat. 82° 47' 07" N. at an elevation of approximately 320 M.

The general orientation of the arms is in the cardinal points of NSEW but with a consistent deviation of about 21°. The northern arm points to a true azimuth of approximately 339°. This can be measured to only about 1° accuracy. Today, the magnetic deviation of the area is approximately 6° but has changed significantly in just a few decades.

The period of precession is approximately 25,725 years. This converts to approximately 71.458 years per degree or 1.399° per century. If the Cross Mound was constructed approximately 1500 years ago, then it was built for the cardinal points.

Folklore in the area suggested that the arms of the mound pointed to several very large burial mounds a short distance away. Extending the

azimuth of the arms outward does not support this theory.

This still left the purpose of this mound a mystery. A further literature search has probably solved this mystery. There is evidence that a great Indian Highway ran for approximately 100 km from the Great Newark Octagon Earthworks to the High Banks Earthworks near Chillicothe, Ohio. This road would have passed within several hundred meters west of the Tarlton Cross Mound. The two great earthworks structures have significant astronomical alignments (3).

Extending the azimuth of this road another 50 km takes one to great archaeological and astronomical sites of Serpent Mound, Fort Hill, Fort Ancient, Seip Mound and Tremper effigy mound.

We have little data of what the level of native Indian astronomical knowledge was but this mound could shed some insight. Certainly they had knowledge of Polaris and true North. There is little or no data to suggest that they had knowledge of magnetic directions or lodestones. The age of this mound is not known but other effigy mounds in this region of Ohio are approximately 1000 years before present.

The purpose of this abstract is to make the basic data available to other researchers so that the real significance of this effigy mound may be understood.

I wish to thank L. Truesdell for his fieldwork and Brunton compass measurements.

References: (1) Krupp, E.C. (2000) Slithering Towards Solstice *Sky and Telescope* Vol. 99 No. 6 June pp. 86-88. (2) Squire, E.G. and Davis, R.H. (1848) Ancient Monuments of the Mississippi Valley, Bartlett and Welford, Cincinnati, Ohio. (3) Lepper, B.T. (1995) Tracking Ohio's Great Hopewell Road *Archaeology Magazine* Nov.-Dec. pp. 52-56