

Note on a carved stone found within the fort on West Whitecastle Farm,
Libberton, Lanarkshire

by J L Davidson

This stone, found some years ago at NGR NT 01114160, lying on the surface of the ground, is an Ordnance Survey Trigonometrical Ground Station marker dating from the original survey of the district in 1853. It has been given by Mr Lyon, the finder, to the National Museum of Antiquities of Scotland (cat no. IB 304). The stone measures 31 mm by 22 mm by 8 mm. The hole in the stone represents the actual trig point above which a tripod carrying the theodolite would be placed. The broad arrow served to draw attention to that reference point (pl 32b).

There are three types of Trigonometrical Ground Stations used by the Ordnance Survey, and in the 19th-century Survey of Great Britain they were identified as follows:

Primary ground stations were marked by stones varying in size from 6 in (150 mm) square to 3 ft (910 mm) by 2 ft (600 mm) in plan, and in depth from 12 in (300 mm) to 24 in (600 mm). They are at varying depths below ground level, some as much as 6 ft (1.8 m). The hole drilled in the centre is from 1 in (20 mm) to 3 in (70 mm) deep; those which were occupied subsequent to 1840 are also marked with the broad arrow. Secondary ground stations were marked in a similar manner but on smaller stones, or on bricks, and were set up to 5 ft (1.5 m) below ground level. Tertiary ground stations were usually marked with a brick 14 in (350 mm) to 2 ft (600 mm) below ground level (OS 1933, 31–2).

The stone from West Whitecastle Farm is certainly not a Primary station, and is most likely to have been a Secondary marker.

A prehistoric cup-marked rock on Tormain Hill, Midlothian (NGR NT 1269) is interesting as it seems that one of the 'cups' has been utilised as a trig reference point indicated by the broad arrow (Allen 1882, 84).

REFERENCES

- Allen, J Romilly 1882 'Some notes on some undescribed stones with cup-markings in Scotland', *Proc Soc Antiq Scot*, 16 (1881–2), 79–143.
OS 1933 Ordnance Survey, *Notes on the Minor Trigonometrical Work of the Ordnance Survey* (rev ed).



a Rattray kiln stands (Anthropological Museum, University of Aberdeen)



b OS trigonometric point marker