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"Revision points revisited"

John Cole, Paul W Sowan, Geofrey

Spencer-Smith

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The Charles Close Society was founded in 1980 to bring together all those with an interest in the maps and history of the Ordnance Survey of Great Britain and its counterparts in the island of Ireland. The Society takes its name from Colonel Sir Charles Arden-Close, OS Director General from 1911 to 1922, and initiator of many of the maps now sought after by collectors.

The Society publishes a wide range of books and booklets on historic OS map series and its journal, *Sheetlines*, is recognised internationally for its specialist articles on Ordnance Survey-related topics.

Revision points revisited

The story of the Swindon revision points (RPs) in *Sheetlines* 97¹ attracted several responses.

From John Cole: Health and safety experts may have palpitations over the railway RPs, with not a hi-vis jacket to be seen and (possibly) not even a railway employee look-out. A train is signalled from Swindon Town station – unless it has just passed – on photo 22A. I have copies of RPs of the 1950s of Brixham (where I did the 1:2500 revision in 1979-81) and 'railway' RPs for several other Devon locations. At Exeter Central in 1947 a pair of brand new 'West Country' Pacific locos are blowing off steam in a siding next to the RP.

OS were clearly behind the times in persevering with such a large scale survey method due to timidity over air survey and tachometry even in the early fifties. The mind boggles at the cost – over 100,000 RPs must have been established in London alone. The Annual Report of 1963 indicates that for England, Scotland and Wales there were over 600,000 RPs during the period 1943-63.

The fear is that the vast majority of RP albums were wantonly destroyed; I'm not too sure about the 'manuscript' copies kept at Southampton or Division offices, but at least having the Swindon set on-line helps to fill a gap.

The reference to my *Sheetlines* 67 article in the Swindon story prompts me to add corrections and additions to that and draw attention to several others.² Further justification is that I did not enlarge on the nature of actual revision points. The Swindon collection indeed gives a very clear selection including developing estates and rural locations. The majority were permanent buildings or other objects of apparent permanence, features thereon if an actual corner wasn't convenient (as per 77A on the Goddard Arms Hotel) and as last resorts, nails or rivets in concrete blocks, walls, pavements or similar. It will be seen from the photographs that even with this aid, finding them at later dates was far from easy, even with a measurement quoted (as 73K).

The OS 1948 'Biscuit book'³ contained seventeen pages on reconnaissance, selection, marking and recording RPs; as for selection the only taboos were telegraph poles, Post Office concrete posts or trees. The last rule was being broken according to some maps, whilst one of the Swindon RPs was in a tree stump.

The functions of RPs, fixed to an accuracy of 0.1 metres⁴ at both 1:1250 and 1:2500 scales, were [a] to anchor the skeleton chain or air survey to the National Grid (later, Detail Points, accurate to 0.25 metres and not appearing on published mapping (unlike RPs), were used for the 1:2500); [b] to facilitate continuous revision, especially in developing housing or industrial estates; [c] to enable those who required surveys of their own (eg at 1:500) to have usable control points.

¹ Surveying in Swindon 1953, Sheetlines 97, 44-45.

² Sheetlines 67, 26-31, Sheetlines 64, 19-25, Sheetlines 68, 48-49, Sheetlines 80, 58-60, Sheetlines 81, 36-39. All are available online at www.charlesclosesociety.org/SheetlinesArchive

³ Instructions for detail (chain) survey described in *Sheetlines* 81, page 36.

⁴ Machine plotted by a rectangular co-ordinatograph to s precision of 0.1 mm.

The absence of RPs on maps of central London was explained in the Sheetlines 81 article in that flat roof control points, many of which already existed, saved a lot of money on traverses to fix RPs. Sadly, this was offset by substandard photography which may have caused difficulties elsewhere. One such location quoted in the *Sheetlines* 67 article was Bath, but it transpired that the southern half of the city was chain surveyed. Banstead was incorrectly identified as the first 'tachy' town - effectively it was chain survey with tachometric experimental surveys probably using RPs as control.

Sheetlines 68 carried a list of survey methods from 1955 to 1965. As with the Sheetlines 67 list, there were numerous date and method corrections. The most significant were Harwich (probably air graphic), Aldershot and Bolton-upon-Dearne (both tachy). Thus chain survey from RPs probably ended with Maldon in 1957, though the method would have been much used for continuous revision into the 1960s until more tachy sets became available.

A list of counties where RPs were established for basic 1:2500 scale work appeared in Sheetlines 67 and to this list should be added Essex (Braintree), Staffs (Alsager and Biddulph) and West Lothian (Bo'ness, Broxburn/Uphall and Linlithgow). A rural strip from Bradford to Wakefield should also be added. Incidentally, there were some remarkable RP tallies in the Lancashire and Yorkshire cases; for example, whilst the general rural average was about thirty RPs per square kilometre, Delph and Dobcross (near Oldham) sported 113 and 109 respectively.

Averages for 1:1250 locations were tolerably consistent – the ideal for a map being twenty (80 for the four quadrants making up a square kilometre). With about fifty maps each, Birmingham, Bolton, Liverpool, Manchester, Sheffield, Swansea and Edinburgh all average 18 to 24 RPs per map. Exceptions include Bournemouth (45), Exeter (51 – but only 18 maps), Leeds (37 – only a few maps), Plymouth (36), Torquay (44).

For air graphic the average seems to have been about 14, but as quoted in Sheetlines 68, exceptions including Bradford, Dover, Deal, Canterbury, Crewe, Folkestone/Hythe, Littlehampton. Shrewsbury and Stafford averaged just four.

Apart from Swindon (and possible Lowestoft) the only collection I'm aware of is at Plymouth Archives, where RP albums for the city, as well as Launceston, Saltash, Torpoint, Tavistock, Okehampton, Totnes, Salcombe, Kingsbridge, Dartmourth and Kingswear are to be found.

Should you wish to know if your property appeared on an RP photograph, the Historic Maps website5 will give you a clue as the vast majority of the first edition 1:1250 (reduced to 1:2500) and 1:2500 are viewable. You may also find out the hard way by damaging a garden spade on a long-forgotten and partiallyburied six-inch square concrete block like this: $\mathbf{O}\mathbf{S}$ rivet or nail ___

R55B

⁵ http://www.old-maps.co.uk

From Paul W Sowan:⁶ Readers may like to know that there is a substantially complete set (63) of RP albums for the former County Borough of Croydon in the town's Local Studies library. These cover the northern part of the present London Borough, but not the area of the former Coulsdon & Purley UDC. Details and a list of these were published in our Croydon bibliographies for regional survey 108 (2004). Apart from the interest in the dated photographs of parts of Croydon rarely or never otherwise recorded, the RP data is most helpful in exactly locating archaeological features in woodland.

From Geoffrey Spencer-Smith: I was a member of one of two teams of surveyors employed on RP fixation in Swindon in 1953. Our office was at 45 Regent Street. Each team consisted of three surveyors and two field assistants. The three were observer, booker and one who positioned the tripods over the traverse station. These consisted of a pipe nail marked with a rawlplug or a wooden peg. Permanent stations were brass rivets set in kerbs or chisel cuts on drains, manhole covers and the like. For measuring the legs of the traverse one surveyor held on the backmark and guided the one at the front who marked the tape end; one booked (the measurement was to one mm) and the field assistants stood on the forward and back stations. Observations also had to be made for change of slope. We used a Cooke Troughton and Sims 3½ inch theodolite for normal work and a Tavistock geodetic theodolite for working off trig stations and for observing bases where the trig point was a roof station.



RPs were plotted on plates after their National Grid position had been calculated. The surveyors had to do an office check on accuracy by measuring to check-points. We had an enamelled zinc sheet about five feet square called a 'crown quad' on which was printed a 360° protractor with a cross in the centre and using a 4H pencil and straight-edge we would plot RPs and checkpoints and do a graphic check. If this did not agree with the check measurements we had to re-observe and re-measure before sending off to Traverse Computations dept in Chessington.

Left: Geoffrey Spencer-Smith observing and his brother booking in Marlborough Road, Swindon.

More photographs of revision points appear on page 63.

⁶ The writer is librarian, archivist and vice president of the Croydon Natural History & Scientific Society.