



Sheetlines

The journal of
THE CHARLES CLOSE SOCIETY
for the Study of Ordnance Survey Maps

This edition of *Sheetlines* was published
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THE CHARLES CLOSE SOCIETY
for the Study of Ordnance Survey Maps
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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.



SHEETLINES

Number 57

April 2000

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Chairman's Report

Chris Board

This report was presented to the Society's Committee, meeting in Richard Oliver's map-filled house in Exeter on 30 January.

I am sorry to have to report that Christie Willatts, who was one of our Honorary Members, died on 8th January aged 91. Although not a member of the Ordnance Survey staff he interacted often vigorously, with OS for over forty years (1931-73) and pioneered the concept of joint publication between the Ministry of Town and Country Planning and themselves.

Since the autumn of last year things have been developing fast in our Society. It would be dramatising the situation if I were to say that we have experienced a crisis. In every Society there comes a time when those who have put much effort into its affairs feel the need for a change, or a rest. Mostly we are given good notice of the impending departure of an officer or member of committee. David Archer has served in the Society's "trenches" for over 10 years. He formally left the Committee and the Chairmanship of the Publications sub-committee last May. However we are greatly indebted to him for continuing to be project manager for Yo Hodson's book on the One-Inch Popular Edition, finally published on 20th January. Few will have any idea how many decisions have had to be made about the detail involved in bringing Yo's manuscript to the press – and David Archer has seen it all through. We are grateful to David and Peter Haigh for setting up storage places for the stock of Yo's book and to Bill Radcliffe and John King. "The book" and the problems of *Sheetlines* have conspired to keep David Parsons, barely a few months as chairman of the Publications sub-committee, even busier than he normally is. We were very sorry indeed that Jon Risby had felt forced to resign the editorship rather earlier than he was intending to do. We were very fortunate to have had Chris Higley to take up the task of producing *Sheetlines* 56. I am delighted to report that Chris has so "enjoyed" the challenge that he has agreed to stay on for some while, more than "the time being". *Sheetlines* is so important as the medium that keeps the Society functioning for most members. Recently, I was told how impressed one of our severest critics, Dr A S Cook, had been when he read the latest number which appeared only a month later than scheduled. Andrew Cook has taken the trouble to put forward his views on the role of *Sheetlines*, which I have asked the Publications sub-committee to consider. It is essential to review *Sheetlines* alongside our other publications rather than in isolation. The consolidated index to *Sheetlines* has been put on one side as has Tim's book, whose tables still require conversion.

We have known for some time that Roger Hellyer who has so splendidly established a simple system for running the membership office, alongside his research and theatrical work, wished to hand over to someone else. I am pleased to say that Rod Leary expects to be able to stand for election to the position from the next AGM in May.

Our programme of events has seemed rather thin recently, despite the efforts of Steve Simpson. However the visit to the Railtrack Archive underneath Waterloo (W) station on 15 January attracted over 30 members and much favourable comment. Steve is planning further events and is anxious that we should not allow the bicentenary of the publication of Old Series map of Kent to go unmarked by the Society.

On the research side, Ian O'Brien has once again visited OSD to recommend DOS files worthy of preservation to be added to the archive already housed in the Cambridge University Library. Anne Taylor is willing to add this second tranche. She is favourably disposed to the idea of our depositing the copies of precious, unique maps undertaken through the Arden Close legacy with CUL. Cambridge may also be a suitable home for further OS and Land Use Survey material if this is passed to us by Dr Willatts's family in the near future, although BLPES (at LSE) might have a claim on LUS rather than planning material. Roger Hellyer and I are to examine what is in the Willatts collection soon. I shall be keen to learn how I might link the work of the new ICA Commission on the History of Cartography with our research group.

Changes at OS continue to intrigue many. Two recent communications from OS reveal changes in personnel and a resolution of the problems which probably led to Dr Robinson's departure

May I express my appreciation to all on the Committee who have helped me during the last months. By the AGM we should be in a position to have a new brochure, up-dated web site and perhaps even a new publication, with a full programme of events for members.

The New Book

Popular Maps. The Ordnance Survey Popular Edition One Inch Map of England and Wales 1919-1926 by Yolande Hodson. 411 pages, B5, 46 illustrations, 13 colour plates, hardback, ISBN 1 870598 15 6.

This book tells the story of the Popular Edition one-inch map of England and Wales from sheet line construction to shop counter, and sets the development of the map within the context of the evolution of the one-inch series from 1801 to the 1930s. This book is the first Charles Close Society publication illustrated with a range of colour plates. It also includes a full catalogue of all known printings of the 146 sheets of the map. We hope to publish a review of this important work in the next edition of *Sheetlines*.

Available from: Publications Manager, The Charles Close Society, 11 Riverdale, Wetherby, Yorkshire LS22 6RP. The price of £30.00 (currently £24.00 for CCS Members) includes postage and packing for UK orders. All other countries postage extra. Please make cheques payable in sterling to: "The Charles Close Society" and allow 28 days for delivery.

Edward Christie Willatts O.B.E.
Born 4 July 1908, died 8 January 2000



Christie Willatts, elected an Honorary Member of the Society in 1992, will be remembered by those who attended his lecture at the Palestine Exploration Fund premises on 12th March 1988. This was part of a study meeting on the First Land Use Survey and the National Atlas project, at which Eila Campbell and Dorothy Castle also spoke. I remember it as a lively meeting sprinkled with anecdotes of the 1930s and 1940s covering the LUS and the Ten Mile Planning Maps. An account of that meeting appeared in *Sheetlines* 21, p.16 and Christie Willatts's paper was published in *Sheetlines* 23, 2-5. Although our meeting dealt with the One-Inch LUS maps and the "Ten Mile" planning maps, few if any of us were aware that Christie in 1946 had been seconded to assist the work of the Anglo-American Committee of Enquiry on Palestine. For the geographical survey and mapping he arranged for that mission and for his other services he was appointed OBE in 1958.

It was as the Organising Secretary of the Land Utilisation Survey of Britain from 1931 to 1941 that Willatts established his reputation. Responsible for the day to day progress of the survey, checking field survey and its reduction to the scale of one-inch to the mile for publication, he was in charge too while Stamp was on a lecture tour in America in 1933-34. This period was also marked by the introduction of half of the 92 county reports, of which his on London and the Middlesex region was published in 1937. He also had to deal with the enforced move of the survey from the London School of Economics which was requisitioned in 1939, and the aftermath of the 1941 blitz. During this period he served in the local Home Guard unit at Wraysbury, having previously been Quarter Master Sergeant in the Army Cadet Corps at Windsor County Boys' School in the 1920s.

On the completion of one-inch mapping Christie Willatts oversaw its generalisation to the "Ten Mile" scale which was required for national land-use planning. From November 1941, he could be spared for part-time duties with the Advisory Maps Committee of Lord Reith's Consultative Panel for Physical Reconstruction. Invited to take charge of a Research Maps Office he became the first professional geographer employed as such in the Civil Service. The Maps Office undertook the compilation of a series of maps at the "Ten Mile" scale which had been authorised earlier in the year. Thus began a career spanning three decades of preparing mapping for physical planning. Those familiar with Roger Hellyer's

monograph on the “Ten Mile” maps will realise how much Willatts was involved in the production of what the Ordnance Survey Description of Small Scale Maps called the “nucleus of a National Atlas”. The Public Record Office OS files reveal that Christie Willatts was a redoubtable defender of his role in the new Ministry of Town and Country Planning which had taken over the Maps Office. As he had done with the LUS maps, he expected to undertake the checking of maps despite the fact that were being printed by the Ordnance Survey from compilations made by his Maps Office staff. A sharp, strict and outspoken editor, he rarely let mistakes pass.

Frustrations connected with seeking approval for further maps or revisions of earlier ones, both with the Treasury and the Ordnance Survey, led eventually to what was effectively a National Atlas of England and Wales, the Desk Atlas. This began production in 1953 and by 1975 had collected nearly 150 maps, some of which went into several editions as conditions changed. Although he had always wanted this atlas to be published officially by the Stationery Office, possibly due to opposition from certain quarters, such as commercial publishers and, it has been suggested, security concerns, it remained a departmental product with limited circulation. It was nevertheless presented to several British Universities, the Belgian counterpart of his Maps Office, and the Polish Academy of Sciences, Warsaw. This Desk Atlas was aimed at the busy Whitehall mandarins and politicians who were likely to be bemused by the complexity and large-format of the two-sheet “Ten Mile” maps with their accompanying Descriptions.

Lest it be thought that these two series of maps were all that were produced by the Maps Office, it is evident that many more were produced for special occasions, for example for discussions on the local incidence of severe unemployment, or the progress of the campaign against air pollution. The Maps Office was for example involved in the search for deep-water sites for oil terminals and for suitable sites for London’s Third Airport, which was considered by the Roskill Committee. Such exercises involved the production of sieve maps though which, by a succession of overlays, sites without constraints might emerge. This technique is of course now performed by Geographical Information Systems from digital representations of distributions very similar to those compiled by the Maps Office.

Christie Willatts inspired and helped to train almost an entire generation of cartographers at a time when there were no formal qualifications in the subject outside geography and surveying. Forced on him by the wartime situation he recruited many young women some straight from school and who count themselves fortunate to have had such a teacher. Having begun his postgraduate career by training as a teacher and having held part-time university teaching posts at LSE and Birkbeck College in London, his role became one of combining research with training within the Civil Service. His national contribution lay (with Dudley Stamp) in the completion of the aims of the LUS, then of laying the groundwork for a national atlas and lastly of raising the profile of geographical cartography in Britain, with decision makers and national institutions. He served on international commissions and many national committees. In retirement, despite his heavy involvement in local ecclesiastical and diocesan affairs, he was always pleased to share his knowledge of a fascinating chapter in the history of cartography with all who would listen and read about it. Our sympathies go to his immediate family.

Chris Board

Major-General ‘Joe’ Edge

Major-General R C A Edge, CB, MBE, who retired as Director General of Ordnance Survey in 1969, died on 30 December 1999 at the age of 87.

The *Daily Telegraph*¹ records that Joe Edge developed an interest in map-making in 1936, while serving with the Royal Engineers in India, in order to avoid a dreary posting to a training battalion. Instead, he found himself a member of a party, which also included Tenzing Norgay, mapping the Garhwal and Kumaun Himalayas for the Survey of India. The *Times* obituary² describes Edge’s narrowly escaping capture during heavy fighting in Burma, and his eventually witnessing the Japanese surrender in Rangoon while heading the XV Corps Survey Branch. Partition saw him Director General of the Survey of Pakistan, and the obituaries pay credit to his bravery during those troubled times in rescuing a shot-down Indian pilot from a lynch mob. Ordnance Survey appointments as Deputy Director (Geodetic Control) in 1954 and Director of Field Surveys in 1961 must have seemed tame by comparison. Maj.-Gen. Edge was appointed Director General in 1965.

After retirement, Joe Edge chaired a number of independent inquiries into large projects, including the Winchester bypass. The *Telegraph* quotes him: “All these inquiries were interesting, controversial and sometimes noisy, especially Winchester, where I gained some notoriety by ejecting the Headmaster of Winchester College from the meeting for bad behaviour”.

Ordnance Survey historical map data

The Public Record Office has appointed Ordnance Survey as a place of deposit for basic scales mapping. OS are the first organisation to be approved by the PRO as a suitable place of deposit for records in electronic, rather than paper, form.

For public records purposes, it has been agreed that the landscape will be best recorded by storing annual snapshots of OS basic scales topographic and height data from the National Topographic Database. From 1999, an annual snapshot of national coverage will be taken each May of *Land-Line.Plus*[®] and *Land-Form PROFILE*[™] (contours). Also included in this place of deposit archive are the snapshots of *Land-Line*[®] data that have been taken between 1995 and 1998 for internal Ordnance Survey purposes. The place of deposit archive will also include all relevant map and data specification documents, and a management database to record information needed for the long-term security of the archive.

Under the Public Records Act 1958, OS are required to make the data available for public access 30 years from the snapshot date, for example 2025, but consideration will be given to making the data available earlier, as an extension to the *Historical data* products.

¹ Obituary, 15 January, 2000.

² 25 January, 2000

Historical data: an update

The joint venture with Landmark Information Group to create an extensive archive of historical mapping in digital form is progressing well. Historical data is currently available as black and white raster on CD-ROM for 1:2500 and 1:10,560 scale County Series mapping, and 1:10,560 and 1:10,000 scale superseded National Grid mapping. The 'A' edition 1:1250 and 1:2500 scale superseded National Grid mapping has been scanned, and following processing will be available by July 2000.

Not surprisingly, the paper archive of large-scale maps published prior to 1945 had a number of maps missing. OS undertook a project to obtain the missing maps. This project is now successfully completed and the additional data is available.

Ordnance Survey and Landmark recently agreed to expand the historical database to include post A edition superseded National Grid mapping at 1:2500 and 1:1250 scale. This will ensure that a comprehensive large-scale historical archive is created in digital form, providing data from the mid-19th Century until the mid-1990s. This additional data including B, C, D (and so on) editions will be available by July 2000.

Digital data for legal deposit libraries

In August 1999 OS signed a new agreement with the British Library, on behalf of the six legal deposit libraries of the British Isles. The agreement enables large-scale digital data to be supplied to the libraries to enable them to provide continued access for their readers to large-scale mapping. In the past, the libraries were provided with copies of 1:1250, 1:2500 and 1:10,560/1:10,000 scale published mapping in paper form. More recently, and until this year, OS large-scale mapping provided to the libraries has been in the form of microfilm cypocards. The libraries will now benefit by having the opportunity to maintain a digital archive in perfect condition together with all the normal advantages of handling digital data. OS will supply an annual 'snapshot' of Land-Line.Plus to the British Library who will in turn convert to their working format and supply the other legal deposit libraries. The legal deposit libraries covered by this agreement are:

- The British Library
- The Bodleian Library
- National Library of Scotland
- National Library of Wales
- Cambridge University Library
- Trinity College Library, Dublin

The agreement allows for the libraries to provide on-screen viewing facilities, and also for controlled plotting facilities for non-commercial private research purposes.

This article has been abridged from Ordnance Survey Information Paper 19/1999 published in October. The full text is available on the OS website. Copies are also available from: Consultative Committee Liaison, Room C433, Ordnance Survey, Romsey Road, Southampton, SO16 4GU.

Cyclic revision of rural and moorland map data

This edition, like other recent editions of *Sheetlines*, comments on deficiencies in recent mapping arising from a lack of up to date revision. Ordnance Survey *Information paper 17/1999*, published in October, reported on the then current status of the cyclic revision programmes covering rural and moorland mapping.

The vast majority of the first revision cycle for rural map data (1:2500 scale) was on target for completion by the end of September 2000. By July 1999, 110,000 km² out of a total of 162,000 km² had been revised. Funding for the National Interest Mapping Service Agreement (NIMSA) has enabled increased use of external contractors to acquire and process the necessary aerial photography, as well as maximum use of in-house production facilities. Ground survey was taking place in areas where it has proved impossible to take aerial photography, due principally to continuing bad weather. So far this activity had been restricted to small isolated groups of maps in Scotland. Any areas that remain for revision at the end of September 2000 will be given high priority for completion in 2001.

By July 1999, OS had revised 21,000 km² of moorland map data out of a total of 66,000 km² to be completed by the end of September 2005. NIMSA funding is also being used to accelerate the progress of the moorland programme.

With completion of the first cyclic revision programme largely on target for September 2000, OS were now planning the programme and content of a second cycle. The first cycle had principally been a catching up exercise to capture up to a twenty-year backlog of change in rural areas. On completion, the backlog of change for those features updated as part of the first cycle will be a maximum of five years. With less change to collect, a second cycle of revision could be completed in a shorter period of time. Alternatively, the opportunity existed to look again at priorities, for example:

- More features could be included in the categories of change for attention in rural areas over a five-year period consistent with the first cycle.
- More effort could be expended on revision in urban map data areas (1:1250 scale), surveying features which at present are not subject to collection under the process of continuous revision.

Alongside the second cycle of revision OS will be initiating a programme of positional accuracy improvements in rural areas. The objective of the programme, which will run for five years, will be to improve the positional accuracy of survey detail that falls outside published tolerance figures relevant to the National Grid. The first year is being used to pinpoint areas for action, and to trial methods available to correct the errors identified. These will include re-survey particularly in areas of urban sprawl, and rural towns currently mapped at 1:2500 scale. New infill development in these areas is highlighting accuracy shortfalls in the original survey that can only be resolved by a full re-survey

Mean high and mean low water marks, which in the current cyclic revision programme have not been targeted for revision, are the subject of a separate NIMSA funded update project (as announced in *Information paper 18/1998*). This project aims to update mean high and mean low water data throughout Great Britain over a period of five years. Effort in 1999 was concentrated on pin-pointing those areas where change has occurred. Consultation with major users of tide information is in hand to set a final programme for action.

The One-inch Third Edition Map of England and Wales, in colour: small sheet series

Roger Hellyer

with an introduction by Richard Oliver

Perhaps the most significant development in the history of the Ordnance Survey one-inch (1:63,360) map in the nineteenth century was its first appearance in colour. The first experiments were in the late 1880s, and publication as a national series began in 1897, preceded by a one-inch manoeuvre map of Aldershot in 1896. Publication of the first coloured one-inch mapping of England and Wales (except for the Isle of Man and the Isles of Scilly) was completed in March 1904.¹ Publication of the Third Edition Large Sheet Series began in December 1906 with the Isle of Man sheet, and on the mainland in June 1907.² The map of 1897-1904 was based on the revised New Series, with a standard sheet size of 18 inches west-east by 12 inches south-north (about 457 x 304 mm), and were usually printed in five colours; the Large Sheet Series had a standard sheet size of 27 inches west-east by 18 inches south-north (about 686 x 457 mm), and were all printed in six colours. The maps were prepared by transfers from engraved copper plates to lithographic stones, supplemented by some new-drawn infills.

Between these two came the Third Edition small sheet series in colour: publication began November 1903 and was abandoned in July 1907 after 96 sheets had appeared. Of the three coloured one-inch series of England and Wales published before 1914, it is probably the least often encountered, perhaps because most of the sheets had a comparatively short currency. Cartographically, the small sheet series is of greater interest than its successor, in that it underwent design change as the Large Sheet Series did not. This is epitomised by three sheets subsequently being renumbered and treated as 'large' sheets. As with the earlier coloured one-inch of 1897-1904, a number of combined sheets were published around the coast, and three such 'small' combined coloured sheets (117, 118, 133, 134; 273, 274, 289, 290; 289, 290, 305, 306, 321) were converted to 'large' sheets (49, 118 and 128 respectively) by renumbering. In the case of sheet 49, this was accomplished initially by overprinting the new sheet number on existing stock.³ Although nominal superseding of the small sheet series began in September 1907 and was completed in September 1910 (by the publication of sheets 96 and 40 respectively), the remaining stock only seems to have been withdrawn from sale in 1913, as part of Col. Charles Close's policy of rationalising the number of available forms of the one-inch map from five to two.⁴

The inception of both the coloured one-inch in principle and of the Large Sheet Series was due to the War Office. The principle can be traced to the deliberations of two committees which sat in 1892, an internal War Office committee under Lieut-Gen. Sir T D Baker, and a Departmental Committee of the Board of Agriculture under Sir John Dorrington. In 1905 the War Office asked for a larger standard sheet size for both the one-inch and the half-inch, and suggested 24 by 16 inches (nine of which would have replaced sixteen of the small sheets):

¹ A study of this map by Tim Nicholson has recently been completed, and it is anticipated that it will be published by the Charles Close Society. I am indebted to Tim Nicholson for sight of the manuscript in advance of publication.

² This series is described in *The Ordnance Survey one-inch map of England and Wales Third Edition (Large Sheet Series)*, London, Charles Close Society, 1988.

³ An alternative interpretation is that the two East Kent sheets were intended from the start as 'large' sheets, but were issued as 'small combined' sheets because the sheet numbering and layout of the Large Sheet Series had not been completely settled by the time of their publication in mid 1906.

⁴ See Yolande Hodson, *Popular maps*, London, Charles Close Society, 1999, 19.

the scheme worked out by the OS was based on combining groups of nine small sheets to produce four large sheets. Although the War Office request for a larger sheet size was made in mid-1905,⁵ it was eighteen months before the first large sheet appeared, and another six months after that before they started to appear in quantity. “As revision progresses, the coloured map is now being issued in larger sheets to meet the views of the War Office, and it is hoped that this will be a convenience to the general public as well”.⁶ Meanwhile ‘small coloured’ sheets continued to be prepared and published; the short interval (three months or less) between the publication of the engraved outline and the lithographed coloured version of some sheets (e.g. 63, 286, 300) suggests that the delay can hardly have been due to the necessary time to prepare the colour-printing materials. On the other hand, production of new coloured one-inch sheets in 1905 may have been delayed by demands for coloured maps from other Government departments.⁷ It is possible that new small coloured sheets continued to be published in the first half of 1907 because the large sheet lines for central and southern England had not been finalised.

The redesignation of three combined ‘small’ sheets as ‘large’ sheets has already been noted. A sheet line diagram in OS catalogues of 1905-6⁸ shows that around the coast some changes in combinations of sheets were to be made, as compared with the coloured version of the revised New Series.⁹ A few of these contemplated combined sheets would have been somewhat oddly shaped; for example, sheet 72/73 would have been about 29 inches west-east by 12 inches south-north (about 737 x 304 mm).¹⁰

The stylistic changes from the original coloured style which had first appeared in 1896 on the Aldershot sheet to the mature style characteristic of the Large Sheet Series took three forms: railways, colours, and marginalia. The last was tied with the presentation of the map.

The depiction of railways is the most straightforward to discuss. The first edition of the New Series (completed in 1895) had used a ‘ladder’ or ‘sleeper’ symbol, which was retained on the earlier sheets of the revised New Series for double-track lines, supplemented by a variation for single-track ones. This was evidently felt to be insufficiently conspicuous, as the coloured maps which began to appear from 1896 used a solid line for double track lines and long chequers for single-track, similar to but bolder than the symbols familiar on the one-inch Popular Edition and Seventh Series, and the 1:25,000 Second Series. These symbols were only used on the coloured maps, and of necessity involved extra litho-drawing. That they appeared on the black plate rather than in colour may have been to save the expense of an extra printing and consequent registration problems. From about August 1896 onwards the

⁵ Papers in PRO class T1.

⁶ Ordnance Survey annual report, 1906-7 (BPP (HC) 1907, Cd.3668, LXVII, 439), 5.

⁷ Ordnance Survey annual report, 1905-6 (BPP (HC) 1906, Cd.3064, XCVII, 649), 3.

⁸ e.g. copies on open access in the British Library Map Library reading room.

⁹ Unpublished combined sheets shown on these indexes: 1/2; 7/8; 9/10; 11/12; 14/15; 16/17; 20/21; 22/23; 28/29; 35/44; 36/44/45/56/57 [Isle of Man]; 37/38; 47/48/58; 54/55; 64/65; 66/67; 72/73; 74/75; 81/82; 83/84; 90/91; 103/104; 116/part 129; 130/146; 131/147; 132/148; 142/part 129; 177/194; 192/209; 193/210; 208/225; 227/244; 228/245; 229/246; 230/247; 248/262; 264/parts 263, 279, 280; 276/292; 277/293; 278/294; 295/part 279; 296/part 280; 307/308; 322/336*; 324/338*; 325/339*; 326/340*; 335/346*; 347/353; 348/354; 349/355; 350/356; 351/358*; 352/359; 357/360. (Those marked * seem to be in the same sheet lines as the coloured revised New Series, and it may be that these indexes indicate in Devon and Cornwall what had been published in the older style rather than what was necessarily contemplated for the newer.)

¹⁰ It is possible that the preference for combined sheets of standard height south-north was so that as many as possible would suit the new folding pattern adopted late in 1904, and discussed below, but the configuration of the coast would practically dictate this anyway.

symbols on the parent engraved maps were modified so that single lines were shown by 'ladders' and double-track by 'chequers'; this was retained both on the engraved Third Edition and on its coloured derivatives. Was the earlier redrawn style considered too bold, or was the extra drawing considered not worth the effort? Personal preference of War Office or OS officers may have contributed.¹¹

It was noted above that most of the sheets of the revised New Series were printed in five colours. These were: outline in black, water in blue, contours in red, hachures in brown, and roads in sienna of various shades. A sixth colour was used on sheets 1-73: green, for woods. The probable reason for this was that the first seventeen sheets in this group, published in 1901, were prepared at a time when the hachures for this group of sheets were still on the same plates as unrevised outline,¹² and whilst it was possible to prepare hachure stones by scraping away most of the unwanted non-hachure work, scraping away the tree symbols in woodland would have required repair of the hachures, and the alternative of leaving the tree symbols on the hachure stone and indicating woodland by adding green infill may have been regarded as a cheaper alternative. (A similar procedure was adopted for the coloured one-inch of Ireland, published 1902-6, and there was a similar problem then and later in England and Wales with parish boundaries running along inland rivers: in consequence, such boundaries sometimes appear in blue.) By the time that the remaining coloured sheets in the northern English group came to be published in 1903-4 separate hachure plates were available, but nonetheless green woods were retained. This may have been for the sake of consistency, but it was perhaps also because it made a more attractive and legible map: the use of green woods was standard on the coloured Third Edition which began to appear in November 1903.

A second colour change was to the road infill. The first coloured one-inch sheets, prepared in 1896-9, had used a dark tone of burnt sienna; then a very yellow sienna was adopted, both for new publications and for reprints. In about August 1904 there was another change, again for both new publications and for reprints, when an orangy burnt sienna was introduced. The earliest Third Edition small coloured sheets therefore appeared with yellowy sienna roads, and differed noticeably from most of the sheets in the series, which were identical (allowing for the vagaries of Edwardian colour control) with the Large Sheet Series.¹³ It is not known why the change was made; the only possible explanation is that the lighter shade might not have shown up well under artificial light.¹⁴ Whatever the truth, the change was made both on the one-inch and on all the other colour-printed OS maps with road infills.

¹¹ The question of the effect of the two- or three-year posting or 'tour of duty' on map design might prove a suitable field of investigation, particularly from the 1930s onwards, when the written archive in the Public Record Office (PRO) is so much fuller than it is for earlier periods.

¹² Until 1892 the engraved one-inch map with hachures was prepared by engraving the hachures on the same plate as the outline; thereafter the hachures were engraved on separate plates. Most of the hill plates for England and Wales sheets 74-360 were engraved separately; those for sheets 1-73, and all but half a dozen in Scotland and Ireland, were combined with outline which was rendered obsolete from 1896 onwards with the publication of revised versions of duplicate outline-only plates.

¹³ As an illustration of this, on the writer's copy of sheet 303, issued in August 1905, the 'burnt sienna' is a distinctly orangy yellow.

¹⁴ I consider this explanation to be more inventive than convincing.

The change in marginalia is associated with a change in packaging style.¹⁵ The first sheets followed the style of the contemporary revised New Series in colour by having a border 0.575 inch (14.6 mm) wide and (for a standard sheet with map area 18 × 12 inches) a printed area of about 525 × 398 mm, with a legend box about 109 × 48 mm and an adjoining sheet diagram showing county boundaries and those settlements giving names to sheets, and folded 6 × 3 in a red book-fold cover of about 102 × 156 mm. From about October 1904 onwards a new style was adopted for new publications, characterised by a border 0.25 inch (6.4 mm) wide and a reorganised legend box 204 × 13 mm, and a much smaller adjoining sheet diagram, and with a total printed area for a standard sheet of about 488 × 335 mm. (These wide (0.575") and narrow (0.25") borders and associated marginal layout are indicated by 'w' and 'n' in column 9 in the list below.) A similar style had been used from its inception on the half-inch map, which began to appear in 1903, and this may have provided the inspiration, but what was new to both the half-inch and the one-inch from late in 1904 was the folding, 6 × 2 in covers 95 × 183 mm. It was now possible to inspect any part of a sheet of standard height (12 inches) without having to open the whole.¹⁶ This was not possible with taller combined sheets or the Large Sheet Series, which used a standard fold of 8 × 3, and the ability to inspect any part of the map without opening the whole was once again to be denied to OS map users until the coming of first the Michelin fold in the 1920s and then the Bender fold in the 1930s.¹⁷ Initially the covers were still red, but early in 1906 white was adopted: the red had been found to run too readily,¹⁸ which was a disadvantage at a time when the British Army had recently adopted khaki, and must have been a disadvantage also for civilian wearers of fashionable brown tweed knickerbocker suits.

The Third Edition small sheet coloured map also shows the change in available styles of presentation, from flat or folded on cloth (usually 1s for a standard-sized sheet, 1s 6d for a larger combined one) to paper flat or folded (1s and 1s 6d) and cloth folded (1s 6d and 2s) from about September 1905, and mounted in sections (2s and 2s 6d) from about June 1906. These changes are reflected in the price notes on the maps.

In the list which follows, column headings represent

1. Date of revision
2. Date of publication
3. Sheet heading
4. Date of reprint - the "+" sign accumulates those of previous editions
5. Date of railway revision (date followed by 'r') or insertion ('i')
6. Date of magnetic variation
7. All rights of reproduction reserved, or Crown Copyright reserved
8. Sheet price
9. The width of the sheet border - *wide* (approx ½ inch) or *narrow* (approx ¼ inch)

¹⁵The integration of map and packaging is fully considered in Tim Nicholson's unpublished study of the New Series coloured revised one-inch; this paragraph owes something conceptually to that work.

¹⁶A variation on this fold seems to have been tried experimentally in 1903 on at least some half-inch and a few one-inch sheets (e.g. 62: copy in writer's collection), whereby the map was effectively folded 6 x 4, with the top and bottom margins folded back out of sight.

¹⁷In fairness, the same might be said of commercial map series, such as the Batholomew half-inch.

¹⁸See comment by Col. Pitt in W J Johnston, 'The new One-Inch and Quarter-Inch maps of the Ordnance Survey', *Geographical Journal* 53 (1920), 192-200, at p.199.

10. Section listing in Roger Hellyer *Ordnance Survey small-scale maps: Indexes 1801-1998*, Kerry, David Archer, 1999.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--|------|------|---|---|------|------|-------------|---|-------|
| Sheets 1-17 not published | | | | | | | | | |
| Sheet 18 Brampton | | | | | | | | | |
| 1903 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
| Sheet 19 Hexham | | | | | | | | | |
| 1902-03 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
| Sheets 20-24 not published | | | | | | | | | |
| Sheet 25 Alston | | | | | | | | | |
| 1903 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
| Sheet 26 Wolsingham | | | | | | | | | |
| 1903 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
| Sheets 27-29 not published | | | | | | | | | |
| Sheet 30 Appleby | | | | | | | | | |
| 1903 | 1906 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
| Sheets 31-41 not published | | | | | | | | | |
| Sheet 42 Northallerton | | | | | | | | | |
| 1904 | 1907 | OSE | - | - | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
| Sheets 43-62 not published | | | | | | | | | |
| Sheet 63 York | | | | | | | | | |
| 1904-05 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
| Sheets 64-91 not published | | | | | | | | | |
| Sheets 92, 93 Holyhead | | | | | | | | | |
| 1903 | 1906 | OSEW | - | - | 1906 | ARRR | 1/-,1/6 | n | 7.1.2 |
| Sheets 94, 106 Bangor | | | | | | | | | |
| 1903 | 1906 | OSEW | - | - | 1906 | ARRR | 1/6,2/- | n | 7.1.2 |
| Sheets 95, 107 Denbigh | | | | | | | | | |
| 1904 | 1906 | OSEW | - | - | 1906 | ARRR | 1/6,2/-,2/6 | n | 7.1.2 |
| Sheet 96 Liverpool | | | | | | | | | |
| 1904 | 1906 | OSEW | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
| Sheets 97-104 not published | | | | | | | | | |
| Sheet 105. Part of Sheet 118 Carnarvon | | | | | | | | | |
| 1903 | 1906 | OSEW | - | - | 1906 | ARRR | 1/6,2/-,2/6 | n | 7.1.2 |
| Sheet 108 Flint | | | | | | | | | |
| 1904 | 1907 | OSEW | - | - | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
| Sheets 109-116 not published | | | | | | | | | |

Sheets 117, 133, 134. Part of Sheet 118 Pwllheli

| | | | | | | | | | |
|------|------|------|---|---|------|------|-------------|---|-------|
| 1903 | 1907 | OSEW | - | - | 1907 | ARRR | 1/6,2/-,2/6 | n | 7.1.2 |
|------|------|------|---|---|------|------|-------------|---|-------|

This sheet was reissued as Sheet 49 in the Large Sheet Series.

Sheet 119 Snowdon

| | | | | | | | | | |
|------|------|------|---|---|------|------|---------|---|-------|
| 1903 | 1906 | OSEW | - | - | 1906 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|------|---|---|------|------|---------|---|-------|

Sheet 120 Corwen

| | | | | | | | | | |
|---------|------|------|---|---|------|------|---------|---|-------|
| 1903-04 | 1906 | OSEW | - | - | 1906 | ARRR | 1/-,1/6 | n | 7.1.2 |
|---------|------|------|---|---|------|------|---------|---|-------|

Sheets 121-132 not published

Sheet 135 Harlech

| | | | | | | | | | |
|------|------|------|---|---|------|------|---------|---|-------|
| 1903 | 1906 | OSEW | - | - | 1906 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|------|---|---|------|------|---------|---|-------|

Sheet 136 Bala

| | | | | | | | | | |
|---------|------|------|---|---|------|------|---------|---|-------|
| 1903-04 | 1906 | OSEW | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|---------|------|------|---|---|------|------|---------|---|-------|

Sheet 137 Oswestry

| | | | | | | | | | |
|------|------|------|---|---|------|------|-------------|---|-------|
| 1904 | 1907 | OSEW | - | - | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|------|---|---|------|------|-------------|---|-------|

Sheet 138 Wem

| | | | | | | | | | |
|------|------|------|---|---|------|------|-------------|---|-------|
| 1904 | 1907 | OSEW | - | - | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|------|---|---|------|------|-------------|---|-------|

Sheets 139-148 not published

Sheet 149 Barmouth

| | | | | | | | | | |
|------|------|------|---|---|------|------|---------|---|-------|
| 1903 | 1906 | OSEW | - | - | 1906 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|------|---|---|------|------|---------|---|-------|

Sheet 150 Dinas-Mawddwy

| | | | | | | | | | |
|---------|------|------|---|---|------|------|-------------|---|-------|
| 1903-04 | 1907 | OSEW | - | - | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|---------|------|------|---|---|------|------|-------------|---|-------|

Sheet 151 not published

Sheet 152 Shrewsbury

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1904 | 1907 | OSE | - | - | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

Sheets 153-184 not published

Sheet 185 Northampton

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|-------------|---|-------|
| 1904-05 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|---------|------|-----|---|---|------|------|-------------|---|-------|

Sheets 186-201 not published

Sheet 202 Towcester

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1904 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

Sheet 203 Bedford

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1904 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

Sheet 204 Biggleswade

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1904 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

Sheet 205 Saffron Walden

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1905 | 1907 | OSE | - | - | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

Sheets 206-215 not published

Sheet 216 *Tewkesbury*

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|---------|---|-------|
| 1903-04 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6 | n | 7.1.2 |
|---------|------|-----|---|---|------|------|---------|---|-------|

Sheet 217 *Moreton in Marsh*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1903 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

Sheet 218 *Chipping Norton*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-----|---|-------|
| 1902 | 1905 | OSE | - | - | 1905 | ARRR | 1/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-----|---|-------|

Sheet 219 *Buckingham*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1902 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

| | | | | | | | | | |
|------|------|-----|------|-------|------|------|-------------|---|-------|
| 1902 | 1905 | OSE | 2.07 | 1.07r | 1905 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|------|-------|------|------|-------------|---|-------|

Sheet 220 *Leighton Buzzard*

| | | | | | | | | | |
|------|------|-----|---|-------|------|------|-------------|---|-------|
| 1902 | 1906 | OSE | - | 3.06i | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|---|-------|------|------|-------------|---|-------|

Sheet 221 *Hitchin*

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|---------|---|-------|
| 1902-03 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|---------|------|-----|---|---|------|------|---------|---|-------|

| | | | | | | | | | |
|---------|------|-----|------|-------|------|------|-------------|---|-------|
| 1902-03 | 1905 | OSE | 3.07 | 2.07r | 1905 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|---------|------|-----|------|-------|------|------|-------------|---|-------|

Sheet 222 *Great Dunmow*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1902 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

Sheet 223 *Braintree*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1904 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

Sheet 224. Part of Sheet 242 *Colchester*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1904 | 1906 | OSE | - | - | 1906 | ARRR | 1/6,2/-,2/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

*Sheets 225-231 not published***Sheet 232** *Abergavenny*

| | | | | | | | | | |
|------|------|------|---|---|------|------|-------------|---|-------|
| 1904 | 1907 | OSEW | - | - | none | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|------|---|---|------|------|-------------|---|-------|

Sheet 233 *Monmouth*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1904 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

Sheet 234 *Gloucester*

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|---------|---|-------|
| 1903-04 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6 | n | 7.1.2 |
|---------|------|-----|---|---|------|------|---------|---|-------|

Sheet 235 *Cirencester*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1903 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

Sheet 236 *Oxford*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-----|---|-------|
| 1902 | 1905 | OSE | - | - | 1905 | ARRR | 1/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-----|---|-------|

Sheet 237 *Thame*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1902 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

Sheet 238 *Aylesbury*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-----|---|-------|
| 1902 | 1905 | OSE | - | - | 1905 | ARRR | 1/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-----|---|-------|

| | | | | | | | | | |
|------|------|-----|------|---|------|------|---------|---|-------|
| 1902 | 1905 | OSE | 1.06 | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|------|---|------|------|---------|---|-------|

Sheet 239 Hertford

| | | | | | | | | | |
|------|------|-----|------|-------|------|------|---------|---|-------|
| 1902 | 1905 | OSE | - | - | 1905 | ARRR | 1/- | n | 7.1.2 |
| 1902 | 1905 | OSE | 3.06 | 8.05r | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |

Sheet 240 Epping

| | | | | | | | | | |
|---------|------|-----|------|---|------|------|-------------|---|-------|
| 1902-03 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
| 1902-03 | 1905 | OSE | 1.07 | - | 1905 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |

Sheet 241. Part of Sheet 242 Chelmsford

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1904 | 1906 | OSE | - | - | 1906 | ARRR | 1/6,2/-,2/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

*Sheets 243-248 not published***Sheets 249, 263 Cardiff and Newport**

| | | | | | | | | | |
|------|------|------|---|---|------|------|-------------|---|-------|
| 1904 | 1906 | OSEW | - | - | 1906 | ARRR | 1/6,2/-,2/6 | n | 7.1.2 |
|------|------|------|---|---|------|------|-------------|---|-------|

Sheet 250 Chepstow

| | | | | | | | | | |
|------|------|------|---|---|------|------|---------|---|-------|
| 1904 | 1906 | OSEW | - | - | 1906 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|------|---|---|------|------|---------|---|-------|

Sheet 251 Malmesbury

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1904 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

Sheet 252 Swindon

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1903 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

Sheet 253 Abingdon

| | | | | | | | | | |
|------|------|-----|-------|---|------|------|---------|---|-------|
| 1902 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
| 1902 | 1904 | OSE | 11.05 | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |

Sheet 254 Henley on Thames

| | | | | | | | | | |
|------|------|-----|-------|---|------|------|---------|---|-------|
| 1902 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
| 1902 | 1904 | OSE | 11.05 | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |

Sheet 255 Beaconsfield

| | | | | | | | | | |
|------|------|-----|-------|---|-------|------|---------|---|-------|
| 1902 | 1904 | OSE | - | - | 1904? | ARRR | 1/- | w | 7.1.1 |
| 1902 | 1904 | OSE | 11.05 | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |

Sheet 256 North London

| | | | | | | | | | |
|------|------|-----|------|-------|------|------|-------------|---|-------|
| 1902 | 1905 | OSE | - | - | 1905 | ARRR | 1/- | n | 7.1.2 |
| 1902 | 1905 | OSE | 7.06 | 6.06r | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |

Sheet 257 Romford

| | | | | | | | | | |
|------|------|-----|------|--------|------|------|-------------|---|-------|
| 1903 | 1905 | OSE | - | - | 1905 | ARRR | 1/- | n | 7.1.2 |
| 1903 | 1905 | OSE | 6.06 | 10.05r | 1905 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |

Sheet 258. Part of Sheet 259 Shoeburyness

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1904 | 1906 | OSE | - | - | 1906 | ARRR | 1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

*Sheets 260-262, 264 not published***Sheet 265 Bath**

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|-------------|---|-------|
| 1903-04 | 1907 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|---------|------|-----|---|---|------|------|-------------|---|-------|

Sheet 266 *Marlborough*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1902 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

Sheet 267 *Hungerford*

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|-----|---|-------|
| 1901-02 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
|---------|------|-----|---|---|------|------|-----|---|-------|

| | | | | | | | | | |
|---------|------|-----|------|---|------|------|---------|---|-------|
| 1901-02 | 1904 | OSE | 6.05 | - | 1904 | ARRR | 1/-,1/6 | w | 7.1.1 |
|---------|------|-----|------|---|------|------|---------|---|-------|

Sheet 268 *Reading*

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|-----|---|-------|
| 1901-02 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
|---------|------|-----|---|---|------|------|-----|---|-------|

| | | | | | | | | | |
|---------|------|-----|------|---|------|------|---------|---|-------|
| 1901-02 | 1904 | OSE | 8.05 | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|---------|------|-----|------|---|------|------|---------|---|-------|

Sheet 269 *Windsor*

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|-----|---|-------|
| 1901-02 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
|---------|------|-----|---|---|------|------|-----|---|-------|

| | | | | | | | | | |
|---------|------|-----|------|--|------|------|----------|---|-------|
| 1901-02 | 1904 | OSE | 8.05 | | 1905 | ARRR | 1/-,1/6? | ? | 7.1.? |
|---------|------|-----|------|--|------|------|----------|---|-------|

| | | | | | | | | | |
|---------|------|-----|-------|------|------|------|-------------|---|-------|
| 1901-02 | 1904 | OSE | 3.07+ | 3.07 | 1905 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|---------|------|-----|-------|------|------|------|-------------|---|-------|

Sheet 270 *South London*

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|-----|---|-------|
| 1901-02 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
|---------|------|-----|---|---|------|------|-----|---|-------|

| | | | | | | | | | |
|---------|------|-----|------|-------|------|------|-------------|---|-------|
| 1901-02 | 1906 | OSE | 5.06 | 1.06r | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|---------|------|-----|------|-------|------|------|-------------|---|-------|

Sheet 271 *Dartford*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1903 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

| | | | | | | | | | |
|------|------|-----|------|-------|------|------|-------------|---|-------|
| 1903 | 1905 | OSE | 4.07 | 3.07r | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|------|-------|------|------|-------------|---|-------|

Sheet 272 *Chatham*

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|---------|---|-------|
| 1903-04 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|---------|------|-----|---|---|------|------|---------|---|-------|

Sheets 273, 274. Part of Sheets 289, 290 *East Kent (North)*

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|---------|---|-------|
| 1903-04 | 1906 | OSE | - | - | 1906 | ARRR | 1/6,2/- | n | 7.1.2 |
|---------|------|-----|---|---|------|------|---------|---|-------|

This sheet was reissued as Sheet 118 in the Large Sheet Series.

Sheets 275-280 not published

Sheet 281 *Frome*

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|-------------|---|-------|
| 1903-04 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|---------|------|-----|---|---|------|------|-------------|---|-------|

Sheet 282 *Devizes*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-----|---|-------|
| 1902 | 1905 | OSE | - | - | 1905 | ARRR | 1/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-----|---|-------|

Sheet 283 *Andover*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-----|---|-------|
| 1901 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
|------|------|-----|---|---|------|------|-----|---|-------|

| | | | | | | | | | |
|------|------|-----|------|---|------|------|---------|---|-------|
| 1901 | 1904 | OSE | 9.05 | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|------|---|------|------|---------|---|-------|

Sheet 284 *Basingstoke*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-----|---|-------|
| 1901 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
|------|------|-----|---|---|------|------|-----|---|-------|

| | | | | | | | | | |
|------|------|-----|------|---|------|------|---------|---|-------|
| 1901 | 1904 | OSE | 1.06 | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|------|---|------|------|---------|---|-------|

Sheet 285 *Aldershot*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-----|---|-------|
| 1901 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
|------|------|-----|---|---|------|------|-----|---|-------|

| | | | | | | | | | |
|------|------|-----|------|---|------|------|---------|---|-------|
| 1901 | 1904 | OSE | 7.05 | - | 1904 | ARRR | 1/-,1/6 | w | 7.1.1 |
|------|------|-----|------|---|------|------|---------|---|-------|

| | | | | | | | | | |
|------|------|-----|-------|-------|------|------|-------------|---|-------|
| 1901 | 1904 | OSE | 2.07+ | 2.07r | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|-------|-------|------|------|-------------|---|-------|

Sheet 286 Reigate

| | | | | | | | | | |
|------|------|-----|-------|-------|------|------|-------------|---|-------|
| 1901 | 1904 | OSE | - | 4.04i | 1904 | ARRR | 1/- | w | 7.1.1 |
| 1901 | 1904 | OSE | 10.05 | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
| 1901 | 1904 | OSE | 6.09+ | - | 1909 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |

Sheet 287 Sevenoaks

| | | | | | | | | | |
|------|------|-----|------|-------|------|------|-------------|---|-------|
| 1903 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
| 1903 | 1905 | OSE | 4.07 | 2.07r | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |

Sheet 288 Maidstone

| | | | | | | | | | |
|------|------|-----|---|-------|------|------|---------|---|-------|
| 1903 | 1905 | OSE | - | 8.05i | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|-------|------|------|---------|---|-------|

Sheets 291-296 not published

Sheet 297 Wincanton

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1903 | 1907 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

Sheet 298 Salisbury

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|---------|---|-------|
| 1902-03 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|---------|------|-----|---|---|------|------|---------|---|-------|

Sheet 299 Winchester

| | | | | | | | | | |
|------|------|-----|-------|---|------|------|-------------|---|-------|
| 1901 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
| 1901 | 1904 | OSE | 8.05 | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
| 1901 | 1904 | OSE | 7.07+ | - | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |

Sheet 300 Alresford

| | | | | | | | | | |
|------|------|-----|--------|-------|------|------|-------------|---|-------|
| 1901 | 1904 | OSE | - | - | 1903 | ARRR | 1/- | w | 7.1.1 |
| 1901 | 1903 | OSE | 8.04 | - | 1904 | ARRR | 1/- | w | 7.1.1 |
| 1901 | 1903 | OSE | 11.06+ | 3.06i | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |

Sheet 301 Haslemere

| | | | | | | | | | |
|------|------|-----|------|---|------|------|---------|---|-------|
| 1901 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
| 1901 | 1904 | OSE | 9.05 | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |

Sheet 302 Horsham

| | | | | | | | | | |
|------|------|-----|------|---|------|------|---------|---|-------|
| 1901 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
| 1901 | 1904 | OSE | 6.05 | - | 1905 | ARRR | 1/-,1/6 | w | 7.1.1 |

Sheet 303 Tunbridge Wells

| | | | | | | | | | |
|------|------|-----|------|-------|------|------|-------------|---|-------|
| 1903 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
| 1903 | 1905 | OSE | 4.07 | 2.07r | 1907 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |

Sheet 304 Tenterden

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1903 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

Sheets 305, 306, 321. Part of Sheets 289, 290 East Kent (South)

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1904 | 1906 | OSE | - | - | 1906 | ARRR | 1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

This sheet was reissued as Sheet 128 in the Large Sheet Series.

Sheets 307-312 not published

Sheet 313 Shaftesbury

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1903 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

Sheet 314 *Ringwood*

| | | | | | | | | | |
|---------|------|-----|------|---|------|------|-------------|---|-------|
| 1902-03 | 1905 | OSE | - | - | 1905 | ARRR | 1/- | n | 7.1.2 |
| 1902-03 | 1905 | OSE | 7.06 | - | 1905 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |

Sheet 315 *Southampton*

| | | | | | | | | | |
|------|------|-----|------|---|------|------|----------|---|-------|
| 1901 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
| 1901 | 1904 | OSE | 9.05 | - | 1905 | ARRR | ?1/-,1/6 | n | 7.1.2 |

Sheets 316, 331 *Portsmouth*

| | | | | | | | | | |
|------|------|-----|------|---|------|------|---------|---|-------|
| 1901 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
| 1901 | 1904 | OSE | 4.05 | - | 1905 | ARRR | 1/-,1/6 | w | 7.1.1 |

Sheets 317, 332 *Chichester and Bognor*

| | | | | | | | | | |
|------|------|-----|-------|-------|------|------|-------------|---|-------|
| 1901 | 1903 | OSE | - | - | 1903 | ARRR | 1/6 | w | 7.1.1 |
| 1901 | 1903 | OSE | 2.05 | - | 1905 | ARRR | 1/6 | w | 7.1.1 |
| 1901 | 1903 | OSE | 7.07+ | 7.07r | 1907 | ARRR | 1/6,2/-,2/6 | n | 7.1.2 |

Sheets 318, 333 *Brighton and Worthing*

| | | | | | | | | | |
|------|------|-----|------|---|------|------|---------|---|-------|
| 1901 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
| 1901 | 1904 | OSE | 2.05 | - | 1905 | ARRR | 1/- | w | 7.1.1 |
| 1901 | 1904 | OSE | 1.06 | - | 1905 | ARRR | 1/-,1/6 | w | 7.1.1 |

Sheets 319, 334 *Eastbourne and Lewes*

| | | | | | | | | | |
|------|------|-----|------|-------|------|------|-------------|---|-------|
| 1903 | 1905 | OSE | - | - | 1905 | ARRR | 1/6,2/- | n | 7.1.2 |
| 1903 | 1905 | OSE | 2.07 | 1.07r | 1905 | ARRR | 1/6,2/-,2/6 | n | 7.1.2 |

Sheet 320 *Hastings*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1903 | 1905 | OSE | - | - | 1905 | ARRR | 1/-,1/6 | n | 7.1.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

*Sheets 322-326 not published***Sheets 327, 341** *Bridport*

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1905 | 1906 | OSE | - | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

Sheets 328, 342 *Dorchester and Weymouth*

| | | | | | | | | | |
|------|------|-----|---|--------|------|------|---------|---|-------|
| 1903 | 1906 | OSE | - | 10.05r | 1906 | ARRR | 1/6,2/- | n | 7.1.2 |
|------|------|-----|---|--------|------|------|---------|---|-------|

Sheets 329, 343 *Bournemouth and Swanage*

| | | | | | | | | | |
|------|------|-----|-------|---|------|------|---------|---|-------|
| 1903 | 1904 | OSE | - | - | 1904 | ARRR | 1/6 | w | 7.1.1 |
| 1903 | 1904 | OSE | 11.05 | - | 1904 | ARRR | 1/6,2/- | w | 7.1.1 |

Sheet 330 *Lymington*

| | | | | | | | | | |
|------|------|-----|------|---|------|------|-------------|---|-------|
| 1901 | 1904 | OSE | - | - | 1904 | ARRR | 1/- | w | 7.1.1 |
| 1901 | 1904 | OSE | 5.06 | - | 1906 | ARRR | 1/-,1/6,2/- | n | 7.1.2 |

*Sheets 335-340 not published***Sheets 344, 345. Part of Sheets 330, 331** *Isle of Wight*

| | | | | | | | | | |
|------|------|-----|------|-------|------|------|---------|---|-------|
| 1901 | 1904 | OSE | - | - | 1904 | ARRR | 1/6 | w | 7.1.1 |
| 1901 | 1904 | OSE | 4.06 | 1.05r | 1904 | ARRR | 1/6,2/- | w | 7.1.1 |

Sheets 346-360 not published

District Maps

Aldershot District Manoeuvre Map. Parts of Sheets 268, 269, 284, 285, 300, 301.

| | | | | | | | | | |
|---------|------|-----|------|---|------|------|-----|---|-------|
| 1901-02 | 1904 | OSE | - | - | 1904 | ARRR | 2/- | w | 7.3.1 |
| | | | 1.05 | | | | | | |
| | | | 1912 | | | | | | |

The reprints were listed by Guy Messenger in *The Ordnance Survey one-inch map of England and Wales Third Edition (Large Sheet Series)*, London, Charles Close Society, 1988, but they have not been recorded by this writer.

Aldershot District Manoeuvre Map (North). Parts of Sheets 268, 269, 284, 285.

There is no green plate on this map. The overprint is red and blue.

| | | | | | | | | | |
|---------|------|-----|---|---|------|------|---------|---|-------|
| 1901-02 | 1905 | OSE | - | - | 1905 | ARRR | 1/6,2/- | n | 7.3.2 |
|---------|------|-----|---|---|------|------|---------|---|-------|

Aldershot Command area bordered in red, leasehold grounds are shaded red and blue.

| | | | | | | | | | |
|---------|------|-----|------|---|------|------|---------|---|-------|
| 1901-02 | 1905 | OSE | 5.06 | - | 1905 | ARRR | 1/6,2/- | n | 7.3.2 |
|---------|------|-----|------|---|------|------|---------|---|-------|

| | | | | | | | | | |
|---------|------|-----|-------|-------|-------|------|-------------|---|-------|
| 1901-02 | 1905 | OSE | 2.07+ | 1.07r | ?1905 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|---------|------|-----|-------|-------|-------|------|-------------|---|-------|

| | | | | | | | | | |
|---------|------|-----|--------|-------|------|------|-------------|---|-------|
| 1901-02 | 1905 | OSE | 6.09++ | 4.09r | 1909 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|---------|------|-----|--------|-------|------|------|-------------|---|-------|

| | | | | | | | | | |
|---------|------|-----|---------|-------|------|------|-------------|---|-------|
| 1901-02 | 1905 | OSE | 7.11+++ | 7.11r | 1911 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|---------|------|-----|---------|-------|------|------|-------------|---|-------|

The component sheets are no longer listed. Leasehold grounds are shaded.

| | | | | | | | | | |
|---------|------|-----|---------|-------|------|------|-------------|---|-------|
| 1901-02 | 1905 | OSE | 7.11+++ | 7.11r | 1911 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|---------|------|-----|---------|-------|------|------|-------------|---|-------|

Leasehold grounds are bordered, but unshaded.

| | | | | | | | | | |
|---------|------|-----|---------|-------|------|------|-------------|---|-------|
| 1901-02 | 1905 | OSE | 7.11+++ | 7.11r | 1911 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|---------|------|-----|---------|-------|------|------|-------------|---|-------|

Conservation areas and danger zones are marked in red.

Aldershot District Manoeuvre Map (South). Parts of Sheets 284, 285, 300, 301, 316, 317.

There is no green plate on this map. The overprint is red and blue.

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1901 | 1905 | OSE | - | - | 1905 | ARRR | 1/6,2/- | n | 7.3.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

Aldershot Command area bordered in red, leasehold grounds shaded red and blue.

| | | | | | | | | | |
|------|------|-----|------|-------|------|------|---------|---|-------|
| 1901 | 1905 | OSE | 5.06 | 1.06r | 1905 | ARRR | 1/6,2/- | n | 7.3.2 |
|------|------|-----|------|-------|------|------|---------|---|-------|

| | | | | | | | | | |
|------|------|-----|--------|--------|-------|------|-------------|---|-------|
| 1901 | 1905 | OSE | 10.07+ | 09.07r | ?1907 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|------|------|-----|--------|--------|-------|------|-------------|---|-------|

| | | | | | | | | | |
|------|------|-----|---------|--------|-------|------|-------------|---|-------|
| 1901 | 1905 | OSE | 10.09++ | 10.09r | ?1909 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|------|------|-----|---------|--------|-------|------|-------------|---|-------|

| | | | | | | | | | |
|------|------|-----|---------|-------|------|------|-------------|---|-------|
| 1901 | 1905 | OSE | 8.12+++ | 8.12r | 1912 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|------|------|-----|---------|-------|------|------|-------------|---|-------|

The component sheets are no longer listed. Leasehold grounds are shaded.

| | | | | | | | | | |
|------|------|-----|---------|-------|------|------|-------------|---|-------|
| 1901 | 1905 | OSE | 8.12+++ | 8.12r | 1912 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|------|------|-----|---------|-------|------|------|-------------|---|-------|

With the Butser Hill area added to the Command.

| | | | | | | | | | |
|------|------|-----|---------|-------|------|------|-------------|---|-------|
| 1901 | 1905 | OSE | 8.12+++ | 8.12r | 1912 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|------|------|-----|---------|-------|------|------|-------------|---|-------|

The Woolmer Instructional Military Railway is noted; the Butser Hill area is not overprinted.

Salisbury Plain. Sheet 282. Parts of Sheets 281, 283, 297, 298, 299.

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1903 | 1906 | OSE | - | - | 1905 | ARRR | 1/6,2/- | n | 7.3.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

| | | | | | | | | | |
|------|------|-----|---|---|------|------|---------|---|-------|
| 1903 | 1906 | OSE | - | - | 1905 | ARRR | 1/6,2/- | n | 7.3.2 |
|------|------|-----|---|---|------|------|---------|---|-------|

The boundary of the War Department lands is overprinted in red, and on all later states.

| | | | | | | | | | |
|------|------|-----|---|---|------|------|-------------|---|-------|
| 1903 | 1909 | OSE | - | - | 1909 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|------|------|-----|---|---|------|------|-------------|---|-------|

With War Department Property revised to 1908.

| | | | | | | | | | |
|---------|------|-----|-------|---|------|------|-------------|---|-------|
| 1901-04 | 1909 | OSE | 10.09 | - | 1909 | ARRR | 1/6,2/-,2/6 | n | 7.3.2 |
|---------|------|-----|-------|---|------|------|-------------|---|-------|

With War Department Property revised to 1908.

1901-04 1909 OSE 10.12+ 8.12r 1912 CCR 1/6,2/-,2/6 n 7.3.2

With War Department Property revised apparently to 1908, but 1911 appears as a superseded date on the next, so this is the more probable revision date here. The component sheets are no longer listed.

1901-04 1909 OSE 10.12+ 8.12r 1912 CCR 1/6,2/-,2/6 n 7.3.2

With War Department Property revised to 1911. Further revisions by War Department 1914. The 1909 publication date has disintegrated into 1908.

1901-04 1909 OSE 2150/27 8.12r 1927 CCR 1/6,2/-,2/6 n 7.3.2

Renamed *War Department Land on Salisbury Plain*, and marked *For Official Use Only*. Further Revisions by War Department 1926.

Military Manoeuvre Map, 1906 Wareham and Surrounding Country. Parts of Sheets 328, 329, 342, 343.

nd 1906 OSE - - 1906 ARRR 1/6,2/-,2/6 n 7.3.2

nd 1906 OSE 9.07 - 1907 ARRR 1/6,2/-,2/6 n 7.3.2

Renamed *Wareham and Surrounding Country*.

Windsor and Neighbourhood. Sheet 269. Part of Sheets 255, 285.

nd 1907 OSE - - - ARRR np s 7.3.3

Prepared specially for Eton College Rifle Volunteer Corps. Without alpha-numeric system, with a simple border. The map was printed, not published, in 1907.

Vox Pop

Peter Warburton

The first text is Old Series LXXXI SW (Buxton), specifically the north eastern corner of the sheet where Axe Edge and the Goyt Valley coincide with a geological boundary between millstone grit moorland on the Cheshire side and the carboniferous limestone country of the White Peak to the east. On the western side of this divide the map indicates small scale mining of the coal scheme running north west - south east. Where the seam runs near to the surface vertical shafts were sunk at close intervals to avoid the need for underground galleries. These workings are correctly shown as in the plural as coal pits. At first sight the item 'Cauk Pits' close to Ladsmanlow Toll Gate might be thought a misprint.

The illustration is from a late 1850s sheet, probably Margery state 6, but the words had remained unchanged since first publication in 1842 and survived as late as the David & Charles facsimile of an 1897 print. The 1905-06 revision removed the wording, using the space to include a triangle of tramways and a rail connection with that unlikely of lines, the Cromford and High Peak (Third Edition, sheet 46).



Going back to 1839, it is easy to imagine Lieutenant Bailey of the survey party realising that there could be no coal down below and seeking local guidance: “What have we here, my man?”. Answer: “Them’s cauk pits”. Cauk, cognate with the Dutch and German kalk, was even then an obsolescent word for lime, extant only in dialect language. The suggestion, advanced with justified diffidence, is that this is an unusual adoption and retention by the OS of a dialect vocabulary applied to a man-made as distinct from a natural feature.

On the adjoining SE Buxton quarter sheet, published two years earlier in 1840, there are several similar industrial sites, all identified by the standard OS description of ‘limestone quarry’. The writing for the SE Quarter was by J. A. Harrison; his colleague J. W. Froggett was responsible for the SW. Froggett is a Derbyshire name. Further speculation is tempting, but chance is no doubt a sounder explanation than some benign conspiracy.

The second example of uncharacteristic informality dates from 1936. A minor change introduced during the period of issue of Tourist and Special District sheets derived from the Popular Edition was the provision of a compilation diagram. This innovation is not present on earlier such sheets but seems to have become general, although not universal, by the mid-1930s.

The standard form of words and the typeface used on both England and Wales and Scotland sheets is illustrated on the left, below (The Trossachs and Loch Lomond, 3700/34). To the right is the odd man out (The Cairngorms, 5036, 1936) – slightly different words and the frightful solecism of an abbreviation. Note the brazen deliberation of the act – the meticulous punctuation, the ample space available for the lettering. The image here is of the perpetrator being hauled up before Higher Authority in the form of a senior official of military manner and Reith-like attitude to be told that this must never be allowed to happen again. Probably it did not: compilation diagrams on those post-war Tourist sheets still based on Popular cartography referred only to ‘component One-Inch Sheets’, cannily omitting mention of any out of date Edition.

Diagram shows the position of this Map in relation to the Sheets of the Popular Edition

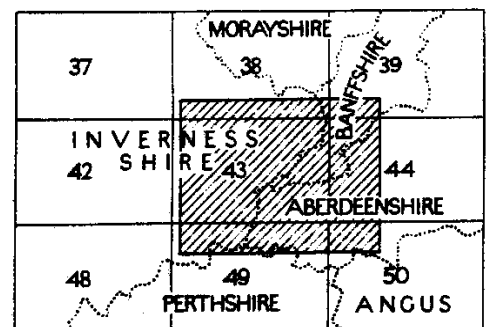
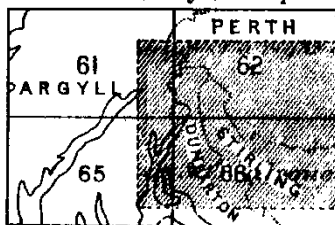


Diagram showing the position of this Sheet in relation to the Pop. Edition.

There is of course a possible alternative theory: that the lapse went unnoticed but, given the writer’s perhaps heterodox opinion that maps should stimulate the imagination, this would be most unsatisfactory.

Exploring the revision on Explorers and Outdoor Leisure Maps

John Cole

Sheetlines 40 (August 1994) contained a review of the first of the Explorer map series. Two each for the Chiltern and Mendip Hills and one for Kielder Water. More important for record purposes, the article concluded with a list of the component Pathfinder maps and their dates.

This article seeks to trigger a similar county by county review and Cornwall makes a convenient starting point on several counts. Three more Explorers appeared during 1995, for Land's End, The Lizard and Bodmin Moor, whilst amidst considerable local publicity, complete coverage for the county was proclaimed in the Autumn of 1997. Geographically, the south west corner of the country is a suitable starting point.

Dating the Explorers is a complex task where Pathfinder sections as opposed to the whole map are involved, due to the range of years across a sheet. This is not helped by the occasional error, for example 1347, *Bodmin*, where the date given is 1971-83 when in fact the eight kilometre squares covering the town itself were revised at 1:2500 scale in 1963. Ordnance Survey service in Cornwall for nearly thirty years thus gives me considerable advantage in respect of dating and content, so it may be more difficult for others to continue in similar fashion.

The dating is divided into two parts: overall resurvey or revision at 1:1250, 1:2500, 1:10,000 or 1:10,560 scale (post 1939-45 war), and partial resurvey or revision. The latter is reduced from larger scales, but uses other unspecified sources also – possibly 1:50,000 mapping in the case of vegetation. In Cornwall any resurvey was at 1:1250 scale for the larger urban areas, with revision at 1:2500 for the remainder and all rural areas, except for 1:10,000 for parts of the Isles of Scilly. Certain coastal sheets below mean high water mark will also have been at only 1:10,000 or 1:10,560 scale. As an example, Explorer 108 commences the overall resurvey period with the resurvey of Plymouth in 1947 and ends with the completion of 1:2500 revision in 1953. The partial work between then and 1997 is fully described later.

Partial revision takes the following form:

- important detail such as bypasses (eight not having previously appeared on Pathfinders) or main road realignments;
- housing or industrial development especially where it extends a built up area. Inside such an area it tends to be more selective;
- large blocks, i.e. 100 square kilometres, of rural 'sweep' - a modern OS term for comprehensive revision.

Other partial revision has tended to take the following form on Cornish Explorers:

- large areas of water other than reservoirs, especially fishing lakes;
- wooded areas, and tracks in woods – mainly deletion but some addition;
- wind farms;
- isolated holiday complexes;
- addition, alteration or deletion of administrative boundaries, antiquities and public rights of way, and similar of names.

There is also some evidence of vegetation revision away from woods – mainly deletion, usually of the scrub and rough grass variety.

In the following lists the Pathfinder numbers are followed by the latest edition letter, (All) indicating that the whole sheet is incorporated. It is important to note that Pathfinders 1310, 1325 and 1372 were originally prepared from digital data and as a consequence had to be converted back to analogue mapping. These digital sheets were instantly identifiable in that buildings were uncased and with a much darker (grey) infill, and showed as many 'garden' fences, walls etc. as the scale would permit.

Explorers 7,8 and 9 were later renumbered, 7 and 8 becoming 102 and 103 (and A1 editions) in 1996. But in the case of 9, a two kilometre gap between it and 107 resulted from sheetline alterations and this had to be filled. Becoming 109 (and a B edition) it had lost Boscastle and Tintagel in the north to sheet 111, and gained Bodmin and Liskeard in the south by overlapping 107.

101; formerly 20; formerly OLM 25 (A3) Isles of Scilly

Overall revision 1978. Partial revision 1994.

The most obvious additions are housing and industrial at Hughtown; airport runways and five masts on St Mary's and a hotel on St Martin's. Submarine contours have been removed since the A edition of the OLM. Replacing the 1:10,000 extract of part of St Mary's shown on the OLM is a 1:2500 extract of the older part of Hughtown, a 1:10,000 extract of part of Tresco and a 1:25,000 extract of Penzance indicating ferry terminal and heliport.

102; formerly 7 Land's End

1364 A2 (All), 1368 B (All), 1359 A1, 1365 A1, 1369 A1.

Overall resurvey or revision 1961 - 1978. Partial resurvey or revision 1978 - 1996.

The B edition of 1368 was a complete rural revision at 1:2500 scale during 1986 - 1988 and a 1:1250 resurvey of Penzance in 1987. As a consequence some edge discrepancies with 1364 might be anticipated but these are remarkably few and hard to detect. One which does stand out is a public right of way (corrected on the more recent Pathfinder).

Housing/industrial revision: Penzance, St Ives, Hayle, Carbis Bay, Lelant Reawla, Wall, Godolphin Cross, Goldsithney, Crowlas, Marazion (community centre), Long Rock, Gulval, Trewellard and Tregaseal.

103; formerly 8 The Lizard

1370 (All), 1372 (All), 1365 A1, 1366 A1, 1369 A1.

Overall 1967 - 1979. Partial 1979 - 1996.

Housing/industrial revision: Falmouth, Helston, Penryn, Porthleven, Breage, Lizard, Ruan Minor, St Keverne, Mabe Burnthouse. New wind turbines shown by small open circles.

104 Redruth and St Agnes

1352 (All), 1346 A1, 1359 A2, 1360, 1365 A1, 1366 A1.

Overall 1963 - 1975. Partial 1975 - 1997.

Cover photo should read "Old mine engine house near (about a mile to the south of) St Agnes Head". Probably the most densely populated part of Cornwall and thus considerable housing and industrial revision, with three new bypasses. The windpump

symbol of the 1:50,000 map has been incorporated and an enlarged example now denotes wind generators (or turbines, as on sheet 103). A wind farm of sixteen generators appears on the map. Isolated change of other varieties is also to be found. Examples are tailings dams (connected with mining) and revision to a major holiday complex.

Housing/industrial revision: Camborne, Redruth, Newquay (part), Truro (part), Perranporth, Praze, Troon, Four Lanes, Illogan, Ponsanooth (school), Mount Hawke, Threemilestone, Shortlanesend, Playing Place, Devoran, St Agnes, Goonhavern, Cubert, Crantock, Holywell, St Newlyn East (part).

105

Falmouth and Mevagissey

1361 (All), 1352 A1, 1353 A1, 1354, 1360, 1366 A1.

Overall 1963 - 1979. Partial 1979 - 1997.

Five new bypasses appear. A significant change to railway detail is included. The main line alters from double to single track near the village of Probus. The actual point of change is several hundred yards north east of the point on the map suggesting that the information has not come from large-scale sources. An existing summer river service between Falmouth and Truro now has its route shown and described as Ferry (P). A projected bypass (since built) has its route depicted by a pecked red line.

Housing/industrial revision excluding 103 and 104 overlaps: Truro, St Austell (part), Mevagissey, Portmellon, Gorran Haven, Veryan, Gerrans (school), Probus, St Mawes, St Just in Roseland, Mylor Bridge (mis-spelt on 104 A edition!), St Erme, Trispen, Grampound Road, Tregony (school).

106

Newquay and Padstow

1337 A1 (All), 1346 A1 (All), 1325, 1338, 1347, 1353 A1, 1354.

Overall 1965 - 1978. Partial 1978 - 1997.

The china clay quarrying area which is susceptible to frequent and widespread change, was fully revised at 1:2500 scale in 1992 and the majority of this is embodied, though revision of names may not be as reliable. Rural complexes such as a business park, a country park and an American theme park appear for the first time. The first two are known to have been surveyed at 1:2500 scale but the third may have come from another source. Two wind farms appear with generators shown by the large windpump symbol. Additional masts have proliferated, particularly at St Eval and are also now shown by symbol as per 1:50,000, rather than dot as per Pathfinder. New bypasses at Mitchell and Indian Queens with the projected route of a road re-alignment as per Explorer 105. A number of fishing lakes have been added apparently from other than 1:2500 revision.

Housing/Industrial revision: Newquay, St Newlyn East, Quintrell Downs, Fraddon, Indian Queens, St Columb Major, St Dennis, St Stephen, Goverseth, Roche, Victoria, Mawgan Porth.

The section of this map covered by Pathfinder 1337 (A1 1994) has very little added. An exception noted was some housing at St Issey.

- 107 St Austell and Liskeard
1347 (All), 1354 (All), 1348, 1355 A1.
Overall 1963 - 1976. Partial 1976 - 1997.
 China clay quarrying revision as per Explorer 106. The private Bodmin and Wenford railway has been extended operationally westwards to a new station at Boscarne Junction whilst an intermediate ‘halt’ has been shown on the existing (opened) section. The whole is now depicted by the single line symbol.
 Housing/industrial revision: Bodmin, Liskeard, St Austell, Looe, Lostwithiel, St Blazey, Par, Tywardreath, Bugle, Penwithick, Pelynt, Luxulyan, Lanivet, Dobwalls.
- 108 Lower Tamar Valley and Plymouth
1339, 1340, 1348, 1349, 1355 A1 1356 A1.
Overall 1947 - 1953. Partial 1953 - 1997.
 The relatively early and compact overall survey dates lead to the production of First Series regular 1:25,000 maps for the areas covered by Pathfinders 1340, 1349 and 1356 (See *Sheetlines* 36 and 47). Close inspection revealed that a complete revision was effected between 1953 and 1983 and a more precise dating is difficult even though 1:10,000 maps have been examined. For example SX45NW indicates that whilst 1:1250 resurvey or revision is dated 1960-83, 1:2500 resurvey or revision is dated 1951-73. There is also evidence of tidal revision but again this is partial. The portion of Pathfinder 1355 included was completely revised in 1988 or later (SX35). There is evidence of partial revision on the eastern side of 1348 including a road re-alignment. Most of the remainder is circa 1951-2 with the exception of SX36NW (Pathfinder 1348) and SX37SW (Pathfinder 1339) which are circa 1975.
 Housing/industrial revision: Plymouth, Tavistock, Callington, Landrake, Gunnislake, Stoke Climsland, Heybrook Bay, Buckland Monachorum.
- 109; formerly 9 Bodmin Moor
1338 (All), 1325, 1326 B, 1339, 1347, 1348.
Overall 1952 - 1978. Partial 1955 - 1997.
 Two wind farms had been shown on Explorer 9; the generators were indicated by tiny dots – almost impossible to pick out at Delabole. On the later sheet the large windpump symbol is used.
 Housing/industrial revision excluding overlap of 107: St Teath, St Mabyn, St Kew Highway, Blisland, Coad’s Green, Five Lanes.
- 111 Bude, Boscastle and Tintagel
1310(All), 1292 A2, 1311 A1, 1325, 1326 B.
Overall 1905 - 1955. Partial 1955 - 1997.
 The pre 1939-45 overall start date indicates the presence of bypassed 1:2500 maps (*Sheetlines* 50). As far as can be ascertained, bypassed kilometre squares are to be found in Pathfinder 1292 and the SX39 part of 1311. Large scale revision would have taken place by about 1980 but the derived nature of the 1:25,000 map has militated against all such revision filtering through.

Housing/industrial revision: Bude (superstore), Boscastle, Bossiney, Marhamchurch, Bridgerule, Pyworthy, Week St Mary, Poundstock, Whitstone, Warbstow Cross, Maxworthy.

112

Launceston and Holsworthy

1292 A2, 1293 A1, 1311 A1, 1312 A1, 1326 B, 1327 A1, 1339, 1340.

Overall 1904 - 1952, Partial 1952 - 1997.

Bypassed not wholly revised in SX39, SX48, SS30 and SS40. Major additions are the re-routed A30 trunk road and Roadford Reservoir. Much of the new afforestation (especially in areas of bypassed 1:2500) may not have come from large-scale sources. Similar applies to new fishing lakes particularly in the vicinity of Halwill. Pathfinder 1326 was republished as a B edition in 1989 and perhaps as a forerunner of the Explorers. My copy was abruptly quoted as 'Revised 1987'. The SX28 part of the map had clearly been revised, but inspection of the relevant 1:10,000 suggests that this took place in the mid 1970s. Far more doubt exists that any revision (post 1950s) was carried out at all in the eastern half of SX38. A rather unfortunate name alteration will be perceived in square 4487.

Housing/industrial revision: Holsworthy, Boyton, St Giles on the Heath, Launceston, Halwill Junction, Northlew.

126

Clovelly and Hartland

1253 A1 (All), 1273 A1 (All), 1254, 1274 A1, 1292 A2, 1293. A1.

Overall 1904 - 1958. Partial 1958 - 1997.

The Cornish portion of this map contains only three unrevised bypassed squares. The situation in SS30, SS40 and SS41 on the Devonshire side is far different. None appear to have existed in SS42 whilst SS22/32 was probably purged of its massive bypassed content by 1980.

Housing/industrial revision: Bideford, Torrington, Hartland, Shebbear and Woolfardisworthy.

Whilst it has already become clear to discerning *Sheetlines* readers that there is no such thing (yet) as an up-to-date Explorer, except maybe in the field of communications, majority of built up area or tourist information etc., there was, likewise, never any such thing as a similar Pathfinder or OLM. An examination of the date ranges listed for the 1:25,000 Second Series in *Sheetlines 48* will reveal that about three to five years between survey and publication was the best, and about thirty-five years the worst. That is taking the earliest survey date other than for Cornwall, Devon and Sussex maps containing bypassed 1:2500.

A minor technical point which should be cleared up is the subject of sand dunes. It was noted in *Sheetlines 49* that a discrepancy existed between the extent on Explorer 104 and the C edition of 1:50,000 sheet 200, in the vicinity of Penhale and Gear Sands (SW770560). The answer in this case points to differing viewpoints of large and small scale surveyors over a subject which is largely 'matter of opinion'. It is doubtful if either is correct and the dunes should extend to the road between Perranporth and Gear Farm, and to the field boundary between there and Mount, contouring being restricted to the field area. A similar 'discrepancy' exists between Explorer 102 and 1:50,000 sheet 203. Here the smaller scale map is undoubtedly correct and the contouring on the Pathfinder and later Explorer should not have been shown.

Give me a firm spot on which to stand ...

Chris Higley

Collectors of Third Edition One-inch maps will have come across the marginal note “The Altitudes are given in Feet above the assumed Mean Level of the Sea at Liverpool, which is 0.650 of a Foot below the general Mean Level of the Sea”. Readers will also remember the masterful demonstration by Brian Adams (*Sheetlines* 40) that, for Ordnance Survey purposes, the prime meridian runs not through the transit circle of Airy’s telescope at Greenwich but instead through a drainpipe some eight metres to the west.

In *Sheetlines* 56, I made some rude remarks about the design of the OS website. Despite the design, some of the content is invaluable. A 42 page booklet, *A guide to coordinate systems in Great Britain*, is available to download free of charge. Subtitled “An introduction to mapping coordinate systems and the use of GPS datasets with Ordnance Survey mapping”, this booklet gives a very clear explanation of why the question “Where **exactly** am I?” is so difficult to answer. Some of the clarity will be lost in this brief summary, but I hope that a review will encourage those with Internet access to download the original document from <http://www.ordsvy.gov.uk/services/gps-co/geo6.htm>. I should have liked to have given appropriate credit to the unfortunately anonymous author(s).

Looking at topographical detail, the Earth has an irregular and complex shape. Mapmakers start with a simple ellipsoid as a model of the Earth’s surface. The satellite-based Global Positioning System (GPS) uses an ellipsoid known as GRS80, which is designed to be a best fit to the whole Earth. The Ordnance Survey uses Airy’s 1830 ellipsoid, which is a better fit in Britain itself, but not useful elsewhere. The two ellipsoids have slightly different dimensions and position. Latitude and longitude are angles which define a point on the surface of an ellipsoid and hence depend on the particular ellipsoid in use. The booklet demolishes the myth that a point on the ground has a unique latitude and longitude. It points out that “there are many different meridians of zero longitude (prime meridians) and many different circles of zero latitude (equators), although the former generally pass somewhere near Greenwich, and the latter is always somewhere near the rotational equator”. Different ellipsoids in common use give rise to equally valid systems of latitude and longitude which can disagree on the coordinates of a point by more than 200 metres.

The fundamental reference surface for vertical measurement is the Geoid, the surface of constant height (strictly, of equal gravitational potential) closest to the average surface level of the world’s oceans. Because of variations in the Earth’s gravity field, this is an irregular surface, which varies from the best-fit ellipsoid by up to 200 metres. Ordnance Survey measures heights from Ordnance Datum Newlyn (ODN), corresponding to the mean sea level as measured by the tide gauge at Newlyn between 1915 and 1921. Although sea levels have changed slightly since then, this adopted zero value for heights has not been redefined. Because of the effect of ocean currents, tides and winds, the ODN local datum is about 80cm below the globally defined Geoid. ODN heights were extended through mainland Britain by using spirit levelling to fix the heights of benchmarks. With the advent of precise GPS, the benchmark network has not been maintained since the 1970s and users are warned of possible subsidence of individual benchmarks. ODN heights are not available on many offshore islands, which have their own mean sea levels based on a local tide gauge.

A map represents features on the curved surface of the Earth by points on a two dimensional plane surface. A projection is used to transform ellipsoidal latitude and longitude into cartesian grid coordinates. A map projection cannot be a perfect representation because it is not possible to show a curved surface on a flat map without distortion. Different map projections will produce different distortion and different coordinates.

The Ordnance Survey uses the National Grid as a horizontal coordinate system. This consists of a geodetic datum using the Airy ellipsoid, a “terrestrial reference frame” (TRF) called OSGB36, based on triangulation, and a Transverse Mercator map projection. The booklet records that the Principal Triangulation of Britain was carried out between 1783 and 1853. The retriangulation, which created OSGB36, was carried out between 1936 and 1953. No new distance measurements were used in this retriangulation. Instead, the overall size was made to agree with the original Principal Triangulation by obtaining the best fit at eleven control stations common to both the triangulations. Hence, the overall size of the TRF used for British mapping can still be derived from the measurement, using eighteen-foot glass rods, of a single base line on Hounslow Heath in 1784. The resulting error, as the OS booklet points out, is surprisingly low. The figure is quoted of about 20 metres in the length of the country.

The booklet also describes a modern GPS coordinate system. This is based not on the trig. pillars of OSGB36, but instead on a TRF provided by the positions of a constellation of 24 satellites operated by the US Department of Defense. For security reasons, the full accuracy of this system is not made available to civilian users: positional accuracies being deliberately distorted by a feature called selective availability. A civilian user with a single GPS receiver (now available, pocket sized, for less than £100) can establish position to around 100 metres or slightly better. The distortion can be overcome by using two GPS receivers, one of which is positioned at a nearby, known reference point.

The datum used for GPS positioning, “World Geodetic System 1984” (WGS84), uses an ellipsoid of the same size and shape as GRS80, oriented with the equator and prime meridian as they were in 1984. A more robust, but now essentially identical, realisation of the WGS84 TRF, based on a number of different space positioning methods, has been created by the civil GPS community. This is known as the International Terrestrial Reference Frame (ITRF). By making use of the tracking stations of the International GPS service, a civilian user of single geodetic-quality GPS can fix a position relative to the ITRF which is accurate to a few millimetres.

GPS is a truly global system and, globally, land masses move relative to each other due to tectonic plate motion or continental drift. Since 1984 the orientation of WGS84 has been changed such that the average motion of crustal plates relative to the ellipsoid is zero. Although average motion is zero, individual plates do move relative to WGS84. Hawaii and Australia are moving at up to one metre per decade; in Britain WGS84 latitudes and longitudes change at about 2.5cm per year in a north-easterly direction.

While one can accept that latitude and longitude will depend on the datum used, having a coordinate system that changes with time is far from ideal. For this reason, the European Terrestrial Reference System 1989 (ETRS89) is defined as a datum which coincided with WGS84 in 1989 and since then has moved steadily with the European land mass. Hence the associated TRF, ETRF89 provides fixed coordinates in Europe, but is not useful elsewhere.

In summary, the *guide to coordinate systems* allows us to compare the traditional and modern systems used by the Ordnance Survey:

| | <i>Traditional</i> | <i>Modern</i> |
|------------------------------|--|---|
| ellipsoid: | Airy 1830 | GRS80 |
| terrestrial reference frame: | OSGB36 | ETRF89 |
| horizontal coordinates: | National Grid, fixed by theodolite triangulation and Transverse Mercator projection. | Fixed by GPS measurement relative to ETRS89 datum. |
| vertical coordinates: | Measured by spirit levelling from tide datum at Newlyn, about 80cm below Geoid. | Measured by GPS as height above GRS80 (ETRS89) ellipsoid, <i>not</i> the Geoid. |

Ordnance Survey *Information paper 1/2000* sets out current Ordnance Survey policy on a series of issues related to coordinate positioning. The increasing adoption of GPS is making the absolute positional accuracy of map data more important than ever before. It also offers the opportunity to provide much more accurate and accessible national positioning services. The paper introduces the idea that the National Grid, ODN and ETRS89 become three “national coordinate systems”.

The National GPS Network, to be completed this year, will provide 30 active (permanently installed, continuously operating) GPS reference stations and 900 passive stations (user-accessible ground monuments). The OS routinely monitors the precise ETRS89 coordinates of all stations and will make this data available on the World Wide Web. This will allow surveyors with appropriate GPS equipment to determine ETRS89 coordinates of any point to 5 - 10 cm accuracy. This accuracy is considerably better than that of some existing 1:2500 rural mapping. As mentioned elsewhere in this edition of *Sheetlines*, a revision programme is in hand to improve this. This programme will involve moving some blocks of map detail by several metres.

The National GPS Network website will also provide software to convert ETRS89 coordinates to National Grid coordinates and ODN height. A version of this transformation to be released in about 2002 will then become the **definition** of the National Grid coordinate system, replacing the current definition based on triangulation.

This strategy retains the National Grid as the basic coordinate referencing system, while ensuring full GPS compatibility with OS mapping. However, it also opens the possibility of a new mapping grid directly compatible with GPS. This would remove the complex pattern of distortions of up to 20 metres present in the National Grid, and align the geometric origin of the mapping grid with the ETRS89 origin (a change of about 150 metres from the geometric origin for the National Grid). While a single national coordinate system would undoubtedly be simpler, the requirement to convert the extensive spatial datasets held by many users is described as “a weighty argument against making this change”. Ordnance Survey promises that a decision will only be taken after further detailed consultation.

Rights of Access on OS Maps

Sue Rumfitt

In *Sheetlines 56*, Peter Haigh raises the question of the new symbol denoting “other rights of access” on OS maps. To understand this new marking one has to appreciate the difficulties the OS and OS users find with the previous markings. For some years now the OS have been using information from local authorities to show the legal rights of access across land. In England and Wales, the information is taken from the Definitive Map for a Council’s area. The Definitive Map is a record of public footpaths and public bridleways; it also records some vehicular highways. It is legally conclusive as to the rights it shows.

Under the original legislation (*National Parks and Access to the Countryside Act, 1949*) the Definitive Map and Statements were to record all public footpaths, bridleways and a category of right, created by the Act, known as a Road Used as a Public Path (RUPP). The legal definition of a RUPP caused some difficulties since it was never completely clear whether such routes included a public vehicular right or not. The legislation has been changed twice, and may yet change again with the Countryside Bill 2000. Presently, the law requires each highway authority in England and Wales to reclassify any remaining RUPPs, as either a Byway Open to All Traffic (BOAT), if public vehicular rights exist, or as a bridleway if public vehicular rights are shown not to exist. Rarely, if public bridleway rights are shown not to exist, a RUPP may be reclassified as a footpath.

Previous legislation (*Countryside Act 1968*) allowed for the reclassification of RUPPs on the basis of their suitability; this is no longer permitted. All public rights are now recorded in the Definitive Map on the basis of law and not on the basis of present use or some subjective measure of suitability.

One of the reasons that apparently new rights of way are being shown for urban areas is that, under the 1949 Act, County Borough Councils were exempted from the requirement to produce a Definitive Map, though, if a County Borough Council wished, it could opt to produce a map. County Councils were also allowed to exclude any other largely urban areas from their map. In 1981, part 3 of the *Wildlife and Countryside Act* required Councils to produce Definitive Maps for all previously excluded areas, with the exception of the inner London Boroughs. Gradually, maps are being produced for both the former County Borough Council areas and for other excluded areas. As these maps are published, the OS shows the information from them on its maps.

However, the routes shown on the Definitive Map are only part of the public highway network. Most public footpaths, bridleways, byways and RUPPs can only be reached by traversing a public road. Highway authorities keep records of the roads they are liable to maintain on a document known as the List of Streets. Unlike the Definitive Map, the List of Streets is not conclusive as to the status of the route, merely conclusive as to the public liability to maintain that route. It is not therefore possible to issue a statement that all routes included on the List of Streets are public roads. The highway authority is liable to repair highways that are not public roads, such as bridleways. Generally, however, most highway authorities have limited the inclusion of routes in the List of Streets to roads.

It has generally been assumed that any coloured road on an OS map is public. The OS has traditionally shown minor public roads and private roads as “white roads”. It has not been possible for the public to determine from an OS map what roads are public, even though map users can find good reliable information about the rest of the minor highway network. This

has meant that users travelling a substantial distance have often found themselves following routes shown by the OS to be, for example, a public bridleway, then a “white road” and then a BOAT. The user cannot tell from the OS map if the middle “white road” length is public or not. This problem became known as the “white roads” problem and the OS in consultation with local authorities has moved to introduce the new symbol, to distinguish publicly maintainable “white roads” from private “white roads”. It was not possible to say that all of the “white roads” which are publicly maintainable are certainly public roads, hence the note in the key about the need to check with the local highway authority. Also, as not all local highway authorities keep their list of streets information on a map base (there being no legal requirement to do so), it was necessary to add the proviso about alignment.

The OS is now seeking to show highway information based on the records of the highway authority. This may mean that in some instances paths are shown with a legal right that some members of the public might find hard in practice to exercise, due to the nature or condition of the route. That is then a matter for the highway authority, which has a duty in law to assert and protect the public right to use the highway. In England and Wales we have long had the legal principle, “once a highway, always a highway”. This means in practice that old public roads, long disused by the public as roads, are still legally public roads. Such a road may now only be a field path. However, its present condition does not affect the legal status. Highway authorities may choose to regulate vehicular, and other, traffic on such routes by means of a traffic regulation order, but that is a management matter.

Recreational routes are those promoted by the local authority to meet recreational needs, and may not in their entirety be along public highways. It is common for specific permission to be negotiated with landowners, usually by means of a permissive path agreement. Map users need to be able to distinguish the route of a promoted recreational path from other permissive or public paths. Hence the special symbol. Of course a recreational route and public highway may coincide, so both symbols will be needed. Sometimes the black pecked lines used by OS to show a path as a feature on the ground do not coincide with the legal line of the path. I don’t know if it is now OS policy to remove the black lines. Over the years policy has certainly changed as to what is shown as a footpath.

The “other route with public access” symbol will be used for Explorer Maps in all areas where the information is made available by the local authority. Several user groups have long pressed for the OS to find some means of showing which minor roads are public and it is hoped that this symbol will finally help solve the “white roads” problem.

The Countryside and Rights of Way Bill was published at the beginning of March and will, if passed into law, introduce a new class of right of way. All existing RUPPs will automatically become “restricted byways”. These will be deemed to have rights of passage on foot, horseback, on bicycle and in a horse drawn vehicle. Anyone seeking to prove motor vehicle rights will have to bring evidence to allow the route to be reclassified as a byway. The new restricted byways will have to be depicted on OS maps by a new symbol. The Bill also provides for a right of open access to certain areas of land (more popularly known as the “right to roam”), ultimately this will provide the OS the new challenge of depicting those areas of land to which this new right applies.

The author was formerly a Rights of Way Officer for a county council and is now an independent rights of way consultant.

Antiquities reviewed

R C Wheeler

The public service ethos of the years after 1945 could lead to some curious behaviour by the OS. I have previously¹ described the mix up over which trig points were to be shown on the One-inch Seventh Series. The activities of the OS Archaeology Branch at the same period are equally remarkable. To be fair, the Archaeology Branch itself was doing a sound job (albeit sometimes rather pedantically) in revising the descriptions of monuments in accordance with contemporary archaeological scholarship. The remarkable behaviour lay in the decision to devote drawing resources to incorporating these revised descriptions on a range of New Popular sheets, for example Sheet 157 (1273) with MV date 1/52, Sheet 175 (C/) with MV date 1956, Sheet 183 (1291) with MV date 1/52. These revisions sometimes incorporate changes to the odd Post Office or Youth Hostel symbol, or occasionally to a railway station, but most of the work was occasioned by the archaeological changes.²

On the New Popular, these changes were at least harmless, though they must have diverted resources at a time when there were numerous new maps to be drawn. With the Seventh Series it was a different matter in that, by 1955, revisions to hand-lettered sheets were being made in letter-press and could be painfully apparent. This is certainly the case with Sheet 138 (B), where the revisions from the initial state are predominantly archaeological, as shown below.

| <i>Grid Ref</i> | <i>Initial state</i> | <i>Changed to</i> |
|-----------------|---------------------------------|----------------------------|
| 751243 | Chapel ³ | Chapel (Remains of) |
| 749255 | Pal | [deleted] |
| 790241 | Promontory Fort | Camp |
| 790109 | Promontory Fort | Camp |
| 825054 | Promontory Fort | Camp |
| 865063 | Earthwork | Camp |
| 920064 | Cas | Castle (Remains of) |
| 862142 | Stones | Standing Stones |
| 809244 | Earthworks | <i>Ancient Earthwork</i> |
| 802239 | Earthworks | <i>Ancient Earthwork</i> |
| 959151 | Priory | Priory (Remains of) |
| 960144 | Haroldston | Haroldston (Remains of) |
| 015135 | Belvedere | Belvedere (Remains of) |
| 002069 | Benton Castle <i>Remains of</i> | Benton Castle (Remains of) |

One could go on *ad nauseam*. What is noticeable is the almost complete absence of content to the changes. ‘Promontory Fort’ was obsolete as an archaeological term but surely meant more to the map-buying public than the exceedingly general ‘Camp’. ‘Remains of’ was

¹ *Sheetlines* 45, pp5-8.

² I could cite several other sheets where such changes occurred but have not identified the precise state at which they were introduced.

³ This font is used as a substitute for Lutheran.

plastered everywhere (in a particularly nasty font) lest the map user should be disappointed in not finding a fully-functioning Castle to invest or a robed Prior to absolve him for doing so. Most remarkably, the inoffensive hand-lettered italic “*Remains of*” was liable to be replaced by the ugly new “(Remains of)” even when no other change was made. In short the original map was greatly defaced to no useful purpose.

Sheet 151 (A/) seems to have undergone a similar process in 1956 but here at least “(Remains of)” was usually shortened to “(Rems of)”. Sheet 107 went through a comparable but less widespread revision, characterized principally by Cairns becoming Carneddau and Maes-y-Gaer at 664725 being changed from prehistoric font to medieval, a distinction that was about to be dropped anyway. Thus Sheet 138 was by no means unique, though it may provide the most extreme instance. Did the torrent of updating that unleashed itself upon Pembrokeshire exhaust itself in the process, or was it halted by a rare outbreak of common sense? It is a question which delvers in the PRO may care to keep in the back of their minds.

Memories are made of this

George Steele

I was born in Keighley in West Yorkshire and from 1946 to 1952 I lived in Worth Village, then a lower class residential and industrial area. The typical houses there were back-to-back terraces and some, like ours, were four houses in a block.

I decided to obtain copies of the map of how things were in my childhood and how they are now. The local library was able to oblige and allowed me to make copies of maps in their possession. I then scanned them into my computer and adjusted the scale to align them perfectly. My first attempt at this technique, some years ago, was Lynmouth before and after the disaster. I did not, at that time, have Adobe Photoshop, so my attempt failed.

In my latest map, to make the old stand out from the new I inverted the colours making it white on black, then adjusted brightness to make it white on grey. The new map is black on white and was made partly transparent to allow the old to show through. The result looks good and the local paper (the *Keighley News*) has run an article on the map.

Since the 1950s the 350 houses shown on the map have all disappeared, along with a major textile mill complex, to be replaced by warehouses, concrete and a new dual carriageway through road. Opposite the end of Milton Street, on the corner of Marlow Street was the Post Office. Opposite that at the end of Milton Street was Fred Smith’s off-licence. On the corner of Alfred Street and Marlow Street was a fish and chip shop. On the corner of Close Street and Marlow Street was a general grocer (Sharps?). There was a Co-op store on Dalton Lane between Arthur Street and York Street. On the corner of Cherry Street and Dalton Lane was Hargreave’s sweet shop (sweets were rationed at that time so were a special weekly treat!).

When we lived in Worth Village, Strong Close Park was an open area with a nursery school in the middle (the original Strong Close Nursery). Beyond a wire fence was a cricket ground for Prince Smith and Stell. All this area is now built on with warehouses or concrete.

By modern standards the houses were not very secure. Even with the door locked it was possible to slide down the “coal hole” and get into the cellar and then into the house. Houses such as ours were built back-to-back and side-to-side (i.e. four in a block). There was



only one room at each level, cellar, living room, bedroom and attic. Cooking and washing up were done at the top of the cellar steps area. Baths were taken in a tin bath in front of the fire. We were six at this time. Me and my brother, two sisters and my parents. Although it must have been very cramped I have only pleasant memories of those years. We moved from Worth Village in May 1952 into a council house on the Bracken Bank Estate.

1:1250 mapping: additional notes

John Cole

Further explanation should have been made in the article in *Sheetlines* 56 about the small map totals at a number of locations. Dawlish, Teignmouth, Northallerton, Bridgnorth, Easton/Fortuneswell, and possibly Todmorden and Burghead, were the subject of what was known as ‘dual scale mapping’. In these cases only the congested town centres were surveyed at 1:1250 with the remainder of the built up area at 1:2500. In the case of Easton/Fortuneswell, the rest of the Isle of Portland was probably 1:2500 resurvey.

This was not altogether a new concept. In the 1950s East Grinstead, Lydd, Newhaven and Sandwich had four 1:1250 maps apiece published and, in the case of the larger towns, this amounted purely to their centres. It is not altogether certain if the surrounds at the time were 1:2500 Overhaul, but at Sandwich the smaller scale was an early example of ‘reformed mapping’ or what was known at the time as 1:2500 Detail Point Survey.

A few misprints should be corrected: ‘Biggin Fill’ should read ‘Biggin Hill’; Burntwood and Norton Canes should read 44 Maps and, in note 2, ‘Salisbury’ should read ‘Sarisbury’.

The above *might* not be all my fault¹ but the following serious error is! Due to mis-reading a diagram, I united St Albans with Harpenden. Apologies to any members from those towns! Ironically, St Albans is now united at 1:1250 scale with Watford to the south-west and Hatfield in the east. Meanwhile the gap between St Albans and Harpenden is now down to eight 1:1250 maps or less.

I have also been corrected by Peter Milne (by way of diagram and map dates) over the map numbers, dating and even amalgamation of Dalkeith and Lasswade. This should read:

| | | |
|----------------------------|----|------|
| Bonnyrigg and Lasswade | 12 | 1948 |
| Dalkeith and Newton Grange | 37 | 1948 |

The discrepancy between this and the figure of 30 (which came from an OS bulletin) is not wholly understood as many of the extra maps appear completely rural. However, the date of survey for all 49 maps also coincides with the period when Dalkeith was used as a local training school. Additionally there may be some significance in the fact that Edinburghshire was one of the re-plotted counties.

The list of added locations should not be regarded as exhaustive.

¹ ‘Salisbury’ was certainly mine - *Ed*.

Explorer 219: Wolverhampton & Dudley

D C Kimber

I recently purchased a copy of Ordnance Survey Explorer Map 219, *Wolverhampton & Dudley*. I am very impressed with the map both in terms of the quality of production, the area covered and the price of £5.50. I consider the map to be good value for money and a worthy complement to Landranger Sheet 139, *Birmingham & Wolverhampton*, and the West Midlands and Staffordshire street atlases.

My main disappointment with the map is that a number of errors that appeared on the Landranger map have continued through to the Explorer map. I would have expected these to be picked up by proof-reading and feedback from various development agencies like local authorities and transport organisations like Travel Midland Metro.

I have been in correspondence with the Ordnance Survey at Southampton about my personal observations on Explorer 219 and have received a reply from Paul Franklin, Publishing Manager, Small Scale Mapping at Ordnance Survey. He states that a copy of my letter will be referred to the next meeting of the Map Design Working Party. This design group meets at regular intervals specifically to discuss comments and correspondence from organisations, trade and members of the public.

Mr Franklin goes on to say that they have had problems over the last decade with revision, particularly in the rural areas. Ordnance Survey has year on year been starved of resources in order to do a really big sweep of the country, and as a result their main computer database of mapping is not as up to date as it should be. The government has recognised this situation and intend to provide Ordnance Survey with sufficient funds to rectify the matter.

Specific comments communicated to Ordnance Survey follow.

Overall Impression

I accept that Explorer maps are mainly aimed at leisure and rural areas but I would like to see urban areas treated with the same importance. I would like to know what is the role of Explorer maps with regard to the built-up urban areas in relation to Ordnance Survey Street Atlases and the Landranger Series maps covering the same areas.

I like the idea of the two displays, one focused on Wolverhampton and the other focused on Dudley, Stourbridge and Kidderminster. The danger of overlapping with *Explorer 218* is that Kidderminster now appears on two sheets. If there are substantial changes in land use or road new road provision in the future, it will be necessary to reprint both maps.

With regard to mapping policy, I fully support the mapping used for *Landranger 139, Birmingham & Wolverhampton* and subsequently used in the *West Midlands Street Atlas* and now *Explorer 219, Wolverhampton & Dudley*. However, I am disappointed that errors that occurred in the original Landranger map were not picked up and corrected through proof-reading, and comments from development agencies like local authorities and transport organisations like Travel Midland Metro.

Major Roads

The Dudley Southern By-pass is shown as open to traffic although it was not open when the map first went on sale. The Dudley Southern By-pass opened to traffic on Friday, 15 October

1999 and I fully support its inclusion. However, I note that the route classification number is not shown. The final section of Wednesfield Way (Section 4) and to be classified A4124 is only shown as 'under construction'. This section of road will open to traffic in October 1999 and in my opinion, it should have been shown as open to traffic

Railways

It is government policy to encourage people to travel by rail and I would like to see all railway stations named. I do not like the selective naming of stations. There are inconsistencies by line. Langley Green station is not named and the nearest printing refers to Oldbury. Dudley Port station is identified even though the words Dudley Port appear nearby.

Midland Metro

Wednesbury Great Western tram stop is incorrectly located. It was wrongly shown on *Landranger 139* and has not been picked up by the transport agencies or proof-reading. The location of the sidings attached to Travel Midland Metro's Wednesbury depot are incorrectly shown. The depot is on the south side of the line not the north side. Priestfield tram stop is not clearly named but the name Priestfield does appear nearby.

Park-and-Ride Scheme, Dunstall Park, Wolverhampton

The park-and-ride scheme based at Dunstall Park marked on the plan was terminated at the end of 1998. Whether it will be resurrected for Christmas 1999 is another matter. This should have been picked up through consultation and proof-reading. Wolverhampton Borough Council does operate a park-and-ride scheme in the run-up to Christmas and New Year but Dunstall Park is not normally included

Business Parks

The Business Park located at Hilton Park south of Junction 1 on the M54 is clearly shown but the major industrial development known as Pensnett Trading Estate is not clearly labelled (only the word Trading Estate is marked). Also not shown is a new business development south of Junction 2 on the M54 at Fordhouses, north of Wolverhampton. This is now substantially complete and it is worthy of being included.

Royal Hospital, Wolverhampton

The Royal Hospital, Wolverhampton closed in 1998 but is still marked as a hospital on the map. Hospitals like New Cross, Wolverhampton and Russells Hall, Dudley are major hospitals with Accident & Emergency Departments and should be given higher status.

Merry Hill Centre

Merry Hill is a major shopping centre but there is no mention of the word shopping to confirm its status. The inclusion of the words Round Oak is misleading. The area is currently known as the Waterfront and is part of the Merry Hill complex. The name Round Oak tends to refer to the former Round Oak Steelworks, which has virtually disappeared. The only part remaining is used as a railhead for incoming steel and is operated by a company known as Round Oak Rail Limited.

Oldbury

The legend OLDBURY is shown some way from the developed area known as Oldbury. Anyone using the map wanting to get to Sainsbury's Savacentre store at Oldbury or Sandwell District Council's Civic Centre would be confused.

Tourist Information

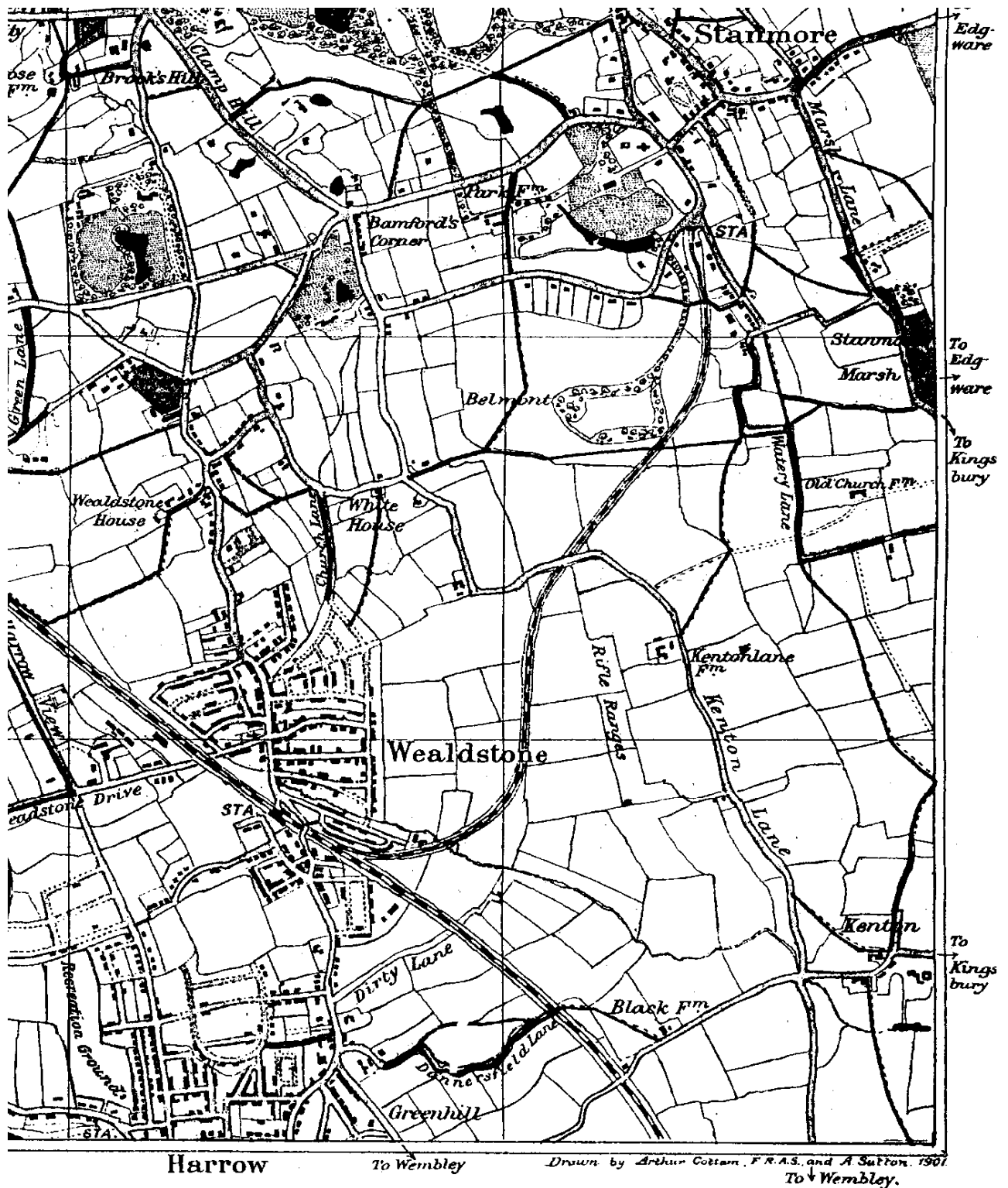
- (a) Public Houses. The inclusion of a beer glass for hostelrys is a new feature and welcome to beer drinkers. Although the entries are selective, a case could be made for inclusion of public houses in built-up areas located near to major tourist sites such as the Black Country Living Museum. Tourism and leisure are not just rural-based activities.
- (b) Museums. The Black Country Museum was renamed the Black Country Living Museum over two years ago. I am completely in favour of showing tourist information but it should be accurate and up-to-date.
- (c) Multiplex Cinema complexes. Several of these now exist in the West Midlands area. They are located at Bentley, Walsall, near to M6 Junction 10, Bentley Bridge, Wednesfield, Wolverhampton and Merry Hill Centre, Dudley. These attract customers from a wide area and I believe that they would be a useful addition to tourist information in urban areas.

A Map in my Collection

R C Wheeler

In 1902, the Watford Fieldpath Association published a two-inch map of the Watford District, drawn in 1901 by Arthur Cottam FRAS and A Sutton, its Hon. Sec. (of "Wolstanbury", St Albans Rd, Watford). The map appears to have been reduced (mechanically?) from OS six-inch sheets of 1897. Certainly its area covers exactly eighteen quarter sheets. The grid of one-mile squares with which it is provided may perhaps have served to facilitate reference to the original sheets, each of these being represented by 3×2 grid squares. (I even wondered whether the principal purpose of the grid was to cover up untidy joins between constituent sheets; however, the grid is printed in brown and the only untidy joins occur along an east west line across the middle of the map, suggesting that it was drawn in two halves.)

The obvious purpose of the map was to provide information on what the Association believed to be public rights of way and public open spaces. However, the map also incorporates revision (presumably undertaken by Association members). For example, at Wealdstone, several new streets are shown, often with some initial buildings (see extract). The two streets south of the railway junction (Rosslyn Crescent and Froggnall Avenue, for those with access to a street map) are somewhat out of their correct alignment. To the south-west, the new recreation ground is shown, twice as large as that shown on the OS Third



Edition one-inch (with a revision date of 1902). Judging by later street maps, the Fieldpath Association was correct in this and the OS wrong.

Gordon Avenue in Stanmore (unnamed on the map but just north of Belmont) is also worthy of note. The 1893 revision of the one-inch showed this as running through undeveloped parkland. The 1897 six-inch deleted the parkland and showed two new houses

on the east west stretch of the road. The Fieldpath map shows six houses plus two empty plots. The 1902 revision of the one-inch shows eight houses (and neglects to delete the parkland stipple). All this tends to confirm the hypothesis of independent local revision, perhaps patchy, of between 1899 (when the Association was founded) and 1901 (when the map was drawn).

Sheetlines were co-ordinated with the Barnet and the Northern Heights Associations, which were preparing maps to the east of this one. A new edition came out in June 1928, incorporating extensive revision: the L&NWR New Lines, new streets and, most prominent of all, the Watford By-pass.

Book Review

Michelin maps of the British Isles 1914-c.1934 at the 1:200,000 scale by Cyril Everard, Special Research Paper, Department of Geography, Queen Mary and Westfield College, University of London, London, E1 4NS. ISBN 1-904791-47-5. A4, comb-bound. Available for £ 6.00 including postage and packing from the foregoing address.

In *Sheetlines* 47 (December 1996) I published an article, 'The rivals', describing various commercial topographic maps of the late nineteenth and twentieth centuries. These included the Michelin 1:200,000, and those who may have been intrigued by the rather bald information given there can now satisfy their curiosity at greater length. Though the author has described it (in a letter to your reviewer) as 'more of a hand-list than a scholarly monograph', it sets an example of what might be done for other series. Another writer has an article on the early Bartholomew half-inch in the press, and is now investigating mapping by George Philip, but the Gall and Inglis half-inch family are as yet, I believe, untouched, to say nothing of the offerings from Bacon and Johnstone. Though all these may not be 'OS maps', beyond the bare minimum of incorporating OS data, yet they help set OS small-scale activity into a wider map-making context.

Three of these - the Barts half-inch, the Gall & Inglis 'graded' half-inch, and the Michelin maps which are the subject of this paper - are of considerable interest for their road classification, which was carried out independently of the Ordnance Survey. Imitation is the sincerest form of flattery, and the new road classification system which appeared from 1914 onwards on the OS one-inch Popular Edition and its derivatives can be interpreted as a development of an example already set by Bartholomew. The Michelin classification is perhaps an example of parallel development rather than imitation; it remains the only significant topographic map series to be sold in Britain of largely overseas parentage. It was also the last new map series to cover the country which showed relief by hachures, which by 1922, if not by 1914, was backward-looking, and perhaps explains why the hachures were thereafter omitted. Hachuring and hill-shading were characteristic of pre-1914 French practice, no doubt because of the lack of suitable contouring over much of that country, but comprehensive hachuring is exceptional in unofficial British mapping.

Cyril Everard's work is cordially recommended to prospective purchasers, and his example to prospective imitators.

Richard Oliver

Kerry musings

David Archer

For us, the new millennium arrived in mid-December in the form of a new computer. Lots of colour, fun and frustration, with instruction manuals leaving no infinitive unsplit. Eventually, we decided to stick a toe in the water and surf, although initially we were more like jumping seagulls.

The Ordnance Survey site was an obvious early port of call, not because it was of interest, but because I knew they had a site and I wanted a successful search. For anyone who has not seen an Internet demonstration, the Ordnance Survey site can best be described as an on-line, very glossy and colourful folder containing lots of leaflets on anything OS; history, products and services, just as one might expect.

However, there are also games, downloadable images and information not available elsewhere. All for free. All items have the OS logo, which, if on paper, would be prized collector's items in fifty years time. Some images will only be available for a few weeks. Might we call this the new ephemera and does it need our consideration?

What do I mean by "the new ephemera"?

The new ephemera appear first on the Ordnance Survey website¹ and can be copied (downloaded) by an individual onto their own computer or a floppy disc.² Whilst writing this, in February 2000, the Ordnance Survey is offering "Free wallpaper to download in February", "Free downloadable mapping for the whole of Great Britain at a variety of scales", "Free GB maps: download small scale maps of Great Britain in a variety of formats", "Free! Osview: a new version of the newly enhanced software that allows you to view digital map data products", a map puzzle game and more. In fact, everything on the site can be copied onto an individual's computer.

In the last issue of *Sheetlines*³, Jon Risby mentioned changes to the OS website. The original text and any illustrations have now gone. The free wallpaper (background screen illustrations) mentioned above will be changed after February (I assume). Was there one for January? All very ephemeral.

How does the new ephemera differ from the old?

The new ephemera (by my definition above) can only be seen on a computer screen. It can be copied and stored on floppy discs. An appropriate computer system is needed to view it. The old ephemera was on paper and could be viewed anywhere in good light.

What are the implications of the difference?

Most examples of the old ephemera have survived because they have been tucked away and forgotten – frequently as bookmarks or slipped inside books. Paper ephemera is often in the form of leaflets, usually advertising Ordnance Survey products or services.

To survive, the new ephemera must be collected, stored and have suitable machines

¹ I consider anything *issued* by the Ordnance Survey on a computer disc as a halfway product between old and new ephemera.

² I do not consider a subsequent printout of the item to be real OS ephemera, even of the old variety.

³ *Sheetlines* 56 (1999), 4.

available to view it. Very little will turn up by chance. I just cannot envisage the computer equivalent of secondhand bookshops, with shelves of old computers amongst which someone exclaims "Hey, this one's got some old OS webpages saved to disc". The technology is changing so fast that what we save on a floppy disc today might not be readable in the future unless we keep the computer as well.

So, what are the chances of CCS members in 2050 being able to study the development of the Ordnance Survey website between 1998 and 2005 by viewing the actual material? Very slim I would say. I am sure that the OS does not have a policy to create an archive of website material. Individual members of our society might start to collect webpages and free stuff, but will soon get bored, run out of space or rediscover maps.

Which leaves the Charles Close Society to pick up the pieces, if it is thought to be worthwhile.

This is the first of, we hope, a regular series of columns from the Sage of Kerry.

Letters

Finds at a Postcard Fair

I recently acquired two OS maps at a Postcard Fair which might interest members:

The first adds to Richard Oliver's article on Bideford maps in *Sheetlines* 56, p5. It is an OS map that appeared in *Hawkins' Descriptive Guide to Newbury & Neighbourhood ... with one-inch map*, published by Thomas Hawkins of Newbury, 1890. The map measures 24" x 24" and is entitled *NEWBURY AND ITS ENVIRONS*. It is from parts of Sheets 253, 254, 267, 268, 283 and 284 of the New Series OS. It is inscribed *Engraved and transferred to zinc at the Ordnance Survey Office, Southampton. 1890*. The map is rare, I know of only one other copy.

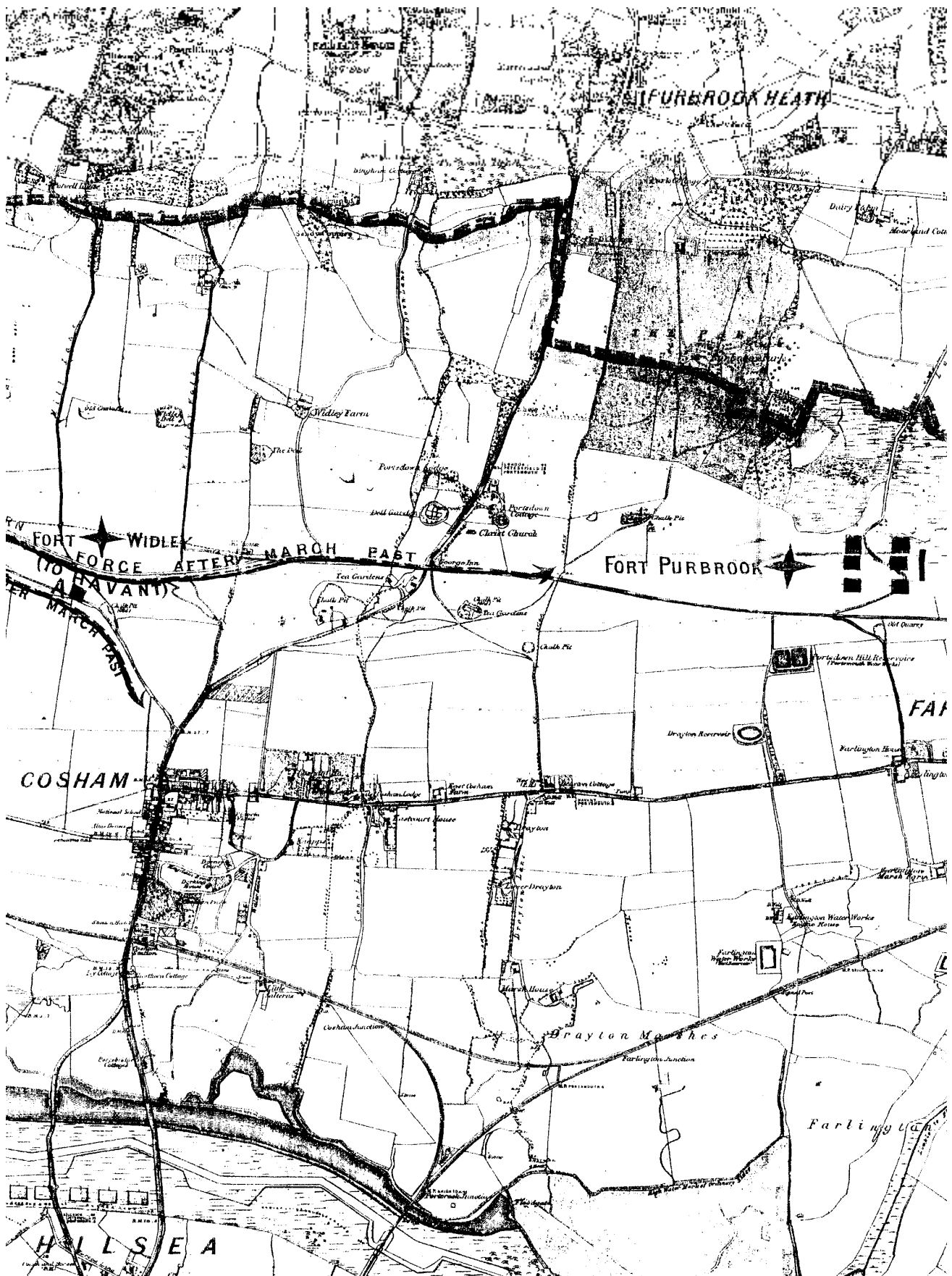
The second supplements Tim Nicholson's article on Palmerston's Follies in *Sheetlines* 54, p21. It is later and more secure than Tim's map. The plans of the follies have been replaced by symbols and there are various additions and deletions. A second road has been added over the Hilsea Channel. I enclose for comparison a copy of the part of the map shown in Tim's article, also a copy of the title giving the date 1884, which confirms Tim's surmise.

Postcard Fairs are not to be despised by OS collectors.

Eugene Burden

Tim Nicholson comments:

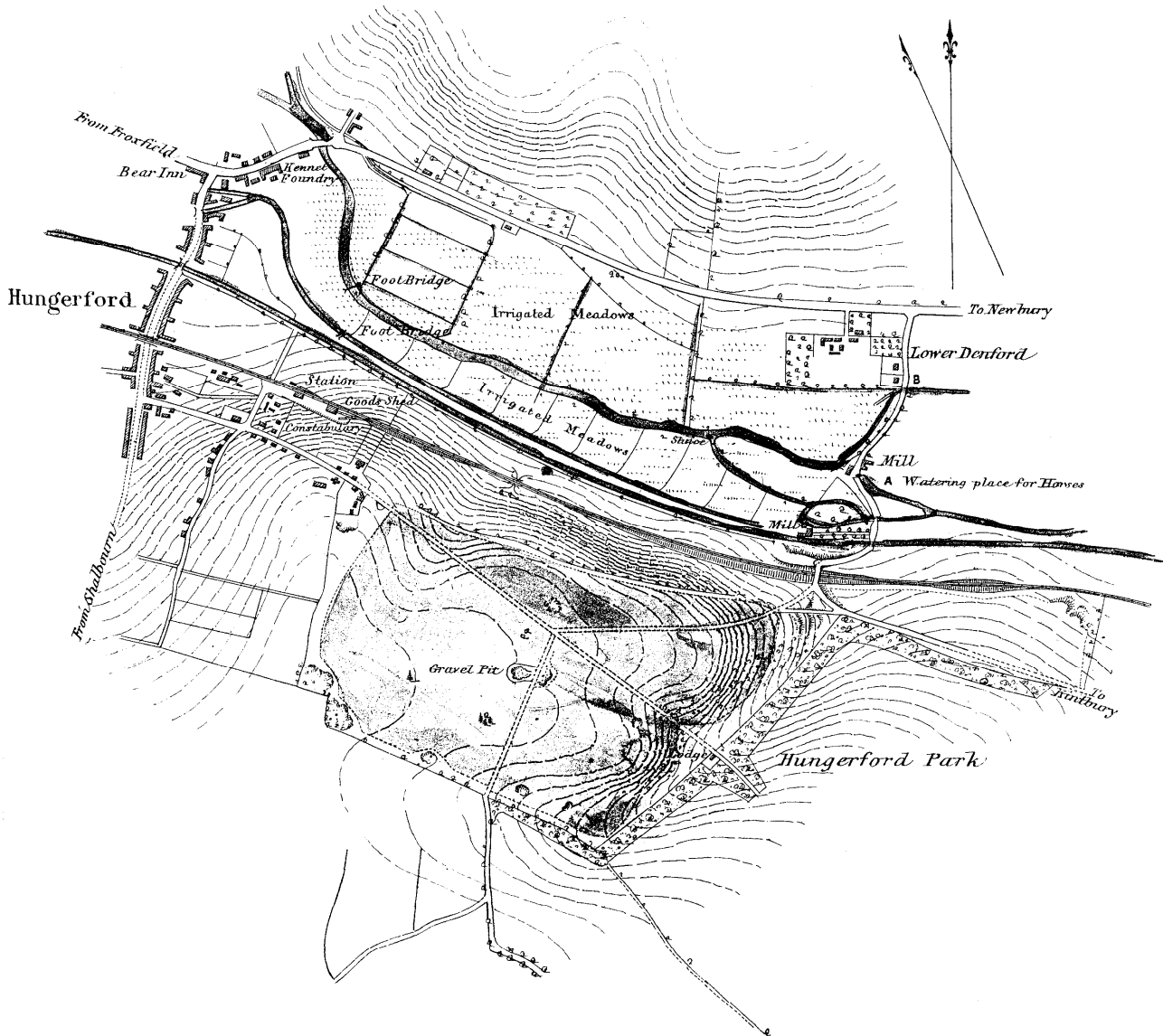
I know about Eugene's map, and have seen it fleetingly, but have not inspected it thoroughly. The scale is the same, and printed differences include the absence, in Eugene's map, of the parish names and acreages, as well as the presence of the old, pre-1868 bridge [over Hilsea Channel].



N^o 50
CAMPING GROUND
ON
HUNGERFORD DOWN

12

Lith'd at the TOP^o DEP^t of the WAR OFFICE,
CAPT^y C. W. WILSON R.E. DIRECTOR.
1872.



Area available 128 acres of down turf on gravel with some patches of gorse (old). Near the town the ground is in places fouled with refuse.
Road to water good. First stream not good, but main river forms an excellent watering place for horses, (A). Water carts should draw from stream at bridge B.

Scale 6 inches to 1 Mile
100 50 0 100 200 300 400 500 600 700 800 900 1000 Yards

W. A. St. John
S.M.L.

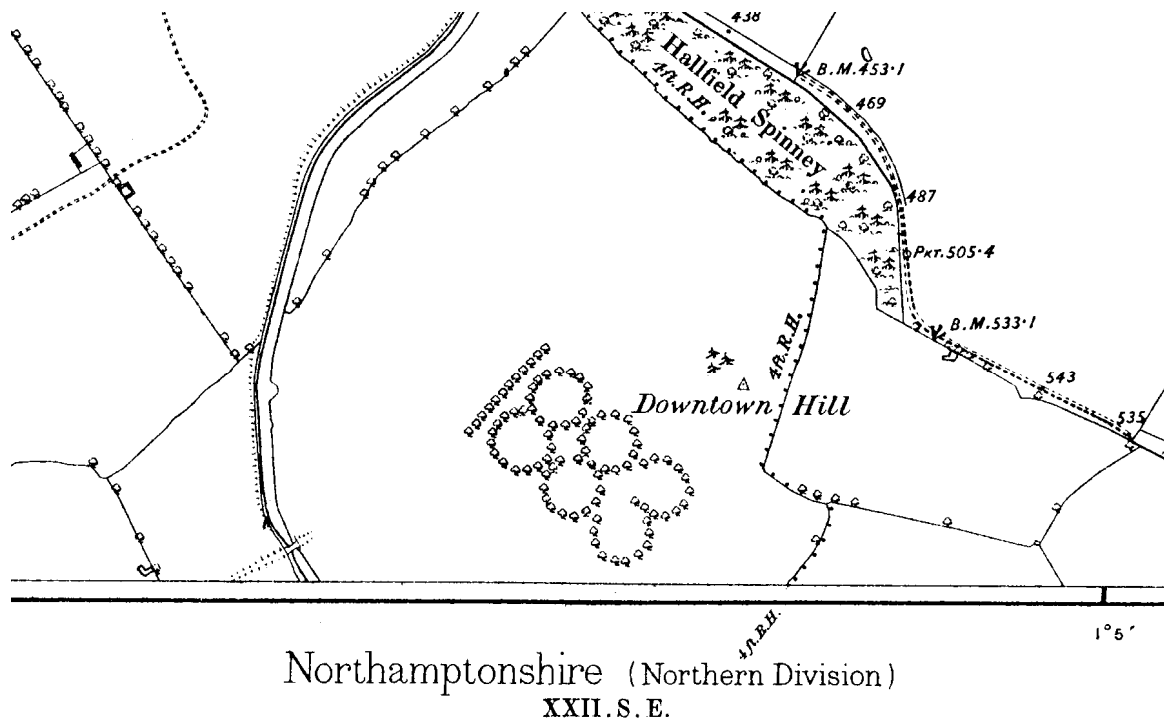
Paul Thomas
S.M.L.

The second set of 45 maps numbered between 1 and 56, at the same scale and about the same size, is of camping grounds in central southern England in Berks, Hants, Wilts and Dorset. The maps are variously signed by Lt W A Hare R.E., Lieut Gosset R.E., Lt H Pilkington R.E., Lt W W Robinson R.E., Lt H L Dundas 15th Regt, Maj C R Johnson 50th Regt, Capt Heriot Maitland, Capt F Cardew 82 Regt, Lt N Lascelles 2 Bn Rifle Brigade, and countersigned by either Lt Col E Belfield R.E. or Lt Col C Chesney. All were "Lithd at the Topl Depot of the War Office. Captn C W Wilson R.E. Director 1872."

The illustration, at reduced scale, is of one such map, No. 12 – Hungerford Down, from the second set. I would be delighted to hear from anyone who might have come across these or other Camping Ground maps or who can shed any further light on those above.

Mike Nolan

Why 1883?



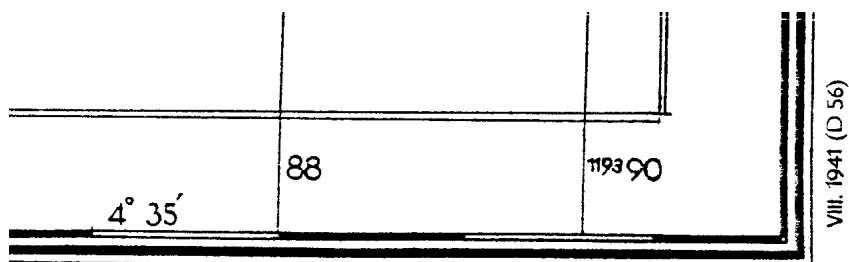
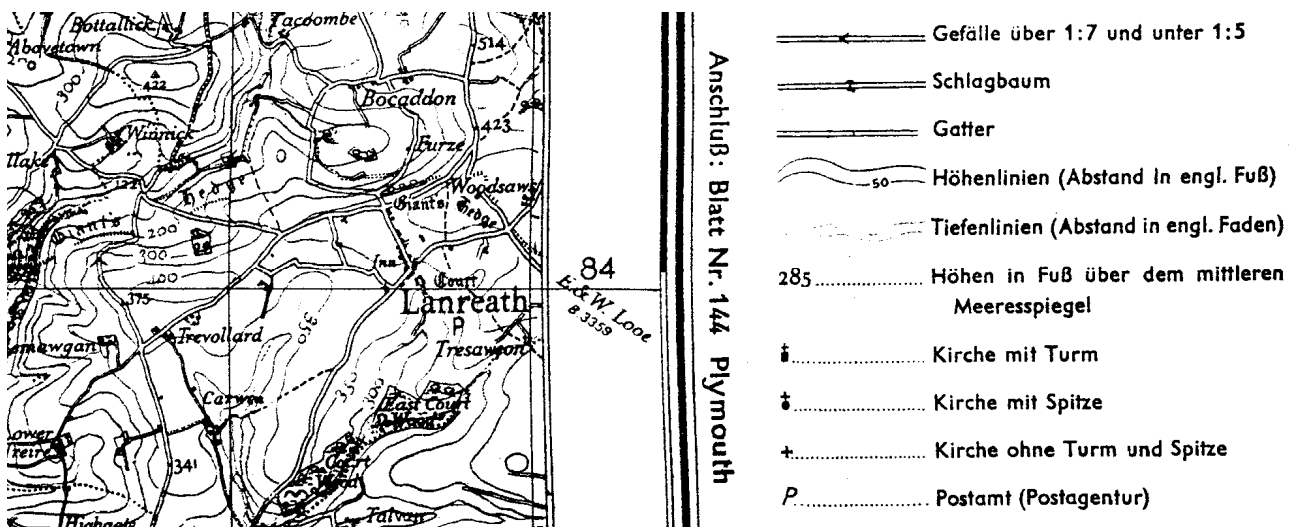
A recent browse through some Six-inch maps revealed an oddity on the First Edition of Northamptonshire Sheet 22NE (Leics 53NE) surveyed in 1885. The owner of a field on the south-westerly slope of Downtown Hill (SP619801) appears to have laid out a commemorative or celebratory plantation of trees some 230 yards across which the Ordnance surveyors faithfully recorded for posterity. Later revisions of the map do not mark it: that might have reflected either later felling or the OS instruction to cease showing individual trees on the map. It would be interesting to know the origin and purpose of this feature, whether it still exists, and if members are aware of any similar plantations which are recorded in this way.

Richard Dean

On the reverse side the part Cornwall sheet¹ has no heading as that part of the map is not used. I enclose one photocopy of the key and another of the bottom right hand corner.

I am not sure which one inch edition the Cornwall map is from. Does anyone know more about the events leading to such a curious combination of maps?

Philippa J. Corrie



Hergestellt im Auftrage Gen St d H, Abt f Kr Kart u Verm Wes (II)

¹ Actually printed at a scale of 1:50,000

New Maps

Jon Risby

This list covers all small scale maps published between 15 December 1999 and 18 March 2000. They are listed by series, and in sheet number order. The columns are as follows: Sheet No. / Title / Edition / Copyright date / Full revision date / Latest revision date / Date of release. After the list of OS maps is a resumé of maps published by Alan Godfrey during January, February & March 2000.

Landranger

| | | | | | | |
|-----|---|----|------|--------|------|----------|
| 29 | Banff & Huntly, Portsoy & Turrif | B | 1999 | 1999 | - | 24/2/00 |
| 36 | Grantown & Aviemore, Cairngorm Mountains | B | 1999 | 1999 | - | 12/1/00 |
| 50 | Glen Orchy & Loch Etive | B | 2000 | 1999 | - | 20/1/00 |
| 57 | Stirling & The Trossachs | B | 1999 | 1997-8 | 1999 | 20/1/00 |
| 73 | Peebles, Galashiels & Selkirk, Tweed Valley | B | 1999 | 1998-9 | 1999 | 3/2/00 |
| 98 | Wensleydale & Upper Wharfedale | B | 2000 | 1999 | - | 24/2/00 |
| 125 | Bala & Lake Vyrnwy, Berwyn | C | 2000 | 1999 | - | 24/2/00 |
| 137 | Ludlow & Church Stretton, Wenlock Edge | B | 1999 | 1998 | 1999 | 26/1/00 |
| 159 | Swansea & Gower, Carmarthen | C1 | 2000 | 1995-6 | 1999 | 24/3/00 |
| 166 | Luton & Hertford, Hitchin & St Albans | C | 2000 | 1998-9 | - | 10/2/00 |
| 175 | Reading & Windsor, Henley-on-Thames & Bracknell | C | 2000 | 1999 | - | 24/2/00 |
| 179 | Canterbury & East Kent, Dover & Margate | C1 | 1999 | 1995-7 | 1999 | 15/12/99 |
| 192 | Exeter & Sidmouth, Exmouth & Teignmouth | C1 | 2000 | 1997 | 1999 | 10/2/00 |

Explorer

| | | | | | | |
|-----|---|----|------|------|-------------------|----------|
| 179 | Gloucester, Cheltenham & Stroud | A/ | 1998 | 1998 | 1999 ¹ | 22/11/99 |
| 206 | Edge Hill & Fenny Compton, Badby, Kington & Middle Tysoe | A | 2000 | 2000 | - | 7/3/00 |
| 217 | The Long Mynd & Wenlock Edge, Church Stretton & Craven Arms | A | 2000 | 1999 | - | 10/2/00 |
| 221 | Coventry & Warwick, Royal Leamington Spa & Kenilworth | A | 2000 | 1999 | - | 17/2/00 |
| 222 | Rugby & Daventry, Southam & Lutterworth | A | 1999 | 1999 | - | 6/1/00 |
| 226 | Ely & Newmarket, Mildenhall & Soham | A | 2000 | 1999 | - | 3/2/00 |
| 232 | Nuneaton & Tamworth, Lichfield & Atherstone | A | 2000 | 1999 | - | 13/1/00 |

¹ Reprinted with corrections

| | | | | | | |
|-----|---|---|------|------|---|---------|
| 233 | Leicester & Hinckley | A | 2000 | 1999 | - | 17/2/00 |
| 240 | Oswestry, Chirk, Ellesmere Port & Pant | A | 2000 | 1999 | - | 20/1/00 |
| 246 | Loughborough, Melton Mowbray & Syston | A | 2000 | 1999 | - | 10/2/00 |
| 248 | Bourne & Heckington, Billingborough & Morton | A | 2000 | 1999 | - | 20/1/00 |
| 255 | Llangollen & Berwyn, Ceiriog Valley | A | 2000 | 1999 | - | 27/1/00 |
| 257 | Crewe & Nantwich, Whitchurch & Tattenhall | A | 2000 | 1999 | - | 27/1/00 |
| 258 | Stoke-on-Trent & Newcastle-under-Lyme, Biddulph & Stone | A | 2000 | 1999 | - | 8/3/00 |
| 259 | Derby, Uttoxeter, Ashbourne & Cheadle | A | 2000 | 1999 | - | 17/2/00 |
| 260 | Nottingham, Vale of Belvoir | A | 2000 | 1999 | - | 9/12/99 |
| 271 | Newark-on-Trent, Retford, Southwell & Saxilby | A | 2000 | 1999 | - | 17/2/00 |
| 272 | Lincoln, Sleaford, Metherringham & Navenby | A | 2000 | 1999 | - | 10/2/00 |
| 274 | Skegness, Alford & Spilsby, Chapel St Leonards & Wainfleet All Saints | A | 2000 | 1999 | - | 9/3/00 |
| 295 | Bridlington, Driffield & Hornsea | A | 2000 | 1999 | - | 2/3/00 |
| 306 | Middlesbrough & Hartlepool, Stockton-on-Tees & Redcar | A | 2000 | 1999 | - | 24/2/00 |

Forthcoming Maps

The following maps have been announced for publication up to 30 April 2000.

Landranger

| | | | |
|-----|--|----|---------|
| 26 | Inverness & Loch Ness, Strathglass | C | 13/4/00 |
| 78 | Nithsdale & Annandale, Sanquhar & Moffat | B | 12/4/00 |
| 107 | Kingston Upon Hull, Beverley & Driffield | C | 13/4/00 |
| 146 | Lampeter & Llandovery | B | 5/4/00 |
| 186 | Aldershot & Guildford, Camberley & Haslemere | C | 16/3/00 |
| 197 | Chichester & The South Downs, Bognor Regis & Arundel | C1 | 13/4/00 |
| 198 | Brighton & Lewes, Haywards Heath | C1 | 13/4/00 |
| 199 | Eastbourne & Hastings, Battle & Heathfield | D | 23/3/00 |

Explorer – New Publications

| | | |
|-----|--|---------|
| 242 | Telford, Ironbridge & The Wrekin | 16/3/00 |
| 243 | Market Drayton, Loggerheads & Eccleshall | 30/3/00 |
| 245 | The National Forest, Burton upon Trent & Swadlincote | 23/3/00 |
| 247 | Grantham, Bottesford & Colsterworth | 16/3/00 |
| 256 | Wrexham & Llangollen | 16/3/00 |

| | | | |
|-----|---|--|---------|
| 264 | Vale of Clwyd | | 30/3/00 |
| 267 | Northwich & Delamere Forest, Winsford & Middlewich | | 23/3/00 |
| 275 | Liverpool & St Helens, Widnes & Runcorn | | 23/3/00 |
| 278 | Sheffield & Barnsley, Rotherham | | 23/3/00 |
| 280 | Isle of Axholme, Scunthorpe & Gainsborough | | 30/3/00 |
| 281 | Ancholme Valley | | 16/3/00 |
| 284 | Grimsby & Cleethorpes & Immingham, Caister & North Thoresby | | 30/3/00 |
| 289 | Leed, Harrogate, Wetherby & Pontefract | | 23/3/00 |
| 314 | Solway Firth, Wigton & Silloth | | 23/3/00 |

Explorer - Revision

| | | | |
|-----|---|---|---------|
| 244 | Cannock Chase & Chasewater, Stafford, Rugeley & Cannock | B | 16/3/00 |
|-----|---|---|---------|

Outdoor Leisure - Revision

| | | | |
|----|--------------------------------------|---|--------|
| 31 | North Pennines – Teesdale & Weardale | B | 6/4/00 |
|----|--------------------------------------|---|--------|

Touring Maps – New Publications

These are new maps at a scale of 1:100,000 and will replace the existing Touring Maps Dartmoor, Exmoor and Devon & Cornwall.¹

| | |
|----------|---------|
| Cornwall | 16/3/00 |
| Devon | 16/3/00 |

Ordnance Survey Northern Ireland – New maps

Discoverer

| | | |
|---|------------------|------|
| 9 | Ballymena, Larne | 1999 |
|---|------------------|------|

¹ *Richard Oliver adds a note:*

The maps reputedly bear a greater resemblance to 1:250,000 than to 1:50,000, but then much the same might be said of the OSNI 1:100,000 (the one which turns up in fragments as GeoStationery), which is nonetheless an effective map (or would be had it been placed on sale!). For we cyclists, the proof of the pudding will be in the contour interval: anything greater than 30 metres...

There are two explanations for the enterprise: the first, and more optimistic and logical, is that it is a cautious experiment, to see whether the principle is worth extending elsewhere; the second, more pessimistic and illogical, is that it is not intended to produce any more, but to hope that some commercial publisher takes up the idea.

Whereas the Devon & Cornwall 1:207,070 derives from the 1:250,000 Travelmaster, and the 1:63,360 Dartmoor from the 1:50,000 Second Series, the 1:63,360 Exmoor is a curious survivor, being the last 'ordinary' OS map to remain on sale which derives from 1:63,360 Seventh Series material. There was a rumour that it was to be withdrawn about seven years ago when the Exmoor Outdoor Leisure Map was published: perhaps it has remained on sale because there were large stocks!

Alan Godfrey

Fuller details of Alan Godfrey's reprints of old OS maps are available from Alan Godfrey Maps, at their new address from January 2000, Prospect Business Park, Leadgate, Consett, DH8 7PW, tel. 01207 583388, fax 01207 583399, or from their website at <http://www.alangodfreymaps.co.uk/>.

The columns are as follows: County / Sheet number / Title / Date of map / Month of issue of reprint.

| | | | | |
|--------------------|--------|------------------------|---------|------|
| Ayrshire | 55.04 | Girvan | 1908 | 3/00 |
| Lincolnshire | 22.11 | Grimsby (South) | 1906 | 3/00 |
| London Large Scale | 7.23 | Old St Pancras | 1871-94 | 3/00 |
| Yorkshire | 288.07 | Grenoside | 1901 | 3/00 |
| Kent | 75.10 | Folkestone | 1906 | 2/00 |
| Lancashire | 87.06 | Bradshaw | 1908 | 2/00 |
| Lancashire | 114.01 | Gateacre | 1904 | 2/00 |
| Essex (New Series) | 07.16 | Saffron Walden | 1919 | 1/00 |
| Essex (New Series) | 69.10 | Buckhurst Hill | 1914 | 1/00 |
| London | 49 | Euston & Regent's Park | 1870 | 1/00 |
| London | 146 | Beckenham & Penge | 1894 | 1/00 |
| Selkirkshire | 102.05 | Selkirk | 1897 | 1/00 |
| Staffordshire | 67.05 | Wombourne | 1900 | 1/00 |
| Surrey | 23.16 | Guildford | 1895 | 1/00 |

England and Wales One-inch

| | | | |
|-----|---------------------------|------|------|
| 68 | Pendle | 1896 | 1/00 |
| 75 | Ribble Estuary | 1901 | 3/00 |
| 80 | Hull & North Lincolnshire | 1895 | 1/00 |
| 223 | Colne Valley & Braintree | 1887 | 1/00 |
| 315 | Southampton Water | 1884 | 1/00 |

Ireland One-inch

| | | | |
|----|--------------------------------|------|------|
| 56 | Swanlinbar & Cuilcagh Mountain | 1899 | 3/00 |
|----|--------------------------------|------|------|

Data Protection Act 1998

The Society normally sends an annual membership list to every member, including overseas members, and prints updates in Sheetlines. If you would prefer your name or address not to be disclosed in this way, please notify the Membership Secretary.