



Sheetlines

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

This edition of *Sheetlines* was published
in 1998 and the articles may have been
superseded by later research.

Please check the index at
<http://www.charlescloseociety.org/sheetlinesindex>
for the most up-to-date references

*This article is provided for personal, non-commercial use only.
Please contact the Society regarding any other use of this work.*

Published by
THE CHARLES CLOSE SOCIETY
for the Study of Ordnance Survey Maps
www.CharlesCloseSociety.org

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.

Number 53

December 1998

Editorial		1
Annual General Meeting 1999		1
The CCS archive of OS Material		2
Binders for <i>Sheetlines</i>		2
Harry Margary, 1913 - 1998 - obituary	Richard Oliver	3
Harry Margary - afterword	Yo Hodson	9
Another literary reference	Richard Oliver	11
Histories of DOS	Richard T Porter	12
The Centre Tree	Roger Morgan	12
More bypassed map information	John Cole	14
Centres of countries	John J Smith	15
The centre of London	Pete Ansell	16
What might 1:100,000 scale national mapping of Great Britain look like	David Forrest and Ewan Kinninment	17
New maps	Richard Oliver	27
Problems of the overhaul - revision of the 1:2500 map.	John Cole	30
Report on survey of the Western Front	Mike Nolan	33
Mirrors of History 5 - The Case of the Twickenham Ferryman	Tim Nicholson	34
Railways, cyclists and the purple plague	Richard Oliver	37
Some observations on Maps for the cycle-tourist in <i>Sheetlines</i> 51	David Forrest	45
Cycling maps	Richard Oliver	47
Letters		48
Extracts from Ordnance Survey Field Bulletins of the early 1950s	John Cole	52
Yet another Guidebook with Ordnance Survey map extracts	John Seeley	53
Improvements and changes to 1:50,000 and 1:25,000 mapping	Richard Oliver	54
Baker's Map of Cambridge	Rosemary Horrox	55
CCS Publications list		55

Sheetlines

Published by THE CHARLES CLOSE SOCIETY
for the study of Ordnance Survey Maps

Sheetlines 53

December 1998

Editorial

The Charles Close Society comes of age

It was eighteen years ago in November that the fledgling Society was born. At that time there were only a handful of members and it was thought that there would never be more than 20 or 30 like minded people, who might get together occasionally to discuss maps and the Ordnance Survey. Now we have around 400 members, regular meetings and visits and the Society continues to go from strength to strength. Our publications also do well, particularly Richard Oliver's Concise Guide, and there will be two other major publications in the next couple of years. The first, Yolande Hodson's major history of the *One-inch Popular* Edition will be available in 1999.

We are very happy to announce that two members, Chris Board and Cyril Everard, have been awarded Honorary Fellowship of the Royal Geographical Society (with the Institute of British Geographers). Both are in recognition of a lifetime's contribution to the subject of geography and the Society. The Charles Close Society is pleased to have such distinguished members, and congratulates them on their achievement.

In this 'birthday' issue of *Sheetlines*, following the sad passing of Harry Margary we have two obituaries, an article from David Forrest and Ewan Kinninment on what a British 1:100,000 scale map might look like, and an interesting tale from Tim Nicholson called the Case of the Twickenham Ferryman.

~~~~~

### Annual General Meeting

The 1999 AGM will be held on Saturday 15<sup>th</sup> May at the Department of Geography, Birkbeck College, Gresse Street, London, W1. Coffee will be available from 10.00, in order to provide an opportunity for members to raise issues informally with the outgoing committee. At 11.00, Peter Chasseaud will talk about Survey on the Western Front 1914-18. Copies of his reprinted trench atlas and also, it is hoped, of his new book on the subject will be available. Formal business will commence at 12.00. After lunch, the traditional Members Map Market will commence at 14.15.

Members wishing to book for a buffet lunch at a local pub or to book space at the map market should contact the Secretary by early May. Nominations for the Society's Offices or Committees, duly seconded, must be received by the Secretary no later than 15<sup>th</sup> April 1999.

~ ~ ~ ~ ~

### **The Charles Close Society Archive of Ordnance Survey material**

During the spring of 1998 several hundred files relating to different series of Ordnance Survey maps were transferred to the Map Room of the Cambridge University library (CUL). They are owned by the Society not being needed by the OS or the Public Record Office. They remain State papers and must be accessible to the public who may wish to consult them. Members of the Charles Close Society may consult them during the usual opening hours of the CUL, by giving prior notice. Write to Miss Anne Taylor, Head of the Map Room, Cambridge University Library, West Road, Cambridge, CB3 9DR, or fax to 01223 333160, or telephone to 01223 333041 for an appointment. Members with appointments booked will be admitted on showing their Charles Close Society membership card at the entrance to the CUL where they will be issued with a temporary admission card without charge. Limited photocopying is permitted within the CUL's normal conditions and range of charges.

The documents include files on the following topics: One-inch maps: Popular edition tourist maps (13); 5th edition (1); 6th New Popular edition (3); 7th series (190) plus miscellaneous material (38). 1:50,000 First series (154). Half-inch maps: Large sheet series England & Wales; Scotland; District; Second series. 1:250,000 5th series (approx 30). Ten mile maps. Historical maps and smaller scale maps. Some fieldwork documents. Some files of instructions and correspondence. Many more files on technical topics connected with post-war map production. The collection is being catalogued at present, so detailed lists of its contents are not yet available.

*Christopher Board*

~ ~ ~ ~ ~

### **Binders for *Sheetlines* – an Update**

Following my note in *Sheetlines* 52 the response from members has been overwhelming and a great deal of interest and excitement has been generated. The Publications sub-committee has recently met and given approval for the project to proceed. We anticipate that we will be able to announce the binders availability in the next edition of *Sheetlines*. Thank you to all those members who contacted me and I apologise for not replying to you personally.

*Mike Cottrell*

## Harry Margary, 1913 – 1998

Richard Oliver

Although he was never a member of the Charles Close Society, no record of the opening up of the history of the Ordnance Survey (OS) in the last third of the twentieth century of which that Society is at least a symptom would be complete without reference to Harry Margary. His *The Old Series Ordnance Survey* (OSOS) is one of the three important Ordnance Survey reissue projects to date,<sup>1</sup> and decidedly the most elaborate in presentation and documentation: the 110 sheets of the one-inch Old Series, reissued in eight volumes between 1975 and 1992, with historical introductions and cartobibliographies that grew in comprehensiveness as the series progressed.

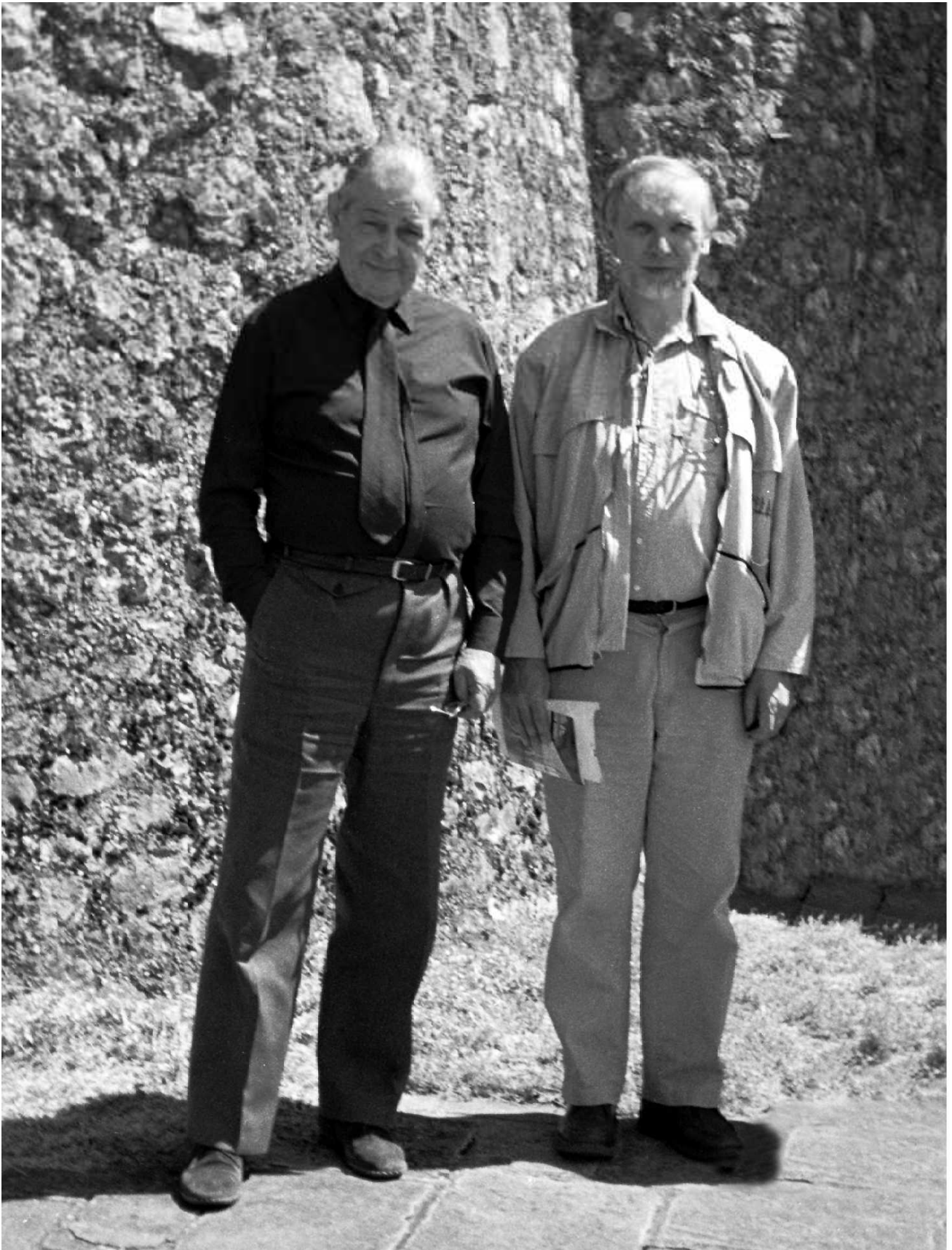
Harry Margary's career was spent with the Admiralty on weapons research, from which he retired in 1971. He had no 'professional' association with cartography, and his interest in maps as artefacts was wholly 'technical', in reproducing and reprinting old ones.<sup>2</sup> His work meant that he had to divide his time between London and Portland, and by 1962, when he was living in Bagshot, he was looking for a house more nearly equidistant between the two. So he bought Lympne Castle. Harry would have been the first to admit that Lympne was an unlikely location, but what 'sold' him the Castle was its position, on a ridge 300 feet above Romney Marsh. Anyone who has had the good fortune to stand on the Castle terrace at sunset will know exactly what he meant. He *had* to have it. I suspect that he got it at a bargain price, as the building was in a run-down state and was 'in need of some attention'. That was duly forthcoming, financed in part by official grants, a condition of which was that the building be opened to the paying public.

The map publishing business grew out of the Castle, (which is really a fortified manor house). In the later 1960s Harry must have been a busy man, as he was still in the employ of the Admiralty, he had a country seat to run, and he was starting to produce accessories to his house for sale to the public. One of these was a facsimile of the Andrews and Dury map of Kent of 1769. From this the business expanded: by 1987 he was offering nine facsimiles of large-scale county maps, four volumes of historic 'A to Z' maps of London, sundry other maps of the capital, maps of North America at the time of the Revolution (in three parts), and various prints and other publications, including nine sets of old playing cards. At the time of his death an *A to Z of Georgian Dublin* had just been completed and was awaiting distribution, and for many years he was closely involved with *Imago Mundi*, the international

---

<sup>1</sup>The other two are the David & Charles one-inch 'first edition' [i.e. Old Series] in 97 sheets, edited by J.B. Harley and issued 1969-71, and The Godfrey Edition, mostly of reduced copies of OS 1:2500 mapping of urban areas, begun by Alan Godfrey in 1981 and still in progress, with over a thousand sheets published to date. Perhaps one should also mention the slightly less ambitious, but only because of territorial extent, ventures in 1989 by Caledonian Books of Ellon, Scotland, in issuing most of the sheets of the revised one-inch of Scotland of the 1890s, and of Phoenix Maps of Dublin in reissuing the whole of the first edition one-inch 'with hills' of Ireland, together with a number of other Irish OS and other maps, and of the index volumes and other material reissued more recently by David Archer.

<sup>2</sup>His only contributions to the history of cartography seem to be two short ones revolving around photography: Harry Margary, 'Notes on map illustrations for Imago Mundi', *Imago Mundi* 27 (1975), 52-4; Harry Margary, 'A proposed photographic method of assessing the accuracy of old maps', *Imago Mundi* 29 (1977), 78-9.



Harry Margary (left) and Brian Harley (right) on the terrace at Lymne Castle, 4 July 1989.

journal for the history of cartography. He had the good fortune to have an excellent firm of printers, Headley's of Ashford, close at hand. Theoreticians would have been hard put to it to find a consistent theme in all this; rather, one senses that all these projects were 'fun to do', but they also provided entertainment and education for a wider circle. They had about them a sense of 'rightness' which would disarm most critics before they could open their mouths or sharpen their pencils. (There was also more conventional public service: he served as a local councillor for some seventeen years in the 1970s and 1980s.)

Most of these facsimiles were accompanied by introductory essays by well-qualified scholars, and in the course of recruiting his authors Harry would have encountered Brian Harley. The OSOS project seems to have grown out of the OS components in the sets of 250 years of mapping of Hampshire, Surrey and Sussex which were amongst the earlier of the Lympe Castle publications, and was probably also felt to be a good idea on its own merits: the David and Charles reissue of this mapping had only just been completed, but not everyone regarded them as wholly satisfactory, partly because of the hybrid nature of the partial revision of many of the sheets, and partly because some were taken from originals which had been struck from very worn copperplates. OSOS began in 1972, with the intention of issuing the mapping in early states (the David and Charles reissues were mostly of very late states) in ten volumes, at a rate of two volumes per year. Brian Harley was recruited to write the introductions, and he in turn recruited Yolande Hodson<sup>3</sup> as his research assistant, which work included the construction of comprehensive cartobibliographies. These were originally intended to cover only the pre-railway states of the sheets, but that soon seems to have been found unsatisfactory, and from Volume III onwards the cartobibliographies aimed to include every known state that the compilers could readily find.<sup>4</sup> Cartobibliographies of comparable detail had been prepared for earlier mapping,<sup>5</sup> but there had been nothing like it for anything emanating from the OS. In the course of this work more and more map collections were visited, and more and more states of the maps came to light. It was as well that, by the late 1980s, it was possible to offset the increasing level of information and the need for frequent redraftings with the assistance of information technology. The later OSOS cartobibliographies owe no small debt to the advent of the home computer.<sup>6</sup>

For Brian Harley, Harry Margary's willingness to set the OSOS venture on foot must have been doubly welcome, in that it enabled him to do a far more thorough job than he had been able to do for the David and Charles project, and it must have provided an antidote to writing *Ordnance Survey maps: a descriptive manual*, hedged about as was the latter by the need to accommodate officialdom. It would also enable him to kill two birds with one stone, as it would enable him to work on the text of *The Old Series of Ordnance Survey One-Inch Maps*, the book to accompany their venture that was optimistically announced inside the covers of the earlier David and Charles issues. (It was intended that the OSOS essays could

---

<sup>3</sup>Then Yolande O'Donoghue.

<sup>4</sup>The cartobibliographies were compiled as follows: Vols I-III by Yolande O'Donoghue; Vols IV-V by John and Barbara Manterfield; and Vols VI-VIII by Richard Oliver. Further cartobibliographies covering post-railway states of the sheets in Volumes I and II were compiled by the late Guy Messenger, and published by the Charles Close Society in 1991.

<sup>5</sup>A good example is that by Richard Newton for Christopher Greenwood's map of Worcestershire of 1822 in J.B. Harley, *Christopher Greenwood, county map-maker* (Worcestershire Historical Society, 1962).

<sup>6</sup>For the 'computerised' method see Richard Oliver, 'Cartobibliography and the Ordnance Survey one-inch Old Series', *Sheetlines* 26 (December 1989), 9-14.

be read as a serialised history, but this scheme was dropped after Volume III in favour of a regionally-oriented approach.) Unfortunately, the inception of OSOS coincided with an expansion in Brian Harley's interests and activities, and it is to be suspected that this acted as a brake on progress. With the first OSOS volume issued in 1975, the project should have been completed in 1980; in the event, Volume II appeared in 1977, Volume III in 1981, Volume IV in 1986, Volume V in 1987, Volume VII in 1989, Volume VIII in 1991, and Volume VI in 1992. (Wales was originally to have been covered in two volumes, VIA and VIB, and northern England by Volumes VIII and IX; in 1986 it was decided to amalgamate these as Volumes VI and VIII respectively.)<sup>7</sup> For Volumes IV and V Brian Harley had John and Barbara Manterfield as collaborators, and the present writer for the remaining three. At Harry's behest, one of my tasks was to keep up the pressure on Brian to deliver the introductory essays by an agreed date: it was no doubt such problems which prompted the following observation in 1988 after I had replied promptly to a query: 'I must indicate that I think that this rapid response shows academic irresponsibility. It is just not done for academics to deal promptly with matters!'<sup>8</sup>

The emphasis of Harry Margary's publishing was on quality rather than quantity in output, but at a modest price. His approach was a curious mixture of the amateur (in the best sense) and of the professional (likewise).<sup>9</sup> He didn't want to lose money, but 'rapacity' is about the last word one would apply to his pricing, and 'mass-market' to his distribution. The two criticisms which could be levelled against his operation were that almost everything was underpriced in terms of production cost and quality, and that it was under-publicised and under-sold. In 1989 he calculated that to cover the costs of printing 1,000 copies of OSOS Volume VII and binding 750 of them, he would have to sell 654 at £25 each, and that took no account of any trade discount.<sup>10</sup> A leaflet campaign for Volumes VII and VIII was calculated to cost £3,000 to £4,000: 'an extremely expensive operation', he observed. Of the 30,000 leaflets, 10,000 were to be distributed to members of the Country Gentlemen's Association, 10,000 more by direct mailing to 'selected professions - solicitors, estate agents and surveyors', and 5000 to county societies and 'the Charles Close Society'.<sup>11</sup> 'At best, I can hope to break even, if experience with Volumes IV and V is anything to go by. The next few months will be interesting financially!'<sup>12</sup> No wonder that he wrote that although his calculations of outgoings for Volume V took no account of the 'hundreds of hours' he had

---

<sup>7</sup>It will be noticed that Volume VI appeared last; this was because of doubts about its viability. There seems to have been a plan around 1983 that Volume V would appear before Volume IV (presumably because most of the mapping in Volume V is rather earlier in date than that in Volume IV), as the writer undertook some archive work for Brian Harley early in that year in order that he could write the introduction that Easter; in the event, Volume IV appeared first, and the introductory essay for Volume V was only drafted in the late summer of 1985.

<sup>8</sup>In the event, this letter dated 1 September took over a month to reach me, due to a prolonged postal strike!

<sup>9</sup>Perhaps 'ethical' would be a better word in view of the image that the 'professions' have for many lay persons nowadays!

<sup>10</sup>This can be placed in context if we consider that when the Charles Close Society published my *Ordnance Survey maps: a concise guide for historians* in 1993, in a run of 1000 copies, we would have covered our costs with the sale of about 350 copies at trade price. Admittedly, common to both the Margary and the CCS operations is direct selling to customers by post, but, even so, Harry Margary's margins were very tight, even when a 'hobby' element is allowed for.

<sup>11</sup>Which had visited Lympe a month or so earlier. Letters to the writer, 19 May 1988 and 12 May 1989.

<sup>12</sup>Letter to the writer of 12 May 1989. I was once told, I think by Brian Harley, that the print-runs for Volumes IV and V were 550 and 450 respectively.



spent on the book, this 'does not bother me as the OSOS project is by way of being a voluntary service!'<sup>13</sup>

His attitude is neatly covered by his reaction to the visit of the Charles Close Society to Lympne Castle. He spoke briefly to the group about his activities and had before him a selection of his wares. 'I was of course delighted that some of them bought map reproductions. I felt a little embarrassed because the maps I put out to be looked at were not meant to be part of a sales pitch.'<sup>14</sup> That the volumes were both underpriced and produced in inadequate runs (all are now out of print)<sup>15</sup> is indicated both by Volume I going out of print before Volumes VI and VIII had been issued, and by prices of about twice the official price being asked in some dealers' lists:<sup>16</sup> 'Margarys' are now collectable items in their own right. Against this, he was anxious to economise if this could be done without compromising quality, such as abandoning single-sided printing of the facsimile pages after Volume III, and seeking to reproduce from originals lent by libraries which would not charge a fee.

There were other constraints. His photography was mostly undertaken using a process camera dating from about 1900 which he had purchased from Headley's, and which could take plates of up to 24 x 30 inches. Visitors must often have looked rather dubious, upon which Harry would point out that a camera is fundamentally just a lens and a light-proof box. The camera resided at the top of the house, which was 'uncomfortably cold' in the first three months of the year, but could reach 90 degrees Fahrenheit in August. Photography for Volume VI could not begin before 1 November 1991 as his photographic assistant declined to begin before the end of the trout fishing season!<sup>17</sup>

Harry was a fisherman himself, usually taking his 'hols' in the west of Ireland or in north-west Scotland in late summer, for the salmon fishing. The daily catch would be put into a freezer at his hotel, put into his car on departure, and put into and taken out of the freezers of hotels on the way home, there to be variously gifts to friends and a contribution to the domestic economy. I lunched at Lympne four or five times, but never had salmon: perhaps the previous year's catch had all been eaten up. Lamb tended to appear much more often; I have been told since that there was an intimate relationship between the lunch menus and the population of sheep grazing on the slopes below the castle! One also remembers a complete 18-inch-diameter Stilton on the sideboard, 'accessed'<sup>18</sup> by shaving downwards, and the most lavish gin-and-tonics and whiskies which I have ever encountered. Three quadruple Scotches, neat, in the early evening after lunching early and lightly, for one who does not have a great capacity for alcohol, sounds like a recipe for disaster, but there must have been a certain magic somewhere, for all was well, but I wouldn't care to try my luck again!

All the public rooms at Lympne Castle seemed to be panelled, including the smoking-room, which contained both one of the largest colour television sets which I have seen and quite the brownest elderly brown leather armchairs that I have sat in. I have since visited Calke Abbey, 'the house that time forgot', but I have my own view on which house had the

<sup>13</sup>Letter to John Manterfield, 4 April 1988: copy in the writer's possession.

<sup>14</sup>Letter to the writer, 20 April 1989.

<sup>15</sup>I understand that a couple of the later volumes (including VII) went out of print following a mishap at a book-binders, resulting in the newly-bound stock made up from residual sheets being unsaleable.

<sup>16</sup>Not dealers who are CCS members, I hasten to add. I hope Harry never found out.

<sup>17</sup>Letters to writer, 19 May 1988, 3 August 1990; telephone conversation with writer, 16 October 1991.

<sup>18</sup>A revolting word, but I cannot think of a better.

more authentic country house atmosphere, right down to the glass-fronted bookcase of which two bays were filled with crime novels (real country houses don't have bodies in the library, with daggers protruding from them; in fact, I don't know that Lympe Castle has a library) and the third with video recordings of vintage films such as *The Ghost Goes West* (I never heard mention of a Lympe Castle ghost, either). Although the photographic studio at the top of the house may have been warmed by the summer sun, the rest of the house was distinctly cool even in midsummer, and I shall never forget the second part of the CCS visit to Lympe on 15 April 1989, when we gathered in the old kitchen so that I could describe the cartobibliographic work: towards the end I became very worried lest several of our number froze solid! However, this must have been amateur stuff compared with what the Margarys encountered when they moved in, just at the beginning of the notorious winter of 1962-3.

It is said that behind every successful man there is a woman, and in Harry's case it was his wife Deirdre, whom he married in 1940, and who was a character in her own right. Following an incapacitating stroke, she died in 1996, and those who knew him latterly felt that he missed her greatly. But he could at least take some refuge in his publishing activities.

There were several interesting Margary might-have-beens. One of them, urged by Brian Harley, was the reproduction of the first edition of the one-inch maps of Scotland, but Harry was not keen;<sup>19</sup> another, floated in the late 1980s, was some facsimiles of music manuscripts by Purcell and Handel in the British Library; a third, following a print of a cat, was a print of a cow; a fourth was to take advantage of the photographic work to issue a series of county-based soft-cover Old Series facsimiles. (The nearest approach to this was *The County of Kent in 1801*, a facsimile of the Mudge-Faden map, issued in 1990 in collaboration with Kent County Council.) One large project which was unrealised was to draw together the *OSOS* introductory essays, including the illustrations of conventional signs and writing which had been prepared by Rodney Fry, to provide the volume which Brian Harley had envisaged as a complement to the David & Charles project; latterly the working title was *The First National Survey*. This was paradoxically both stimulated and impeded by Brian Harley's sudden death in December 1991 whilst Volume VI was in progress: there were other collaborators willing to undertake the work, but there was the difficulty that some essential aspects of the story, such as the abortive mapping in south-west Scotland in 1819-27, would have to be partly researched and written up, and there was the question of financial viability. So the project languished, though its desirability remains as great as ever. Perhaps Harry's passing will help concentrate minds.

'I cannot tell you what a relief it is to have completed the series... I have received several kind letters and congratulations from my "regular" customers with a barely concealed note of surprise that after 18 years the task I set myself had been completed. I gather that this type of serial publication programme often founders part way through. If I had not taken a fairly relaxed view about profitability this one also would have foundered!'<sup>20</sup> But it didn't, and both students of the history of cartography and those of us who were associated with

---

<sup>19</sup>This project was announced by David and Charles as a follow-up to their Old Series project, but was abandoned following the oil crisis in 1973. Harry was dubious about the chances of English-published mapping selling in Scotland, and the appearance about this time of reprints by Caledonian Books of Ellon of one-inch mapping based on the 1894-5 revision probably scuppered whatever frail chances the idea may ever have had.

<sup>20</sup>Letter to writer, 2 October 1992.

preparing the volumes are the beneficiaries of this quiet-spoken man, the epitome of the apparently relaxed, tweed-wearing, pipe-smoking English gentleman, with a hidden capacity for very hard work.

## **Harry Margary - Afterword**

Yo Hodson

It is a sobering thought to be writing as the last surviving principal of what is, in cartographic facsimile publishing terms, a monumental project. I do so now to pay tribute to two people for whom I have a deep affection and of whom I have the most happy memories. When Brian and I began work on the Margary facsimiles in 1973, Harry was 60 years old, Brian was 40, and I was 27. Harry quickly assumed the position of Father Figure to us both. As far as he was concerned, he thought that we were going to produce a short introductory essay to each of the proposed ten volumes, and that they would be published at the smart rate of one every six months. He had no idea that we proposed to use the facsimiles as a vehicle for the most ambitious history of the early years of the Ordnance Survey (OS) yet written.

It soon became apparent that it would not be possible to produce such ‘cutting-edge’ text at the drop of a hat. Harry learned to become very patient with us. But, in fact, we were being no more ambitious with our essays than he was with his photography. All parties were aiming at near perfection; each was attempting, no less, than to produce the ultimate craftsmanship in his chosen field.

Nothing, as the OS were wont to reiterate throughout the nineteenth century, equalled the beauty of the engraved one-inch map (although, for some of us, the early engraved six-inch maps are the apogee of the map engraver’s art). The skill with which the hachures were etched was unequalled, it was claimed, in the world. It was this very crispness of the engraved line that posed such a challenge to Harry, who intended to reproduce it as a lithographed image (in the modern sense). To say that he achieved this is something of an understatement. I use these volumes for reference work on a regular basis, sometimes side by side with the original, and it often seems to me that all the facsimile lacks is the feel of the platemark - that indentation marking the edge of the copperplate - and my finger subconsciously runs over the map border, expecting to feel the slight raised roughness of the engraved line, but always reminded by the smoothness that I am not using the original map.

Harry's part of the work was made much easier by the willingness of some institutions to lend him copies of the original maps for photography. The time-consuming job was identifying which copies to use. Brian had already gained much experience by preparing the notes for the David and Charles reprints of the Old Series one-inch maps; but these were a motley crew, assembled from different sets and of later printings, not always from a pristine original. They were of undoubted value in showing the later landscape of nineteenth-century England and Wales, but our aim was to find the earliest known state of each sheet.

This was by no means straightforward for the first sheets to be issued. We turned for help to Peter Clark and Ian Mumford, both of whom had taught Brian much of what he knew about the Old Series for the David and Charles work. I had also learned a similar lesson from the same source while working at Military Survey, where Peter was Chief Map Research Officer, and Ian was Senior Map Research Officer. Both of them have had an abiding interest in OS maps since early times - indeed, Ian was giving lectures on the one-inch maps before most of us were born.

At the beginning, then, copies of maps from the Mumford and Clark collection were spread on all available surfaces for side by side comparisons. Long spans of silent scrutiny were broken by occasional squeaks of excitement as infinitesimal differences in the content were discovered. I was taught by Peter and Ian what to look out for, and how to put certain aspects of the marginalia in a rough chronological order. Thus armed, off I went to the various copyright collections. This aspect of the work did not greatly appeal to Brian. In retrospect, I have a feeling he knew something I did not, for what began as a simple quest to find the earliest issue of a map was to turn into a work of almost Sisyphean proportions within a very short space of time.

Brian thought we ought to have a bibliographical note on the maps at the end of each essay. This was intended to be a short summary. But then Peter Clark uttered the fateful words: "You can't do that, you must do it properly." With no precedent to guide me, I embarked on what was certainly one of the most time-consuming studies I have ever undertaken. Every square inch of one copy was compared, side by side, with another. Remember that copying facilities were not then what they are today, nor, as Richard has remarked above, was the home computer even dreamed of. Peter provided me with sheets of film, the same size as a full sheet Old Series map, printed in black with 2-inch squares; this was a huge help in the process of comparative analysis. Even so, it took a full week to do the work involved for one sheet alone, using all the sets in the British Museum/Library. It will become clear that, with four weeks' annual leave, and sometimes as many as 13 sheets to a volume, six months would not begin to be enough time for the completion of each volume.

It seemed that one way of reducing the workload was to confine ourselves to the pre-railway states of the sheets. As far as we were concerned, the cartobibliography was not the most important element of the work. Much of our time was spent in scouring the PRO for new documentary information. With the help of the late Peter Penfold, then Assistant Keeper in charge of maps, we unearthed what to us was spectacular material; the old North Room at Chancery Lane, always freezing cold and a real test of character to work in, became a hothouse of discovery. We initially complained about the dusty files until it dawned on us that the undiscovered nature of their content was in direct proportion to the dirt they had accumulated. Thenceforth, a filthy file was welcomed with great expectation which was often fulfilled.

The pattern of work we established for the first two volumes could not be maintained for the third. Initially, the work of writing the text was divided equally between us; we did the original research. Together, the notes were typed up I indexed them and we each wrote our respective sections. Brian, in his own inimitable fashion, put the two halves together in the most elegant way; I then added the cartobibliography. By the time the third volume came to be researched, we realised that the cartobibliography had become something of a rod for the

back, for now the appearance of railways on the sheets could hardly be ignored. My part in the introductory essay was much reduced, and the map analysis took over. With the benefit of hindsight, I think it would be reasonable for critics to turn round and say that surely we could have foreseen all this. However, I do believe it is a measure of the pioneering approach that we were taking and, above all, of our deep ignorance of what lay ahead, that we did not give a thought to the inevitable complexities that we would meet in the cartobibliographies.

This all had to be fitted in around full time work in other spheres. Both of us were also writing for Seymour's *History of the Ordnance Survey*, and, when the first Margary volume was in preparation, Brian was also finishing the text for *Ordnance Survey maps: a descriptive manual*, a job he relished for it took him from the past to the present in terms of the time span he covered, and he acquired a much wider perspective of OS matters as a result.

In 1980, with new family responsibilities and less time available, I had to relinquish my part in the production of the facsimiles. In all this time, Harry's patience had turned to genial resignation, although I fancy that privately he must have quietly been somewhat exasperated by the prolongation of what had seemed such a simple project. He would joke with us, and try to chivvy us on, saying that he wished to finish the series before he turned up his toes, little knowing that Brian would predecease us both. The completion of the series is due in no small way to the dogged persistence of Brian's later co-authors in preparing what is, compared with my own feeble beginnings, a massively professional cartobibliography of a most complex map. The whole is a fitting memorial to both Brian and Harry.

Finally, Harry and Deirdre's hospitality was indeed legendary; I can vouch for the lunches on lamb, and it really is just as well that we took the train, rather than drove, back to London.

~~~~~

Another literary reference

Richard Oliver

A number of references to Ordnance Survey maps in novels and stories were given in *Sheetlines* 45 (pp 34-7). Here is another, from Chapter 16 of Anthony Trollope's *Phineas Redux* (1874):

At the foot of the hill... straggles the Copperhouse Brook, so called by the hunting men of the present day, though men who know the country of old... will tell you that it is properly called the river Cobber, and that the spacious old farm buildings above were once known as the Cobber Manor House. He would be a vain man who would now try to change the name, as Copperhouse Cross has been printed in all the lists of hunting meets for at least the last thirty years; and the Ordnance map has utterly rejected the two b's.

This article was first published in Sheetlines 52, regrettably with a couple of typing errors. I am therefore reproducing the whole article, and offer my apologies to Richard for the errors last time. JR

Histories of DOS

Richard T Porter

In his review, *Sheetlines* 48 (April 1997) pp 68-70, of Gerald McGrath's *Mapping for Development: The contributions of the Directorate of Overseas Surveys*, Richard Oliver notes on p.70 that the map extracts "appear to have been prepared from the original reproduction materials". In fact he could have gone further, and, for the record, I shall do so: the extracts were cut from stock copies of original printed map sheets. Three clues:

- i) the comment on the list of extracts (facing p.264) that "it has been necessary to obtain the extract from several map sheets" (i.e. where DOS did not have enough stock of any one sheet, as can be deduced from the lack of a sheet number for several of the extracts);
- ii) The varying colours and weights of the paper used - the thinnest and greyest is the oldest!
- iii) it may well be that every copy of McGrath's monograph has a unique combination of extracts; the two that I have just compared have not a single extract in common. And one does need two copies, as the 'perfect' binding of a working copy will soon begin to disintegrate.

I hope I may list here the few significant but still minor errors in the book:

p.130. The Sarawak sheet number is 2-111-16 not 2-III-16;

p.143. Note 1 Mr Rainsford's initials were H.F., though his signature was indistinguishable from H.J.R.!

p.149. Miss Windsor was the third Chief Computer - the first was C.G. Fannin, 1946 - 47; the second was H.H.Brazier, who died earlier this year.

pp.20, 21, 182. According to the DOS Annual Report 1966, it was the Pool of Soil Scientists (not Surveyors) that was assimilated into FLU Section.

~~~~~

## **The Centre Tree**

The post card opposite was found by Roger Morgan at a postcard fair. Can any member shed any light on what it means?



*The Centre Tree (By Ordinance Survey) Morton.*

## More bypassed map information

John Cole

At the risk of irritating readers I have a list of additions and corrections to previous articles. My chief excuses are under-research and over-enthusiasm!

Sheetlines 47 (December 1996): 1:25000 'Regulars'. The eleven maps concerned gave only the dates of the 1:10560 maps from which they were derived. The precise revision dates were as follows:

|               |         |      |         |               |         |
|---------------|---------|------|---------|---------------|---------|
| SX45(Part 44) | 1947-52 | SX54 | 1949-51 | SX64(Part 63) | 1950-51 |
| SX46          | 1951-52 | SX55 | 1948-52 | SX65          | 1949-52 |
| SX47          | 1951-53 | SX56 | 1950-52 | SX66          | 1950-52 |
|               |         | SX57 | 1950-52 | SX67          | 1950-52 |

Towns and villages resurveyed at 1:2500 were Plympton 1950, Plymstock 1951-52, Saltash 1951-52 and additionally Tavistock 1953 and Torpoint 1951 (Torpoint should be added to Launceston and Saltash - Cornish towns resurveyed at 1:2500 -*Sheetlines* 49). The method was revision points and chain survey. All but Tavistock were resurveyed again in 1982 in the extended Plymouth 1:1250 area. (Plympton, Plymstock and Saltash by tacheometer surveys and Torpoint by machine plotted air survey.)

In *Sheetlines* 39 ( I have only just obtained a back number) John Symons drew attention to an insert giving details of the limits of the 'regulars' pasted into his copies of SX46, SX55 and SX56. Richard Oliver further commented that these inserts were probably only to be found in A editions. I have only three of such, SX45 and SX55 being paper (flat) whilst my copy of SX66 purchased in 1956 does not have this insert.

Sheetlines 48. (April 1997). Linkage of old town plans with the 1:1250. In line 5 I wrongly described Brigadier Wheeler as Division Officer at Bristol. He did not take over this post until 1951, being in 1947, Director of Field Surveys.

Sheetlines 50. (December 1997). 'Passing By'. Line 2 should read 'Sheetlines 29 (Jan. 1991)'. In paragraph five, SX5871 was an incorrect example of a 1:2500 map with little detail of substance. In fact although this area was originally surveyed at that scale, it was downgraded to 1:10560 in 1950 before revision took place. However SX5872 to its north was published in 1953 after revision at 1:2500 scale the previous year and the only significant features were a road cutting the map's north west corner; a rifle range and a few streams. The remainder was rough pasture and marsh symbols..

Sheetlines 52. 'A map in my collection'. SO9682NW was published in 1954. (The survey date quoted is actually July 1953 which was the date of validation of my efforts!). Paragraph four: regarding places surveyed at 1:1250 scale, a list appears in *Sheetlines* 24 (April 1989) giving numbers of maps involved and dates of survey. Lydd was one of a few extreme examples (only four maps) resurveyed at 1:1250 for technical reasons or special request.



Whilst bypassed maps have taken up sufficient *Sheetlines* space, (still without my being able to account for all the maps involved) some further information is to hand. Should any reader be interested or require 1:2500 map numbers plus original date, they should contact me direct. (As suspected the OS figures for Devon should read Cornwall/Devon whilst Dorset/Hants/Wilts should be lumped together - 262 maps.)

## Centres of countries

John J Smith

As a confirmed digital illiterate, I am obliged to Michael Holroyd for his explanation of the principle on which the Ordnance Survey supposedly obtained their result.

My suggested displacement method depends on the assumption that a “tidemark” registered when half the volume is displaced will divide the figure into two equal surface areas. I accept that successive immersions will not produce a centre, but will only narrow down the area within which the centre lies. In the case of a triangle, suspension from the three apices would produce only a smaller triangle which of course would be pointless, as the position of the centre is self evident.

In the case of an irregular figure I doubt whether the resultant multiple criss-cross would even approximately coincide and it would be necessary to resort to something akin to what in photographic circles would be termed ‘zooming down’ to achieve a virtual pin point.

In the sixth paragraph of his letter Mr Holroyd accepts the notion – which seems absurd to me – that the centre of a country could be located within another country, as could occur if a tongue of another country protruded into the area partially enclosed by the arc of a crescent-shaped country. I had conceived this as a possibility, but had dismissed it as a nonsense. I like my ‘centres’ to be within the country concerned, and on dry land.

The word ‘centroid’ is a useful term to describe an alternative to the unattainable. It means ‘like a centre’. It is not a centre, and it was a centre – indeed the centre, and with a very high degree of precision – that Mr Hunt sought. He cannot have it. There is no such place.

Philip Atkins (Sheetlines 51) quotes a definition in a Bartholomew–edited gazetteer. What grounds are there for regarding the centre of the dome of St Paul’s as having any more validity than any other point? It would be interesting to know precisely in what terms this was claimed to be ‘the centre of London’.

I have no quarrel with the use of ‘centre’ in a metaphorical sense, as in ‘the hub of the Empire’ mentioned by Eugene Burden; the figure of Eros in Piccadilly Circus has been similarly described.

So far as Jon Risby’s anecdotal contribution in Sheetlines 52 is concerned, *of course* the Ordnance Survey took measurements from the King Charles statue. They *had* to in order to get it on the map, but did they claim it as the ‘centre of London’?

Chancing on a copy of *Experimental Hydrostatics and Mechanics for School Certificate Students*, by E Nightingale published by G Bell and Sons in 1929, I came across a description of the suspension method of finding the centre of gravity, followed by an example of its utility:-

***By cutting out of cardboard a map of England, its geometrical center may be determined in this way, and you will find it is not far from Daventry, where the big wireless broadcasting station is situated.***

This was 12 years before Arden-Close's article in The Geographical Journal.

### **The centre of London**

Pete Ansell

With reference to A.G Hunt's enquiry as to the exact location of the centre of London, the case for St Paul's Cathedral is further supported by William Fadon's circular *Topographical Map of the Country Twenty Miles Around London* (1790), which takes this point as its centre.

By this time the Standard at Cornhill had lost its pre-eminence as the central standard point of measurement, as seven different standard stones were in use at that time to measure distances from London, depending on the route. These were located at

- i. London Bridge - for the roads to Dover, Maidstone, and Tunbridge Wells;
- ii. Westminster Bridge - for the roads to Brighton and Portsmouth;
- iii. Hyde Park Comer - for the roads to Plymouth and Bath;
- iv. Oxford Street Turnpike (Marble Arch) - for the roads to Oxford and St Albans;
- v. Hick's Hall (Smithfield) - for the road to York via Hatfield;
- vi. Shoreditch Church - for the road to Cambridge;
- vii. Whitechapel Church - for the roads to Newmarket and Harwich.

However, a case could be made for Trafalgar Square as the modern centre of London, as this is used as the current Standard Point for measuring miles to London on all motorways.

~~~~~

What might 1:100,000 scale national mapping of Great Britain look like?¹

David Forrest & Ewen Kinninment

Most European countries have national topographic map series at 1:100,000 scale. The Ordnance Survey of Great Britain are unusual in not publishing mapping at this scale. The authors examine the case for a 1:100,000 topographic series of Great Britain and illustrate two potential designs based on the familiar Landranger specification.

Map series scales in Europe

Examining the topographic map series available in European countries (Table 1) it is clear that although many gaps in coverage exist at the large scale end (1:10,000), the majority of countries have full coverage at 1:20,000 or 25,000, 1:50,000, 1:100,000 and either 1:200,000 or 250,000. The large amount of conformity of scales in Eastern Europe can be explained by the influence of the former Soviet Union (see Collier et al, 1997). In Western Europe there are two very noticeable gaps in the table of coverage: France lacks a current 1:50,000 series and Great Britain and Northern Ireland lack coverage at 1:100,000 scale. Of course this table does not indicate the state of mapping, it being quite likely that some is quite dated. Nevertheless the implication is that the mapping is current.

In the case of France, 1:50,000 scale mapping was published for most of this century. Following the completion of modern 1:25,000 scale mapping in the *Serie Bleu* and *Top25* and the incorporation of Tourist information in these series, the recent catalogues of the IGN no longer mention the 1:50,000 *Serie Orange* mapping². Those not needing the large amount of detail provided by the 1:25,000 series are directed towards the 1:100,000 scale *Carte Touristique* (*Serie Vert*). These are very large maps of some 120x90 cm, but there are only 74 sheets required to cover the country. The sheet arrangement, unlike the *Serie Bleu* and *Serie Orange*, is not based on a regular pattern, but is organised to give the most efficient coverage of the country (as is the *Top25*). Without entering into a detailed comparison of content and design, it is noticeable that the level of information contained in the French 1:100,000 scale, at least with respect to buildings and urban areas, is as detailed as in the Ordnance Survey (OS) 1:50,000 mapping. This is common to many European topographic maps at medium scales, where typically there is less generalisation of the urban area and other features than we are accustomed to in the U.K.

Medium scale map series in Great Britain

In Britain there has never been an official 1:100,000 national topographic series. There have, however, been a number of both government and commercial map series at or around this scale over the years. Richard Oliver recently discussed some of these in *Sheetlines* Figure

¹ This article is largely based on a poster paper presented at the 1997 BCS Symposium and published in the proceedings. Given recent coverage in *Sheetlines* of the potential for mapping of GB around this scale, the editors agreed that wider exposure of this paper to CCS members was merited.

² The IGN website still provides an index for the 1:50,000 and it appears to be available by direct order from the IGN, although it is now quite dated.

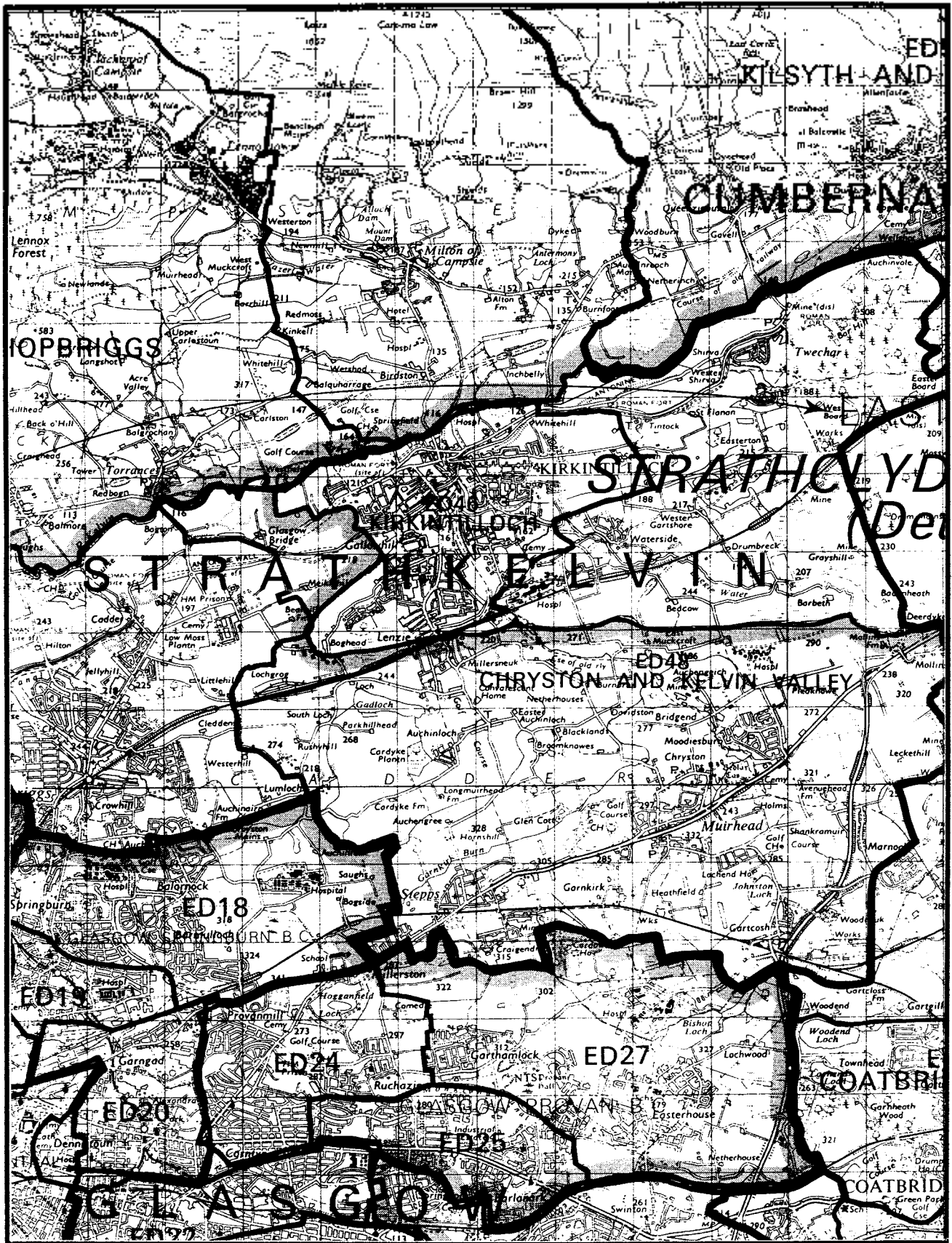


Figure 1. Extract of 1:100,000 Administrative map. Copyright Ordnance Survey



Figure 2. O.S. Landranger reduced to 1:100 000. Copyright Ordnance Survey

scale over the years. Richard Oliver recently discussed some of these in *Sheetlines* (*Sheetlines* 51, April 1998 pp.14-26). The most obvious example is the Bartholomew's topographic maps, originally at ½ inch to the mile (1:126,720), latterly published at 1:100,000 scale as a 'National' series. Despite the long history of this series, it is no longer available as national topographic coverage. Certain areas continue to be published as tourist maps, generally on extended sheet lines compared to the former National series, but the number of sheets currently published has gradually dwindled. Outline editions of the 1:100,000 scale have also served as the basis for Post Code index maps, etc. Although an attractive map in many respects, the Bartholomew map is quite heavily generalised for the scale when compared to French or German official topographic mapping at this scale.

The OS have dabbled in the past in producing half inch to the mile maps, but national coverage was never completed and the last series was abandoned in 1961 (Owen & Pilbeam, 1992, p.145). More recently a 1:100,000 scale base was produced by the OS by photographic reduction of the 1 inch series to form the basis of official administrative boundary maps. This series too is no longer available, administrative boundaries now being published on a 1:250,000 base. *It was when using the 1:100,000 administrative maps for a student exercise that the leading author first came to realise the potential for 1:100,000 scale mapping in favour of 1:50,000.* It was found to be perfectly feasible to use these maps for extracting much of the base information required, despite the fact that all the topographic information was printed in grey and that the strong green and red boundaries initially dominate the visual impression.

Figure 1 shows an extract of a 1:100,000 scale administrative map of an area NE of Glasgow. Even given the monochrome nature of this it is quite possible to pick out urban areas, woodlands, roads and railways. Clearly the feature that suffers most with this reduction is the names, which, it has to be admitted, are rather small and difficult to read at normal viewing distances. Obviously, if the map were reproduced in full colour overall legibility would be increased, as can be seen with GSGS Misc. Series 2000 which do just that (Forrest 1998). The problem with the size of names is presumably one of the main factors in the OS deciding upon 1:50,000 for the move from one-inch to the mile to a metric scale in the mid 1970s. As mentioned above, the OS 1:50,000 (and the one-inch before it) are rather more generalised than many other European 1:50,000 scale series, and were it not for the effort required in resetting all the names, a reduction to 1:100,000 would in the authors' opinions have been a better option at that time. Clearly this effort was not necessary with the enlargement of the one-inch to 1:50,000. Figure 2 similarly shows an extract at 1:100,000 reduced from the current colour 1:50,000 and again, apart from names, most of the detail is certainly discernible.

Apart from the Bartholomew's 1:100,000 scale mapping of GB there are also two other significant series, both of which illustrate much more the potential of 1:100,000 topographic mapping of Great Britain. During the Second World War, OD based German 1:100,000 topographic mapping was produced and, more recently, the Soviet military produced a 1:100,000 map series of the UK. The German map is a pretty poor quality product and is difficult to read. In contrast, the extract from the Soviet series (figure 3) shows similar levels of detail in most features to what we are accustomed to from the OS 1:50,000 series, and the map is certainly quite legible. Having been designed explicitly at 1:100,000 the names on the Soviet

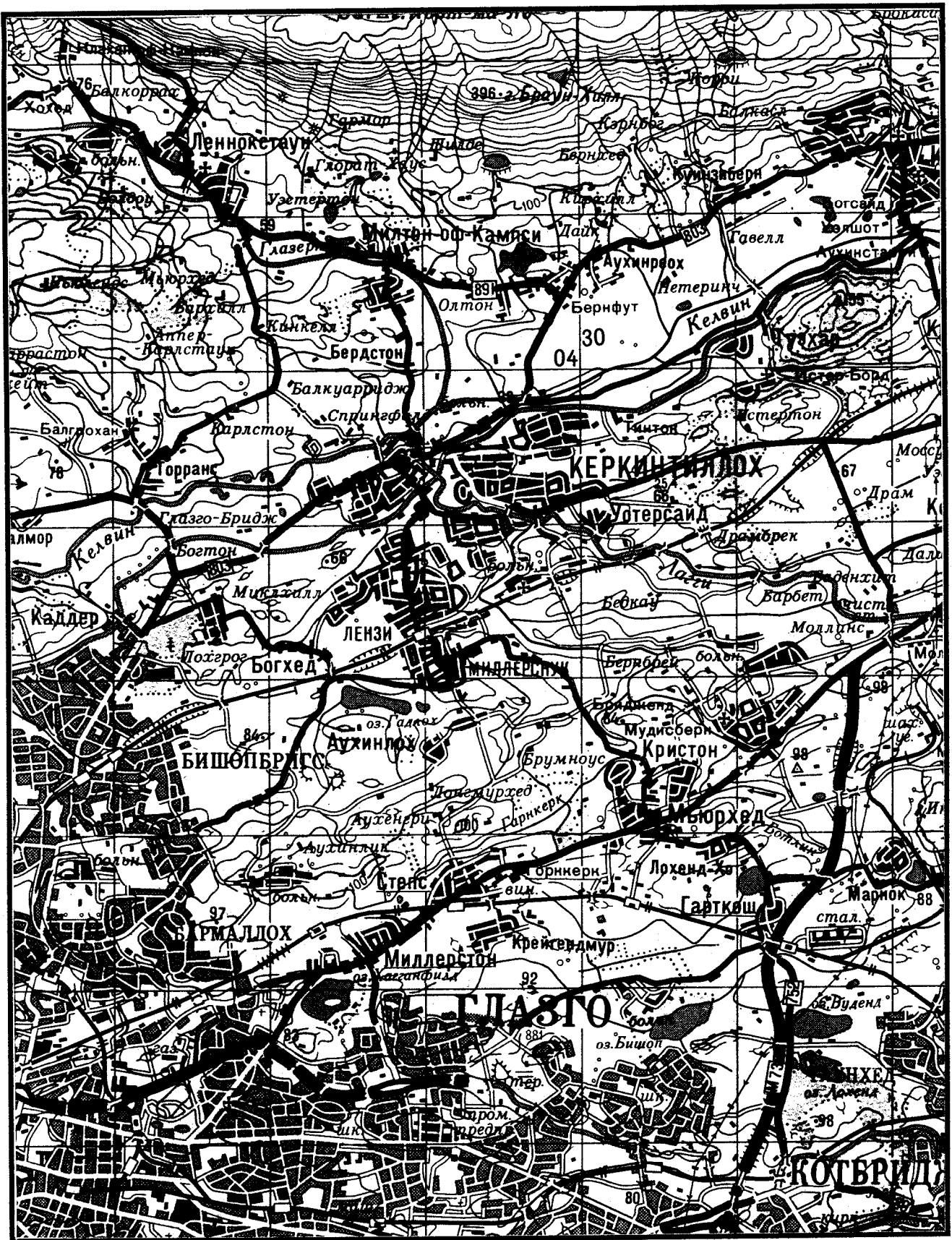


Figure 3. Monochrome extract of Soviet 1:100,000 map of Great Britain.

the names on the Soviet map, despite being in Cyrillic, are appropriately sized compared with those on the reduction of OS product shown in figures 1 & 2.

Experimentation

In order to investigate more fully the potential for 1:100,000 topographic mapping of Great Britain a series of test maps have been produced, mimicking the style of various European 1:100,000 specifications³. It is always difficult to compare directly maps of different countries because the topography is not the same. In this study two standard areas have been used. The first is to the NE of Glasgow, and all maps illustrated here are of this area. To contrast with this, a more rural area in the Lake District forms the second study area. The availability of digital data and powerful desktop systems for producing the maps makes this kind of experimentation much more straightforward and rapid than was the case with traditional production. The basis of the maps in figures 4 and 5 is OS Meridian data (tile NS66). Additional information such as drainage, woodland boundaries, isolated buildings, etc, has been digitised from the Landranger map of the area.

The initial trial map, figure 4, is a monochrome extract of a 1:100,000 map using the basic specifications of the OS Landranger. This again shows that most of the detail from the current 1:50,000 specification is perfectly capable of being depicted at 1:100,000. The major difference from figure 2 is the more appropriate size of names. Figure 5 is a generalised version of the map, the main differences being the reduction in the number of minor roads and the increased contour interval. One would not expect to use a map at this scale for detailed navigation in urban areas, as many streets have been eliminated. Unclassified roads in rural areas and through roads and streets have been retained. The contour interval has been increased from 10 to 25 metres. This was possible, as a digital terrain model (Landform Panorama data) was used to generate the contours. Although perhaps less accurate than the original plotted contours, the accuracy is perfectly adequate for this scale and such an approach gives greater flexibility in choosing intervals.

Conclusions

The authors do believe that a 1:100,000 scale national topographic series of Great Britain is a viable proposition and would be more appropriate to the needs of many users than the current 1:50,000 scale. It is recognised, however, that there remains a demand for 1:50,000 scale mapping by the military⁴ and the fact that the British public are so familiar with the Landranger series and its 'pink' covers means that it would not be practical to discontinue it in the short term. Looking to the future, as the new Explorer series spreads to national coverage, more emphasis should be placed on that series for those that need detail of the topography, reducing the value of and demand for Landranger mapping. Those only

³ The maps based on European designs form the basis of an article submitted to the Cartographic Journal which will include illustrations in colour.

⁴ Interestingly, hearsay evidence suggests that soldiers recently returned from Germany requested 1:100,000 maps of exercise areas, having found those used in Germany at that scale more suitable than the 1:50,000 maps available for similar exercises in the UK.



Figure 4. Extract of 1:100,000 map, detailed version. Based on Meridian and digitised data, original in colour. Data copyright Ordnance Survey.



Figure 5. Extract of 1:100,000 map, generalised version. Based on Meridian and digitised data, original in colour. Data copyright Ordnance Survey.

but not catered for by the far smaller 1:250,000 scale, would benefit greatly from the availability of 1:100,000 mapping. Digital production methods and, in particular, automated name placement software, already in use by the OS, may help to make it commercially viable to move to this scale.

Acknowledgements

Jane Drummond assisted with data transfer and manipulation; Sally Hill carried out some preliminary investigations on this topic; and Mike Shand scanned figures 1 to 3.

References

- Bohme, R. (1990 & 91) Inventory of World Topographic Mapping Vols. 1 & 2. Barking Essex: Elsevier for the ICA.
- Collier, P. et al (1996) The state of mapping in the former satellite countries of Eastern Europe. *Cartographic Journal* Vol.33, No.2 pp.131-139.
- Forrest, D. (1998) GSGS Misc. Series 1999 and 2000. *Sheetlines* 52.
- Oliver, R. Ordnance Survey maps for the cycle-tourist. *Sheetlines* 51, pp 14-31.
- Owen & Pilbeam (1992) Ordnance Survey: Map Makers to Britain since 1791. London: HMSO.

Notes to accompany Table 1

1. 1:25,000 & 1:100,000 photo enlarged from 1:50,000 & 1:200,000 respectively
2. Original 1:50,000 photo reduced from 1:20,000. 1:50,000 & 1:100,000 being replaced by new 1:50,000
3. 1:100,000 actually half inch (1:126,720)
4. 1:100,000 not revised where new 1:50,000 available 1:250,000 replacing 1:200,000
5. 1:100,000 photo reduction of 1:50,000
6. 1:100,000 not being revised, except some tourist editions
7. 1:100,000 discontinued

Table 1 - National Topographic Map Series in Europe (after Collier, et al, & Bohme)

Figures are % of country covered by published mapping.

Country	10,000	20,000	25,000	50,000	100,000	200,000	250,000	Notes
Western Europe								
Austria	25		85	100	100	100		1
Belgium	100		100	100	100		100	
Denmark			100	100	100	100		
Faroe Is.		100		100	100	100		
Finland		100		100	100	100		2
France			100		100		100	
Germany - W.			100	100	75	100	100	
Germany - E.	100		100	100	100		100	
Great Britain	100		100	100			100	
Iceland				30+	100		100	
Ireland				100	100		100	3
Italy			100	50	100	100	75	4
Luxembourg	100	100		100	100		100	
Malta			100					
Netherlands	100		100	100	100		100	5
Northern Ireland				100			100	
Norway				100	100		100	6
Portugal			100	100	100	100	100	
Spain			30	100	80	100		
Sweden		100		100	100		100	
Switzerland			100	100	100		100	
Eastern Europe								
Albania	100		100	100	100	100		
Belarus	100		100	100	100	100		
Bulgaria	100		100	100	100	100		
Cyprus	inc		inc		100	100		
Czech Republic	100		100	100	100	100		
Estonia	75		100	100	100	100		7
Greece	limited			100	100		100	
Hungary	70		26		100	100		
Latvia	100		100	100	100	100		
Lithuania	100		100	100	100	100		
Poland	inc		80	100	60	100		
Romania	Inc		100	100	100	100		
Russia	100		100	100	100	100		
Slovakia	100		100	100	100	100		
Slovenia			100	100	100	100		
Ukraine	100		100	100	100	100		

New maps

Richard Oliver

Ordnance Survey of Great Britain

New publications between 1 July 1998 and 31 December 1998 included the following. Dates following edition codes are those of general revision (where available); all 1:50,000 and 1:25,000 sheets are assumed to show Access Land and cycle routes unless annotated [X]; sheets annotated [Y] after the title show 'surfaced cycle routes'; bracketed dates thus (1/98) indicate month and year of publication.

The OS information here is based on the following publications – *Maps, Atlases & Guides current editions and forthcoming titles* (monthly) and *Pathfinder Maps no longer available* (bimonthly). More details are available from the OS Customer Information Helpline on 0845 050505

1:50,000 Landranger (Second Series):

4	C	1998	<i>Shetland – Southern Mainland</i>	(12/98)
5	B	1997	<i>Orkney – Northern Isles</i>	(7/98)
6	B	1997	<i>Orkney – Mainland</i>	(8/98)
7	B	1997	<i>Orkney – Southern Isles</i>	(7/98)
15	B	1998	<i>Loch Assynt, Lochinver & Kylesku</i> [Y]	(10/98)
25	B	1997	<i>Glen Clova & Glen Affric</i> [Y]	(8/98)
33	C	1997	<i>Loch Alsh, Glen Shiel & Loch Hourn</i>	(7/98)
46	C	1996-8	<i>Coll and Tiree</i>	(12/98)
64	C	1997	<i>Glasgow, Motherwell & Airdrie</i> [Y]	(10/98)
65	C1	1998	<i>Falkirk & Linlithgow, Dunfermline</i>	(11/98)
70	B	1997	<i>Ayr, Kilmarnock & Troon</i> [Y]	(10/98)
79	C	1997	<i>Hawick & Eskdale, Langholm</i>	(7/98)
88	C1	1995	<i>Newcastle upon Tyne, Durham & Sunderland</i>	(9/98)
95	B	1997	<i>Isle of Man</i>	(7/98)
99	C	1997	<i>Northallerton & Ripon, Pateley Bridge & Leyburn</i>	(8/98)
102	C	1998	<i>Preston & Blackpool, Lytham St Anne's</i> [Y]	(10/98)
113	C1	1995	<i>Grimsby, Louth & Market Rasen</i>	(8/98)
114	B	1997	<i>Anglesey</i> [Y]	(8/98)
152	C1	1995	<i>Northampton & Milton Keynes, Buckingham & Daventry</i>	(7/98)
153	C	1998	<i>Bedford & Huntingdon, St Neots & Biggleswade</i>	(11/98)
162	C	1997	<i>Gloucester & Forest of Dean</i> [Y]	(10/98)
167	C	1997	<i>Chelmsford, Harlow & Bishop's Stortford</i>	(8/98)
168	C	1998	<i>Colchester, Halstead & Maldon</i> [Y]	(10/98)
171	C	1997	<i>Cardiff & Newport, Pontypool</i>	(7/98)
172	C	1997	<i>Bristol & Bath, Thornbury & Chew Magna</i> [Y]	(7/98)
182	C	1997	<i>Weston-super-Mare, Bridgwater & Wells</i>	(8/98)

193 C 1997 *Taunton & Lime Regis, Chard & Bridport* (8/98)

1:25,000 Explorer (Second Series):

24	A/	<i>Norfolk Coast Central</i>	(8/98)
138	A/	<i>Dover, Folkestone & Hythe</i>	(11/98)
154	A	<i>Bristol West & Portishead</i>	(7/98)
158	A	<i>Newbury & Hungerford, Lambourn & Kintbury</i>	(10/98)
159	A	<i>Reading, Wokingham & Pangbourne</i>	(10/98)
160	A	<i>Windsor, Weybridge & Bracknell</i>	(9/98)
166	A	<i>Rhondda & Merthyr Tydfil</i>	(8/98)
176	A	<i>Blackwater Estuary, Maldon, Burnham-on-Crouch & Southend-on-Sea</i>	(10/98)
178	A	<i>Llanelli & Ammanford, Kidwelly</i>	(10/98)
179	A	<i>Gloucester, Cheltenham & Stroud</i>	(8/98)
182	A	<i>St Albans & Hatfield</i>	(8/98)
183	A	<i>Chelmsford & The Rodings</i>	(8/98)
185	A	<i>Newcastle Emlyn/Castell Newydd Emlyn</i>	(8/98)
189	A	<i>Hereford & Ross-On-Wye</i>	(11/98)
192	A	<i>Buckingham & Milton Keynes</i>	(8/98)
195	A	<i>Braintree & Saffron Walden</i>	(8/98)
198	A	<i>Cardigan & New Quay</i>	(8/98)
205	A	<i>Stratford-upon-Avon & Evesham</i>	(11/98)

The following 1:25,000 *Explorer* has been renumbered:

116	A	<i>Lyme Regis & Bridport</i> [formerly <i>Explorer</i> 29]	(11/98)
-----	---	--	---------

1:63,360 Touring Map:

6	B	<i>Yorkshire Dales</i>	(10/98)
---	---	------------------------	---------

The following are announced for publication: proposed publication dates are given in brackets:

1:50,000 Landranger (Second Series)

20	B	<i>Beinn Dearg & Loch Broom, Ben Wyvis</i>	(3/3/99)
34	B	<i>Fort Augustus, Glen Albyn & Glen Roy</i>	(13/1/99)
77	B	<i>Dalmellington & New Galloway, Galloway Forest Park</i>	(27/1/99)
123	B	<i>Lleyn Peninsula</i>	(10/2/99)
169	C	<i>Ipswich & The Naze, Clacton-on-Sea</i>	(27/1/99)
188	B3	<i>Maidstone & The Weald, Royal Tunbridge Wells</i>	(23/12/98)
192	C	<i>Exeter & Sidmouth, Exmouth & Teignmouth</i>	(3/2/99)

1:25,000 Explorer (Second Series):

152	A	<i>Newport & Pontypool</i>	(2/99)
156	A	<i>Chippenham & Bradford-on-Avon</i>	(27/1/99)
161	A	<i>London South</i>	(27/1/99)
162	A	<i>Greenwich & Gravesend</i>	(27/1/99)
170	A	<i>Abingdon, Wantage & Vale of White Horse</i>	(20/1/99)
173	A	<i>London North</i>	(27/1/99)
174	A	<i>Epping Forest & Lee Valley</i>	(27/1/99)
180	A	<i>Oxford</i>	(20/1/99)
184	A	<i>Colchester</i>	(23/12/98)
194	A	<i>Hertford & Bishop's Stortford</i>	(27/1/99)
202	A	<i>Leominster & Bromyard</i>	(13/1/99)
213	A	<i>Aberystwyth & Cwn Rheidol</i>	(27/1/99)

The following 1:25,000 *Pathfinders* have recently been officially withdrawn from publication (though residual stocks of some sheets may remain on sale):

629, 638, 639, 650, 651, 661, 662, 753, 769, 770, 786, 802-804, 823, 824, 844, 845, 864-866, 905, 906, 988, 997, 1011, 1020, 1034, 1040/1, 1046, 1047, 1051, 1064/5, 1066, 1070, 1071, 1075, 1088, 1089, 1098, 1095, 1106, 1108, 1109, 1112, 1113, 1119, 1123, 1122, 1128, 1129, 1134, 1144, 1146-1148, 1150, 1153, 1166, 1170-3, 1182, 1186-9, 1287, 1297/8, 1316/7 1368.

Ordnance Survey of Ireland

The following 1:50,000 Discovery series sheets have recently been published:

Sheets 41, 47, 48 (all as 'First Edition').

The Godfrey Edition

The following were published by Alan Godfrey Maps between 23 July and 6 November 1998:

1:63,360

England	8	[1861-3]	<i>Redesdale</i>	(9/98)
England	69	[1847-50]	<i>Mid-Airedale</i>	(7/98)
England	286	[1866-71]	<i>East Surrey & Mole Valley</i>	(10/98)

1:2500 reduced to 1:4340

Cheshire	36.08	1907	<i>Macclesfield (North)</i>	(10/98)
Essex	28.09	1896	<i>Colchester (East)</i>	(10/98)
Essex (NS)	69.09	1914	<i>Chingford Green</i>	(7/98)
Essex (NS)	78.16	1915	<i>Goodmayes & Seven Kings</i>	(10/98)
Essex	89.01	1895	<i>Tilbury Riverside & Gravesend Reach</i>	(11/98)
Flintshire	10.10	1910	<i>Connah's Quay</i>	(9/98)
Gloucestershire	71.15	1902	<i>Clifton Down</i>	(7/98)
Gloucestershire	75.04	1902	<i>Bristol (SW) & Bedminster</i>	(10/98)

Kent	3.09	1862-4	<i>Erith</i>	(7/98)
Kent	8.05	1861	<i>Mottingham</i>	(11/98)
Kent	42.03	1865-6	<i>Maidstone (North)</i>	(10/98)
Kent	42.07	1865-8	<i>Maidstone (South)</i>	(10/98)
Lancashire	56.10	1910	<i>Brierfield & Reedley Hollows</i>	(8/98)
Lancashire	97.10	1906	<i>Oldham (South)</i>	(8/98)
Lancashire	99.15	1906	<i>Fazakerley</i>	(7/98)
Lancashire	111.04	1905	<i>Levenshulme</i>	(7/98)
Lancashire	111.05	1905	<i>Chorlton-cum-Hardy (South)</i>	(10/98)
Lancashire	111.08	1904	<i>Heaton Chapel</i>	(9/98)
London	3	1894	<i>Upper Edmonton</i>	(10/98)
Nottinghamshire	35.03	1899	<i>Newark</i>	(7/98)
Staffordshire	71.05	1901	<i>Wordsley</i>	(9/98)
Suffolk	56.07	1903	<i>Stowmarket</i>	(7/98)
Suffolk	75.11	1902	<i>Ipswich</i>	(7/98)
Suffolk	75.12	1902-3	<i>Ipswich (East)</i>	(11/98)
Suffolk	90.01	1902	<i>Felixstowe</i>	(9/98)
Surrey	14.09	1911	<i>Beddington & Waddon</i>	(8/98)
Surrey	14.11	1911	<i>Shirley</i>	(10/98)
Surrey	14.13	1911	<i>South Beddington</i>	(11/98)
Surrey	16.14	1895	<i>Brookwood & Pirbright</i>	(10/98)
Wiltshire	26.02	1899	<i>Chippenham (South) & Lacock</i> (includes part of Wiltshire 26.10)	(10/98)
Worcestershire	4.09	1901	<i>Wollaston</i>	(8/98)
Worcestershire	5.09	1914	<i>Coombeswood</i>	(10/98)
Yorkshire	218.03	1906	<i>East Leeds</i>	(9/98)

1:1056 reduced to 1:1760

London	7.95	1872	Elephant & Castle	(9/98)
--------	------	------	-------------------	--------

~~~~~

**Problems of the overhaul - revision of the 1:2500 map.**

John Cole

This article seeks to be a non-controversial and unbiased view of a former reviser.

In the late 1940s the approach to the post war revision of the 1:2500 map went down diverging paths. This has been described in *Sheetlines* 29 (Jan 1991) noting that Devon was to be 'overhauled' by ground only methods, whilst Essex was in effect a resurvey by graphic plotted air survey means with the old County Series map used to supplement unclear or hidden areas on the photograph. Neither method was particularly speedy and apparent lack of change in parts of Devon and Cornwall led to the infamous by-passing era described in *Sheetlines* 50.



Directives on overhaul - at least the field completion aspect - always tended to be rather ambiguous, leading not surprisingly to differences over interpretation depending on what part of England, Scotland or Wales one might be in, or even which part of a county.

At the outset the ideal seems to have been for some sort of graphic (as opposed to instrumental) check on every field boundary junction and every building position but it soon became clear that this was far from practical on an overhaul map. A further problem which always bedevilled ground overhaul was that whilst detecting errors in original work was easy enough, making satisfactory correction was often quite another matter. When in 1957 air photos were used to aid revision (as opposed to the Essex experiment which was more of a resurvey) things tended to become more complex. Errors not readily apparent on the ground e.g. slight shape differences along old hedges or hedgebanks, or the twists and turns of a stream divorced from any other feature, show up very clearly on an air photograph. Provided the terrain was flat it was a fairly easy decision to make whether to correct or not. But if undulating the graphic air photo reviser had to be very careful and the time spent on radial line plotting (the means by which photos were used in hilly areas) could be wasted since correction could eventually prove unjustified.

In very general terms the rule was if detail *appeared* to be unchanged leave it alone. Old detail only to be corrected in the course of adding new or if an original error would (in the reviser's opinion) be obvious to a map user. Such might be an error of 2.0 metres in a gap between buildings only 4.0 metres apart, or two buildings or objects at obviously incorrect angles to each other. A discrepancy of between 0.5 and 1.0 metres in the width of a building 20 or so metres wide would not be considered worthy of correction unless new detail was to be added on the side in error.

At this point I will illustrate from personal experience how differing conceptions of how overhaul should be approached led to equally differing standards. My first encounters were in the West Midlands (to the west and northeast of Wolverhampton) in a brief diversion from 1:1250 duties. Quite apart from deciding how rules should be applied, there were severe irritations in the form of a long straight electricity transmission line (always a problem on overhaul) and its very inconvenient bend just outside the 1:1250 area. And on another map reconstituted from parts of four County Series, there was a 'step' in a long straight road caused by lack of agreement on the edges of two of the old maps. Resolution of this - approximately 2.0 metres with houses either side of the road - caused much time and trouble involving at one point the Region Manager who declined on costs grounds to attempt a further reconstitution of the map.

None of this did much for the morale of myself or others, or our confidence in overhaul. But my next spell of duty took me to the Reading area where I was to find a far more upbeat approach to the task. The surveyor in charge had a very painstaking attitude to any aspect of survey and whilst I considered this going a bit too far in the case of the 1:2500 it did not take me long to recognise the merits of his point of view.

The majority of the work was again by ground methods but I had my first encounter with air revised maps and first impressions were none too good. The surveyor in charge was even less pleased than myself as he had served with air survey branch at headquarters and considered there was little excuse for the shortcomings that manifested on ground completion.

My third location was Cornwall and yet more ground overhaul was followed by another batch of air revision covering a small town. Once again the results tended to be disappointing but there was some evidence that the task had been rushed and the photography not fully utilised.

However the close of the 1960s marked the introduction of air revision being carried out locally rather than at Southampton, (plotting at HQ being retained for the more difficult or complex areas) and there could be no dispute that if care and common sense were applied this means of revision was much superior to the wholly ground effort. The method in fact was known as 'air-ground'.

I had kept in touch with my former supervisor at Reading and we were in complete agreement that the 'pains taking' approach led to good results but he sounded a word of warning that seemingly ambitious rates of map output were expected of the method.

This was brought home to us locally when a fresh section (one supervisor and three surveyors) was added to the two already operating in the county and very soon began to produce 'fast' work which was held up as an example. So fast in fact that the supervisor was unable to keep up with the quality control and I was ordered, as an experienced surveyor, to assist him. It was then that the reasons for the output became apparent because to me the finished work had considerable inadequacies. Some was unquestionably bad and the local supervisor had no argument with my findings. But other things I was not happy with required a more diplomatic approach, and rather than over use the 'ignominious green ink', (*Sheetlines* 52 page 39!) discussed matters I could not live with being always ready to demonstrate my reasons, with the surveyor concerned. Then I simply repositioned and re-penned the offending detail. Nothing was disputed and indeed the surveyor(s) involved seemed to appreciate my stance, contenting themselves with the remark 'We think you are going into the work a bit too deeply'. My rejoinder to this was that they had better hope that certain of my colleagues did not turn up to do any checking since one was a little less tolerant than myself and the other even more extreme! A few months later this situation indeed came about and as I predicted there were ructions and a deterioration in relations between our sections.

Who was right? Our local attitude did not win any great favour from our superiors. We could hardly be criticised for over accurate work given the nature of the 1:2500 but hints were frequently dropped that we were too 'finicky'.

If I had any doubts at the time they were dispelled in later years when the published work came under continuous revision. I did not join such a section until some ten years after it was established but during that time I heard of various complaints when further work was done in the speedy area and I also saw a written complaint from outside the OS. When eventually I had to do some revision here I was rather relieved to find that problems encountered were not a lot worse than elsewhere. And even in the sector where I was originally employed, although the general standard was high, this by no means ensured that the maps were problem free.

There are about 163,000 square kilometres of 1:2500 mapping. Some resurveyed, some reformed, but the vast majority reconstituted County Series, fitted to the National Grid and overhauled (revised). Away from the 1:1250 these still cover some large towns, countless villages and other built up areas. The standard of work in County Series days may well have varied from place to place, quite apart from the complications of the replotted counties and

changes of meridian. The concept of a uniform national survey is that a map exists everywhere should someone need it, and a great many maps in areas of even rural unimportance may never have been looked at since publication date (except maybe in a reduced state for the 1:10560 or 1:10000 derived map). Many of these could be of superior accuracy to the one quite justifiably complained about in *Sheetlines* 50 - it is all a matter of luck with the overhaul.

So why not resurvey the lot from the word go? As always an easy question to ask with hindsight. The answer as always is just one word - cost<sup>5</sup>.

~~~~~

**Report On Survey On The Western Front 1914-1918 London
Printed By His Majesty's Stationery Office**

Although not part of the series of volumes of the Official History of the First World War, "Report on Survey on the Western Front 1914-1918" was the official G.S.G.S. record of the work of Military Survey in the first World War. It was produced in very limited quantities in October 1920 and was classified "For Official Use Only". It was re-printed in 1939 but it has never been released to the public. This extremely rare 200 page book describes:

- The Development of Royal Engineer Survey Companies and Battalions,
- Field survey and triangulation of Belgium and France,
- Map Production and the early use of Air Photographs,
- Map Printing and the system of Map Supply to units in the field. Artillery Survey including Battery Survey and the use of Battery Boards,
- Cross Observation and Sound Ranging,
- The work of the Compilation Sections.

The report then goes on to discuss Geodetic Problems, the Courses of Instruction for Surveyors, the development of Screen Calibration of guns, production of Photo Panoramas and the use of Steroscopic Photos and finally the military survey organisations and methods of the American, Belgian, French and German armies. The report is illustrated, containing seven specimen map extracts and an index of the area mapped.

It is intended to proceed with a limited-run re-print of Report on Survey on the Western Front for public sale in 1999, sanction having already been given by the H.M.S.O. Copyright Unit. If you might be interested in this reprint and would like to be informed of its availability and price please contact Mike Nolan on Newbury (01635) 253167. Or write to him at Col. (Retd.) M.A. Nolan, Tall Trees, Broadlayings, Woolton Hill, Newbury, Berks, RG20 9T5

Mike Nolan

⁵ In the Serpell Report of 1979 the OS notes a figure of £260 million for a complete resurvey of the 1:2500 or £6 million for "bringing sub-standard maps up to the OS standard".

Presumably the latter course has been embarked upon to some extent. During the late 80s and early 90s a large block NW of Exeter was resurveyed (though it is suspected that wooded areas were filled in from existing revisions) and a substantial area to the west and south of Paignton was reformed mapping.

This article is the fifth in a series of six, the first four of which were published some time ago.¹

Mirrors of History

5. The Case of the Twickenham Ferryman

Tim Nicholson

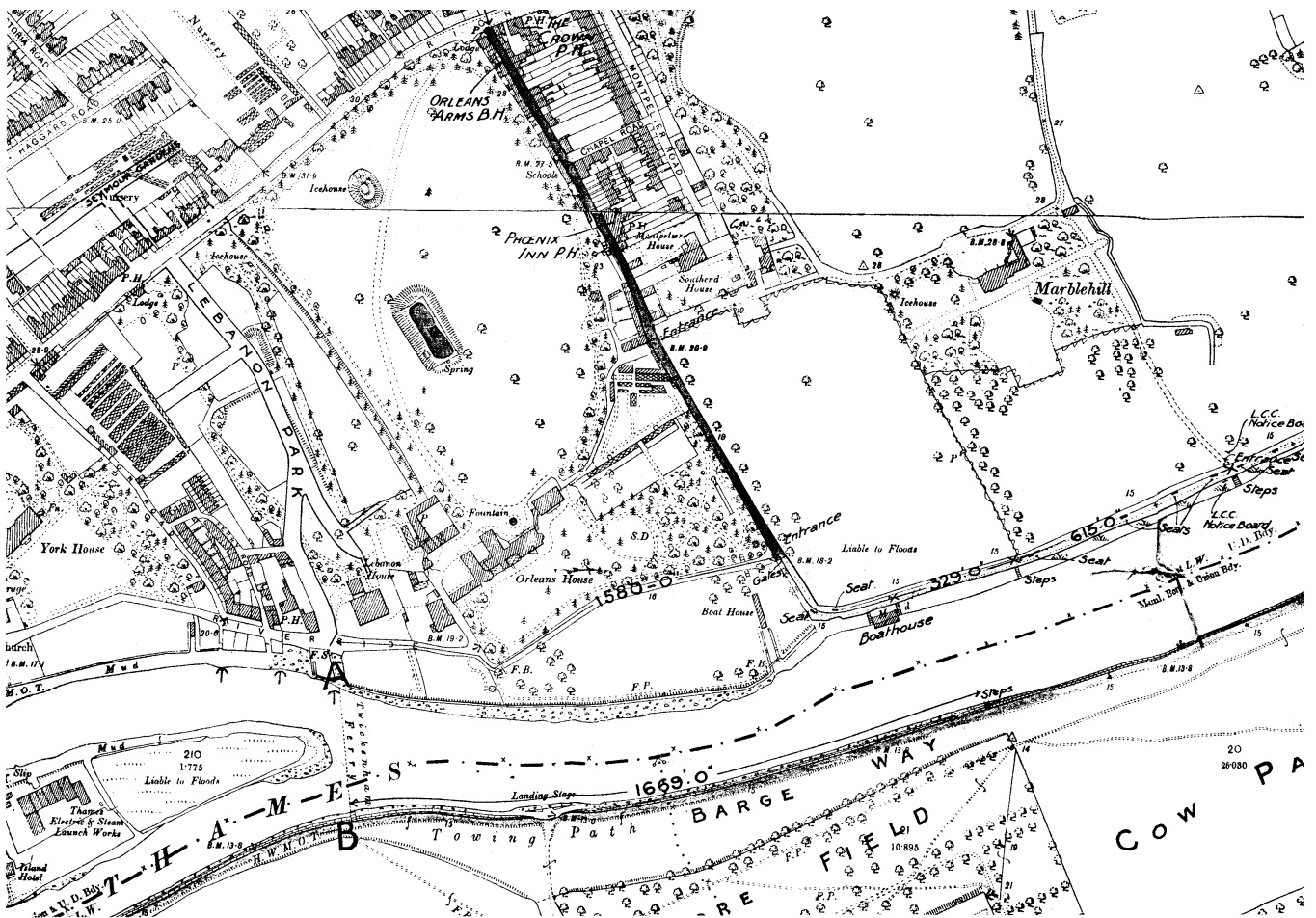
Twickenham in the mid-1890s was already a prosperous London commuter village. Streets of big new villas stretched away from Richmond Bridge towards old Twickenham, beyond the great westward bend of the Thames. They flanked the line of the London & South Western Railway, the building of which had made the capital accessible, and had given rise to the spread of city workers' housing beside it. But there was still open ground and orchards between the stubby fingers of development, and beyond them to the west extended an almost unbroken expanse of orchards. This was the picture of *rus in urbe* shown by the Middlesex and London sheets of the 1:2500 Ordnance Survey map in their second edition, revised in 1893-4 and published in 1897. At about this time, the parish of Twickenham had just 16,000 inhabitants.

The relevant sheets of the third edition, revised between 1910 and 1912 and published between 1912 and 1915, show a transformation in less than 20 years. Much of the land between the probings of recent development has filled up with houses; what were expanses of tree-dotted open ground south of Richmond Bridge have started to vanish under new streets, as have the orchards west of the Old River Crane. The population of Twickenham - now, appropriately, one of the new Urban Districts - has swollen to nearly 30,000

Before the new map was available, a need arose to anticipate it - to picture on a map the boom that had happened. Very neatly, the standard composite London sheet CX/Middlesex sheet XX (12) in the north was joined to London sheet CXXII/Middlesex sheet XX (16) in the south - a combination that embraced both the Surrey and the Middlesex banks of the Thames. An extract is shown here. On the map are superimposed, in red, 29 new Twickenham streets that we know, from contemporary street directories, were built between 1897/8 and 1910. Since it slices through an orchard, one is called Orchard Road. Marble Hill Park had been acquired for the people of London by the London County Council in 1902 and opened to the public. Access now includes a path along the park's river frontage.

On the map, the park is accentuated with a pink wash, while around it public houses, park entrances, LCC notice boards, riverbank seats, steps leading down to the water, and a boathouse are all highlighted in red. So, on the Surrey shore, are more steps. So, too, are the two ends of the Old Twickenham Ferry just east of Eel Pie Island, shown as "A" and "B". Also marked in red is a distance of 1669 ft (just over 556 yards) from the Surrey end of the ferry eastwards to the first flight of river steps. Correspondingly, other distances are given in red on the opposite shore, east from the Middlesex end of the ferry to flights of river steps on

¹ The last 'Mirror of History' was published in Sheetlines 46 (August 1996), pp33/4



Reduced extract from 1: 2500 map, showing Old Twickenham Ferry (A-B), the distance to the presumed location of Hammerton's ferry, public amenities at Marble Hill Park, and access by the new road (Lebanon Park) and the old (Orleans Road).

Ham House on the Surrey bank opposite Twickenham. A towing path along this shore is highlighted in green, and further stressed by the words "Barge way" in red. A single, old street on the Middlesex shore - Orleans Road, beside Marble Hill Park - is emphasised in brown. Apart from a new road, Lebanon Park, it is the only major means of access to the river front here.

There are three clues to the origins of the map. First, most of the coloured overprint is devoted to emphasising certain specific features: the amount of new housing, and hence population, in Twickenham; the considerable recent increase in riverside amenities provided by the LCC for the borough's citizens; the new public access to the river on the Middlesex bank; and the established access on the opposite shore. Secondly, it is possible to date the southern element of the map. The imprint on this sheet reads "40/12"; that is, 40 copies printed in 1912. The modest print run may be that of a reprint for public use, or - being so small - may indicate a printing for some special, limited purpose. (The imprint of the northern element has been lost in joining the sheets.) Thirdly, in the margin in the top right-hand corner of the northern sheet is a label which reads "D. Plan put in evidence by Mr E. J. Partridge", indicating that the map was produced at a formal hearing of some description.

By themselves, these clues lead nowhere; but contemporary LCC Minutes and Chancery Division records lay a promising trail of their own. In 1909 a firm called Hammerton & Co, encouraged, no doubt, by all the new traffic, launched a passenger ferry between Marble Hill Park and the Surrey shore of the Thames. It was duly licensed by the LCC; but in July the same year the Earl of Dysart sued Hammerton, on the ground that their enterprise was damaging the trade of his established ferry, which, he contended, enjoyed the sole right of carrying people over the Thames between Ham and Twickenham. In October 1912, when the action had dragged on for more than three years, Hammerton, obviously feeling the pinch, applied to the LCC for financial help with legal costs, on the ground that a second ferry benefited the public. They were given £50, to be repaid out of costs if they won; and when Hammerton asked the LCC for another £50 in December, they got that too. It was clear where the LCC's sympathies lay.

The action was heard in the High Court of Chancery by Mr Justice Warrington between April 3 and 10, 1913. On the 16th the court found for Hammerton, and awarded them costs. The judge decided that Lord Dysart's exclusive rights were confined to the two ends of his ferry, and did not extend to the towns beyond. Further, the new right of public promenade along the Marble Hill bank and the area's improved access meant that there was a new and different traffic from that hitherto enjoyed solely by Lord Dysart, who therefore had no exclusive rights to it. The judge referred to a map that showed the two ends of the Earl's ferry marked with the letters "A" and "B"; and he described Hammerton's ferry as being between 500 and 600 yards from it. These references to the map before the judge, and the sharp relevance to the case of all the added detail on the surviving map, appear to confirm beyond a reasonable doubt that they were copies of the same document. The case of the Twickenham ferryman seems to be solved.

Railways, cyclists and the purple plague

Richard Oliver

Some recent publications from Ordnance Survey combined with some observations by Tim Hadfield and David Kimber on mapping of railways in *Sheetlines* 52 prompt further comments on the well-trying theme of OS small-scale maps: As They Are, and As They Ought To Be. The subject is perhaps getting to be a little tired so far as my opinions are concerned, and I do hope that more readers will follow David Kimber's example and publish critical comments on new editions of 1:50,000 and 1:25,000 mapping which cover districts with which they are familiar. The development of the 1:25,000 Explorers should offer plenty of scope for this, and plurality of opinions can only be healthy.

Railways

An interest in railways and an interest in OS maps often seem to go together, and it could be that a survey of CCS members' interests would show that writings about railways in *Sheetlines* over the years have been, if anything, not quite equal to the interest in the subject. There is still plenty of scope for drawing attention to apparent anomalies and quirks on older and larger-scale mapping, but the comments on more modern mapping in *Sheetlines* 52 provide a starting-point.

I quite agree with Tim Hadfield's 'wrath' as to the depiction of the various categories of railways on the One-inch (1:63,360) Seventh Series (and, it may be added, the 1:50,000).¹ Given that passenger stations are shown anyway, and that one can only join or (with the advent of central door locking) leave trains at stations, it is difficult to see why a single symbol should not be used for all standard gauge (4ft 8.5 ins, 1.435 m) 'running lines', regardless of whether they are passenger, freight, mineral or disused. The present practice on the 1:50,000 seems to be to reserve the thick solid line for routes with advertised passenger services, and to use the thin line with cross-bars for other lines; it means that the symbol needs to be redrawn when a line is downgraded, or upgraded. This point is also implicit in David Kimber's comments on the latest edition (C, 1998) of 1:50,000 Sheet 139,² and, indeed, in the summer timetable for 1998 at least one train traversing this very sheet obligingly made a nonsense of the thick-line vs thin-line-and-crossbars distinction. It was a morning train from Holyhead to Birmingham New Street, which ran between Wolverhampton and Birmingham via the old Grand Junction route, i.e. over a 'freight line, siding or tramway' between SO 922998 and SP 014962³. Diversion of trains running between Birmingham and Bristol over the Camp Hill route out of Birmingham, between SP 048796 and SP 086859,

¹Letter in *Sheetlines* 52 (August 1998), pp58-9.

²David Kimber, 'Landranger Sheet 139: *Birmingham and Wolverhampton*', *Sheetlines* 52 (August 1998), 14-17, esp. pp 15-16.

³In order not to expose the main text of *Sheetlines* to the horrors of what must seem perilously close to 'train-spotting', but in the expectation that many readers will be interested in further details: the train in question was booked to leave Stafford at about 09.04 and Wolverhampton at about 09.18, and thence to run non-stop to New Street, arriving about 09.56. The usual timing for a non-stop run from Wolverhampton to New Street is about 20 minutes, and routing via the Grand Junction line was presumably adopted as the train was of the now unusual 'hailed' (locomotive-and-coaches) sort, in order to avoid running-round at New Street with the resulting occupation of busy tracks.

which is also shown on the 1:50,000 mostly as ‘Freight’, etc, seems to be quite common.⁴ Use of one symbol for both passenger and freight lines might also improve the 1:25,000: the single thin line for the freight line eastwards from Morlais Junction (SN 571021) on the recently-published Explorer 178 *Llanelli & Ammanford* looks thin and ‘weedy’, and is difficult to distinguish from the parallel boundary fences. The usual principle of OS depiction seems to be what might be characterised as ‘civil service neutrality’, of avoiding controversy by describing an object by its physical characteristics (this would explain ‘Place of Worship’, as being considered ‘uncontroversial’), but describing a railway as passenger or other is giving it a value not obvious to the casual onlooker, and of questionable use to the traveller.

David Kimber also raises the question of how modern electric tramways or ‘light railway lines’ such as Midland Metro Line One are to be shown. ‘Common sense’ might suggest that where these run on distinct reservations (much of Midland Metro Line One follows the route of the former Great Western Railway main line between Birmingham and Wolverhampton) they should be shown as ordinary railways, and that the ‘tramway’ symbol should be employed only where they run along streets, as indeed is done on Sheet 139.⁵ More subtle distinctions, based on such as whether light rail systems do or don’t carry bicycles, seem dubious: one can find ex-British Railways lines which don’t carry them either, a notorious case to we cyclists being that between Kingston-upon-Hull and Scarborough! A special symbol for on-street stations on street tramways, as in the instance cited in Wolverhampton, might be useful, but there is always the danger of clutter. Let’s get the ‘freight lines’ ‘solidified’ first!

There is, of course, another long-running complaint about the 1:50,000 Second Series from those of us with railway interests, and that is the lack of distinction between single and multiple track lines.⁶ I’m sure that I’m not the only member of the Society who has repeatedly urged on Ordnance Survey the restoration of this information. I believe that the reason why it was omitted when the 1:50,000 Second Series was being designed in the early 1970s was that a chequered line, as had been used hitherto for single-track passenger lines, was difficult to draw by scribing, and that the distinction between single and multiple tracks was thought to be of insufficient interest to be worth showing at 1:50,000 scale. (The information was, and continues to be, shown at 1:25,000 scale.) Although I have seen no mention of it, also germane must have been the reduction of routes from multiple to single track, of which there were already some examples by 1970⁷ and of which there has been much more since: a single railway symbol would obviate the need for any redrawing whenever tracks were ‘rationalised’⁸. The result is that it is not easy to get a comprehensive, up-to-date view of

⁴Some of these ‘diversions’ may in fact be scheduled, in order that ‘hailed’ trains from the Bristol direction going on to Wolverhampton, etc, can avoid reversal at New Street, which would be necessary were they to approach New Street via the usual Birmingham West Suburban Line route.

⁵Although this seems to be new to domestic British mapping, distinct symbols for on-road tramways can be found on older British-produced overseas mapping, for example on GSGS 2364 (Belgium, 1:100,000), where a ladder-type symbol is employed, with perfect clarity: see e.g. Sheet 5 (1912) and [Sheet 6], *Brussels*, 1910.

⁶The OS 1:126,720 *Greater London* map of 1935 and 1:625,000 *Railways* two-sheet map of 1946 both distinguish four-track lines as well!

⁷Notable examples were the routes between Salisbury and Exeter, Oxford and Worcester, and Ipswich and Lowestoft

⁸As an alternative to reintroducing the chequers, one can think of three possible solutions. (1) By annotation: this method was used on the 1:63,360 *Killarney* map of 1913, and on a few roughly contemporary 1:126,720 sheets of Ireland (e.g.

how much track-reduction has been carried out, and although the 1:25,000 Explorers now being published appear to be up-to-date in this respect, even when complete (say 350 maps at about £5.50 each) they will be an expensive way of acquiring the information. However, a series of volumes of *Railway Track Diagrams* now being published by the Quail Map Company⁹ would seem to undermine the case not only for OS including the distinction between single and multiple track on the 1:50,000, but for railway students bothering to buy new OS mapping at all, as they include all the information necessary for annotating either whatever small-scale OS maps one already has to hand, or else, say, an old road atlas, such as are now appearing in quantity in many charity shops, often in very reasonable condition and at pretty nominal prices.

Even if one has the current 1:50,000 to hand, there may still be apparent difficulties. As an example, a curiosity is to be seen on the latest edition (C1, 1998) of 1:50,000 Sheet 113, *Grimsby, Louth & Market Rasen*, where the recently relaid Great Northern Railway is shown running between TF 307966 and TF 310956, but there is no indication of either a bridge (highly improbable) or a level crossing (surely an operating necessity?) at its solitary road encounter at TF 308961. Or do the trains jump, as they did in *Alice Through the Looking-Glass*? Turning to the appropriate Quail track diagram, the mystery disappears: there is a level crossing.

It remains only to say that I purchased my Quail volume at that well known temple of OS retailing, the National Map Centre (still known to many as Cook, Hammond & Kell).

Cyclists

The distinction between single and multiple track railways was abandoned because it was believed that the information was only of specialised interest. However, the whole point of national mapping such as that which has been associated with the name Ordnance Survey is that one map should serve a wide range of interests and users. Thus special interests can cut both ways: on the one hand it can be argued that the information is too specialised to justify collecting and publishing, but on the other it can be argued that certain other information needs to be put onto the map in order to attract or retain a certain group of users and (very important these days) their money. This presumably explains why cycle routes have started to appear on the 1:50,000. They started out in a modest way around 1990, as annotations along country roads¹⁰. This meant extra text on the map, with the associated

Sheet 10, 1914). (2) By single or multiple cross-bars at intervals, as on the 1:250,000 'JOG' (Joint Operations Graphic) mapping. (3) By a single solid line, but much wider for multiple than for single track. The first two have the disadvantage that they are not very suited to lines with mixed single and double track, and annotation would certainly increase clutter. The third was used in the late 1930s and 1940s on OS-produced 1:253,440 aviation mapping of Britain, and is my preferred option, but it has two disadvantages: first, the wider of the two lines needs to be wide enough to be unmistakable even to relatively unsophisticated map users, and, second, station symbols may need to be varied in size if they are to appear in suitable proportion to the width of the railway symbol, as otherwise they may appear either 'pinched' (as on the Ordnance Survey of Northern Ireland 1:126,720 Second Series of 1968-70, about the worst design aspect of an otherwise pleasing map), or excessively bold (as on the 1:50,000 of Ireland, now approaching completion).

⁹The example which I have is *Railway Track Diagrams*, 2, *England: East*, Exeter, Quail Map Company, 1998, ISBN 1-898319-29-4, £ 7.95 (softback). The Quail Map Company's address is 2 Lincoln Road, Exeter, EX4 2DZ, telephone and fax 01392-430277. Volumes for Scotland and Ireland have also been published.

¹⁰See for example 1:50,000 Second Series Sheet 117, *Chester & Wrexham*, edition B (1990), at e.g. SJ 435695, SJ 450653 and SJ 535716.

threat of clutter, and so in 1997 an symbol was introduced: a magenta bicycle, placed at intervals along selected cycle routes. It was one of the best new symbols to appear on an OS map for a long time: it had a mobile, purposeful feel, and was jolly to look at. It first appeared on Sheet 135, edition B, in the summer of 1997, together with National Cycle Route numbers (reversed-out, in magenta): this sheet subsequently had to be withdrawn because of some problem with the public-rights-of-way depiction, and somehow the blight seems to have affected the poor bicycle symbol.

What happened next can be seen on 1:50,000 Sheet 172, edition C, *Bristol & Bath*. This now includes Regional Cycle Route numbers (in cyan, boxed) as well as national ones, and two new symbols: national cycle routes are now shown by green dots, and ‘Surfaced cycle routes’ by green dashes. Though not mentioned in the legend, National Cycle Routes which run along surfaced cycle routes are shown by green dots and green dashes, and those which run along ordinary tarred, colour-infilled roads are shown by adding the green dots to the existing infill. The result is hardly successful: the green dots appear disproportionately prominent. (I write this as a cyclist and non-motorist, who sometimes has to navigate for automobilists.) In built-up areas, such as Bath (e.g. at ST 733650), the dots interfere with other detail, and in the country (as between ST 506550 and ST 688674, that is the whole length of National Cycle Route 4 on this sheet) they are intrusive and distracting.

Landranger 172 was issued in this form to obtain public reaction,¹¹ which was duly forthcoming: ‘Feedback to date has been so enthusiastic and unanimous about the addition of this information that we have decided to include it on future revisions of Landranger maps.’¹² And OS lost no time in adding more horrid little green dots and dashes: they stalk across 1:50,000 Sheet 70, *Ayr, Kilmarnock & Troon*, edition B, in honour of National Cycle Route 7, and they lurk in the legend of several more which have recently been published¹³. It is a strange thing, but these dotted-and-dashed sheets all bear ‘8/98’ print codes, and Sheet 70 was published on 6 October, so OS lost no time in making its decision. Of course, it is quite unthinkable that the innovation was going to be a success all along; after all, the customer is always right.

Whether he or she is carto-literate may be another matter. One can imagine complaints pouring in to OS about the magenta bicycle: that the symbols were far too widely spaced, anything up to 8 cm (about 3 inches) apart, to be readily followed¹⁴!! The green dots are at 0.5 cm spacing, which is presumably complaint-proof. Dare one suggest green bicycles at 4 cm spacing? They might look better in built-up areas, where the green dots suggest a desire to cram in detail at all costs, particularly that of legibility.

Depiction of cycle routes might also have a more subtle purpose: to deflect demands for a national OS map suitable for cycling at 1:100,000 or 1:125,000 scale.

¹¹See OS Consultation Paper 1/1998. OS information and consultation papers are available both at www.ordsvy.gov.uk and by post from OS.

¹²OS Information Paper 14/1998.

¹³Those on sale by the end of October included: 15, B; 25, B; and 168, C.

¹⁴In which connection it would be interesting to know how many of those who commented on 1:50,000 Sheet 124, (*Dolgellau*, edition B2 (1995), with the experimental dark grey hill-shading,) condemned it outright, being unaware that it might be the practice rather than the principle that was at fault, and how many, like me and at least one other member of the Society, suggested that OS make another experiment, say trying brown, as on One-inch Seventh Series Sheet 87, *Isle of Man*, edition C (1970).

The purple plague

Legibility and clarity also affect the depiction of access land on the 1:50,000 and 1:25,000; or rather, they affect other detail in the vicinity of the access land. On the smaller scale National Trust and Forestry Commission lands are shown; on the larger ‘Other Access Land’ also appears. On both it is shown by vignetted purple bands, which look particularly intrusive on the 1:50,000, perhaps because the area of paper to be covered is only a quarter of that on the 1:25,000 and so the bands tend to have a more ‘solid’ look. The purple bands first appeared on the 1:50,000 Landrangers with the unfortunate Sheet 135, edition B, and there are some very choice examples on the new Landranger 172, for example in ST 5373 and its unfortunate neighbours.

To be fair, both cycle routes and access land do present cartographers with a problem: both often coincide with another symbol, and often with intricate detail. Both are shown on the 1:50,000 by superimposition. The depiction of the cycle routes is a fairly recent problem and, forced to choose between a 1:50,000 which had green dot-and-dash cycle routes and one which had purple-banded access land, I would take the former, partly as legibility is not quite so compromised in the depiction of cycle routes, and partly because OS has had long enough to find a satisfactory solution to depicting access land: nearly seventy years, in fact.

The National Trust was founded in 1895, and the OS first started to indicate such land from 1931, with the introduction of the One-inch Fifth Edition. The symbol used was a fine black dot-dash line, infilled with a delicate vignetted green. It is unclear why this particular style of depiction was chosen, but as the Fifth Edition started as the Fifth (Relief) Edition, with hachures, layers and hill-shading, the depiction of National Trust land was presumably designed so as to harmonise with the brown and grey relief treatment.¹⁵ This method was retained even after the Relief Edition was abandoned in 1936, and a similar style was adopted when National Trust areas started to be added to derivatives of the One-inch Popular Edition: to Tourist sheets in the late 1930s¹⁶, and then to ‘Provisional’ New Popular sheets from 1945.¹⁷ Though the green was usually applied with exemplary delicacy, this style was found to be not wholly satisfactory, apparently because it was liable to be confused with tracks¹⁸. It is also not easy to read in the vicinity of woodland, and in 1948 something quite different was tried: broad hatched red bands. These appeared on the Lake District Tourist map of 1948; this seems to have been the only published map so treated, but red hatching with a red outer solid line was used on the One-inch Seventh Edition pilot sheet, 142 *Hereford*, printed in August 1949¹⁹. This style was not liked either²⁰, (it looked particularly intrusive on Sheet 142), and a fine red line without shading was adopted instead on the published Seventh Series

¹⁵Good examples are to be seen on Fifth (Relief) Edition Sheet 119, *Exmoor* (1934), at 876,000-1,265,000 (Stoke Pero) and 882,000-1,272,000 (Selworthy Beacon) and on *Aldershot, South* (1932), at 1,099,000-1,257,500 (Coombe Head).

¹⁶E.g. *Lake District* (1939), on which very thick green bands are used.

¹⁷Good examples are on Sheet 82, *Keswick* (1947), around 35/2006 (Sca Fell) and on Sheet 125, *Norwich* (1945), around 63/1728 (Blickling).

¹⁸Cheetham to Stevens, 9 Feb. 1949, item 12A in Public Record Office (PRO) OS 1/785.

¹⁹Probably the easiest way to see this sheet (of which only five copies are at present known to be extant) is to visit the Royal Geographical Society, and ask to see their copy, which is kept in the OS Specimens Drawer.

²⁰Stevens to DGOS, 6 Feb. 1949, item 11A in PRO OS 1/785.

sheets, which began to appear in 1952, with the further refinement of upright and italic 'NT' to indicate restrictions on opening²¹.

This general principle held when Forestry Commission land started to be shown on the 1:50,000 Second Series from 1977 onwards, and for the 1:25,000 *Outdoor Leisure Maps* when they began to appear in 'process colours' a few years later, though on the larger scale purple was used rather than red or magenta. Fine purple lines were also used on the experimental 1:50,000 Sheet 124 *Dolgellau* in 1995, and it may be that we owe the purple bands to the difficulties of reading fine purple lines on Landranger 124, though I would prefer to think that the fundamental problem was the intrusiveness of the hill-shading,²² which was executed in such a way that it looks, in retrospect, like an experiment which was designed to fail.

Dual-format: the answer?

Mention of Seventh Edition Sheet 142 of 1949 immediately suggests, for the minority of us who have seen and studied it, a splendid exemplar of a small-scale OS map uncluttered with tourist information and (except for the few National Trust areas in red) the other excrescences which the purchaser of the 1:50,000 and 1:25,000 of nearly half a century later must take willy-nilly. It suggests an inviting prospect: dual-publication of at least the 1:50,000, one with purple access lands, green cycle ways, and every other horror that modern society generally and a commercialised OS in particular can think of to besmirch the face of Britain, and the other broadly as Sheet 142, with public rights of way in red, for tender stomachs and sensitive eyes such as mine.²³

However, there are two groups of objections to dual-format publication. The first is that there is no historical evidence to support the case for it, and at least three instances of small-scale OS examples which point the other way.

The first is the publication of the late nineteenth century engraved one-inch map in two forms, in outline with contours, and with hills shown by hachuring. By the last quarter of the nineteenth century the outline map definitely seems to have been more favoured, particularly in Scotland, and though publication of the hachured version was only abandoned in 1911-12, post-1895 examples are not easy to find.²⁴ The second is the publication of the half-inch (1:126,720) map of Great Britain in alternative hill-shaded and 'layer' (hypsometrically tinted) forms between c.1907 and the early 1930s: in 1914 the 'layer'

²¹Conference on style of 7th Edition, Feb. 1950, item 86(1)A in PRO OS 1/785.

²²See David Watt, 'Landranger Sheet 124, *Dolgellau*', *Sheetlines* 44 (December 1995), 52-5.

²³Such a suggestion can, of course, be interpreted in two ways: either as a conscious desire for a clearer, less cluttered map, or as a subconscious desire for a different form of society, from which certain disliked aspects of the contemporary world are agreeably absent. One can imagine the late Brian Harley having great fun with this!

²⁴This is based on the writer's experience of private collections, which are probably more representative of the general purchaser than are library sets. That the hachured map was generally rather more popular than the outline map in northern England in the later nineteenth century (see cartobibliography in Harry Margary, *The Old Series Ordnance Survey*, Volume VIII, *Northern England*, Lympe, Harry Margary, 1991) may be because this was the only style available over much of England and Wales until c.1890; similarly, very few New Series sheets had been published in hachured as well as outline form by the time that the first revision of the New Series began in 1893, so most customers had to take the outline map willy-nilly. But the outline map substantially outsold the hachured map in Scotland at this time: see Col Sir Charles Wilson's evidence (q.24) in *Report of the Departmental Committee ... to inquire into the ... Ordnance Survey* [the 'Dorington Committee'], B.P.P. (H.C.) 1893-4 [c.6895] LXXII, 305.

version outsold the hill-shaded by four to one.²⁵ The third, and perhaps most germane, concerns the Fifth Edition: initially the sheets were published only in the elaborate Relief Edition, but from January 1935 they were offered also in a ‘non-relief’ edition. Within 18 months further publication of the Relief Edition was abandoned, which seems eloquent enough, and when a couple of years later there was the possibility that the nascent one-inch New Popular Edition might have to be published both with and without a metric grid, great efforts were made to avoid the horrors of dual format publication, and to design a grid line which would not be intrusive.²⁶

No doubt good reasons can be suggested why all these failed: the engraved hill-map was often pretty illegible; by the time that the OS began to produce its half-inch map Bartholomew had already evolved a much clearer design, using layers, which set the style for the scale; and the Fifth Relief cost more than the non-relief. However, none of these offer much support for the concept of dual-format publication of mass-market mapping, or for those who wish to ‘bring back the Seventh Series’.²⁷

The second group of objections concern map-selling. The 1:50,000 map is a mass-market map; far too many copies are sold to make a Superplan-type print-on-demand version practicable, even if there were no technical constraints. Were the 1:50,000 to be published in two separate styles, which might be characterised as the ‘restrained’ and the ‘uninhibited’, it would be necessary for retailers to carry a double stock: not necessarily significantly more stock than they do at present, but a more varied one. This leads to the obvious difficulty that if the retailer is out of stock of one particular form of a sheet then the customer must either buy the other, or go without; either the retailer loses a sale or the potential customer does not buy a map, or else buys a second-best, and so no-one wins. There are also maintenance problems for the publisher: there is always the danger that the more popular form will go out of print, and be more likely to be issued in a revised edition, than the less popular form. (It may be suspected that such problems led to the decline of the half-inch hill-shaded map in the late 1920s; they would certainly have worked against the Fifth (Relief) Edition, of which no sheet was ever reprinted, so that in the late 1930s obsolescent Fifth Reliefs and updated non-relief Fifths were on sale side by side.)

Thus it is apparent that the only practical possibility at each scale is a single coloured map.²⁸

Conclusion: fundamental redesign is needed

If only one style of map has to be produced, then it has to appeal to a wide audience. If that means that a wide variety of information has to be included so as to appeal to various groups of users and potential users, then it follows that that information must be presented as

²⁵Lt-Col E.P. Brooker’s evidence (q.691), in ‘Departmental Committee on the sale of small-scale Ordnance Survey maps’, PRO OS 1/6/5.

²⁶‘Discussion on the Final Report of the Departmental Committee on the Ordnance Survey’, *Geographical Journal*, 99 (1939), 314-32, esp. p.316.

²⁷Those acquainted with Sheet 142 will probably agree that ‘Bring back the Seventh Series’ and ‘Bring back the Seventh Edition’ are two quite different things!

²⁸These comments do not apply to the dual-format publication of black outline mapping, which is presumably kept going so as to appeal to a specialised market, though it is notable that the outline edition of the 1:25,000 was discontinued in 1993, and that whereas the coloured version of the 1:50,000 sells for £4.95, the outline version sells for £18.00.

clearly as possible, and it is in that respect that the 1:50,000 Landranger map in its latest form, with purple access land, bold green cycle-route symbols, and large magenta diamonds for ‘recreational paths’, is a failure. That I find it ugly to look at is a subjective judgement, and irrelevant in a world where ‘handsome is as handsome does’, but as it is less than ideally legible and therefore less usable, ‘handsome doesn’t’, and it thus stands condemned as ugly in absolute terms.

David Watt hit on the nub of the problem when he wrote that the 1:50,000 was not designed to carry hill-shading.²⁹ The trouble is, the 1:50,000 is really a derivative of the ‘coloured outline’ type of map first exemplified for most civil map users by the one-inch Popular Edition, and both Sheet 142 of 1949 and the early 1:50,000 Second Series sheets (115, 176 and 177 of 1974) represent organic developments of the Popular Edition style. Such a map usually shows only one thing in one place: the main exceptions are the contours. The trouble with hill-shading and purple-vignetted (and red-hatched) access land is that it often shows two things in one place, and that is a recipe for trouble: whereas a wood or a road in ‘reality’ is each a single visible object, access rights and cycle routes are effectively ‘invisible’ (usually the only indication will be a notice-board or signpost), and so one thing in the physical world becomes two on the map.

This suggests that the 1:50,000 (and probably the 1:25,000 as well, now that the main thing distinguishing it from the smaller scale seems to be the depiction of field boundaries) should be consciously redesigned, so as to reflect that it is now showing more than one layer of information across much of the map. Taking the design of the map as it was in the early 1990s as a starting-point, the following modifications are suggested:

Woodland: this is at present shown by green tint, supplemented by symbols for wholly coniferous or non-coniferous woods, as a result of which it has a half-finished look.³⁰ This should be replaced by printing the boundaries of woods as a fine green line, with the area of the wood infilled with green tree symbols. This style has not been much used hitherto by the OS - the half-inch in the later 1900s and the one-inch Cairngorms tourist sheet of 1974 are the only published examples which come to mind - but it is used with excellent effect by Goldeneye of Cheltenham on their layered half-inch maps.³¹ It provides transparency when other colours are to be overprinted.

Access land: this should be bounded in purple by a fine line - as on Sheet 124 *Dolgellau* of 1995 - and infilled with fine purple stipple.

²⁹Watt, ‘Sheet 124’, Sheetlines 44, p55. This is probably best interpreted in the sense that the colour-scheme of the 1:50,000 was not so designed: the 1:63,360 *North York Moors* (1982) and *Yorkshire Dales* (1992) maps both show that the 1:50,000 can be adapted to layers and shading, and indeed that the basic design of the 1:50,000 works perfectly well at the smaller scale!

³⁰This is the result of the distinction having been omitted from the earlier sheets of the 1:50,000 Second Series, but restored from 1980 onwards, following representations to the OS Review Committee (‘Serpell Committee’) in 1978.

³¹The style was also experimented with on some one-inch specimens which took the style of the Popular Edition of Scotland as their starting point) of the environs of Aldershot prepared c.1925; see Yolande Hodson (ed), *‘An Inch to the Mile’: the Ordnance Survey One-inch Map 1805-1974*, London, Charles Close Society, 1991, 50. The green bounding line was omitted on the 1900s half-inch, which is probably satisfactory at 1:100,000 or smaller where only an ‘impressionistic’ effect is called for (in British conditions, anyway), and might work at 1:25,000 where field boundaries are mapped, but would be definitely unsatisfactory at 1:50,000.

Buildings: should either continue to be shown as at present, in an orangey colour, or else in a greyish colour, as on the Ordnance Survey of Ireland's 1:50,000. (Contrast with the other tints will be important.)

'Danger areas': should be bounded by a fine red line, and infilled in fine red stipple. (Writing 'DANGER AREA' in red or magenta, as at present, is both inelegant and imprecise.)

Water: to be shown in blue, as at present.

'Other land', i.e. non-access land or 'danger areas', to be shown in fine yellow tint.

National park boundaries: possibly to be shown in bold yellow or orange, but as a much narrower line or vignette than at present.

Cycle routes: those running along colour-infilled roads to be indicated by a magenta or green bicycle symbol placed at intervals along the road; those running through towns to be shown by green pecks at intervals in the road; surfaced cycle routes to be shown by green dashes.

It would also be desirable to add a note to the effect that 'All information and detail on this map is shown subject to the limitations of scale.'

The result would be somewhat different to look at as compared with the likes of the latest editions of Landrangers 70 and 172; and surely it would be a great improvement.

~~~~~

### **Some observations on *Maps for the cycle-tourist in Sheetlines 51***

David Forrest

While it is clear that I am a supporter of the idea of national mapping of Great Britain at (or about) 1:100,000 scale, I would like to add a few comments to Richard Oliver's article in *Sheetlines 51*. I strongly agree with Richard that there is evidence that mapping at this scale would appeal to more than the cyclist. For the motorist or tourist, 1:50,000 is not a particularly useful scale. There is insufficient detail to navigate off the main roads in urban areas, and even with the relatively large size of the Landranger sheet, one soon drives off the edge. For greater coverage on a single sheet there is the 1:250,000, but here a problem arises in exploring off the main roads even in rural areas, and as a tourist map the OS offering is really quite limited. It is quite noticeable, and presumably not by coincidence, that many specialist tourist maps adopt a scale in the range 1:100,000 to 1:150,000, as examples by Golden-Eye, Estate Publications, Harveys and others show. Indeed the Harveys' map of Loch Lomond and the Trossachs at 1:100,000, not included in Richard's survey, is a further good example of what can be done at this scale, although it does not have sufficient contours (surprisingly for Harveys) to meet Richard's demands. Despite its pleasing appearance, the Harveys map, like most of the UK maps produced for tourists, is quite generalised.

Administrators would also find mapping at this intermediate scale useful. The size of many administrative areas makes 1:50,000 impractical for many purposes, but the size of the

area too small to be useful when mapped at 1:250,000. Clearly there was logic in the old OS 1:100,000 administrative boundary maps, even though the base was simply a reduced version of the 1 inch outline edition printed in grey.

To see clearly the level of detail that can be achieved successfully at 1:100,000, one only has to hop across the Channel (or go through the tunnel these days) and look at the French 1:100,000 Serie Verte, now generally referred to as Carte Touristique. We found the Environs of Paris map invaluable this summer in negotiating our way around the outer suburbs and ring roads of Paris. The large sheet sizes, typically 120x90 cm bled off at the edges to waste no paper on white margins, means that the area of about 6 Landrangers is covered by each map. Contours are at 20 metres, reduced to 40 in more mountainous areas, and hill shading is also included to give a more immediate impression of relief.

*Some comments on Richard's specifications for an OS 1:125,000 series*

(1) While not opposed to 1:125,000 scale, I think that for official national mapping 1:100,000 would be a more logical choice. It is a scale used widely by National Mapping agencies in Europe and elsewhere, and as moves towards common standards for mapping (or digital map data at least) increase, it is not logical to go it alone with a maverick scale. The military would also be more supportive of a scale matching mapping they use in other spheres of operation.

(2) Although 30 metres is not too inconvenient a vertical interval, there is no good reason for being tied to multiples of the interval used at 1:50,000. With Landform Panorama digital terrain models, any required vertical interval can be generated. Although these will be interpolated rather than photogrammetrically plotted contours, at the scale in question and for the likely uses of such mapping, the reduction in accuracy and detail is insignificant. If there was a demand for greater accuracy or detail, then Landform Profile data could be used. Thus, if deemed most appropriate, a 25 metre interval could be used.

(3) I am against the idea of basing the map mainly on 1:250,000 data. Those maps that I have seen enlarged from 1:250,000 are crude. This applies particularly to the earlier photographic enlargements, but even those generated from the digital data with appropriately specified line styles and type sizes are not particularly appealing. Our experiments show that Meridian data together with Landform Panorama is perfectly suitable for use at 1:100,000 and provides the core information required (roads, railways, urban areas and relief). The problem with this dataset is that it does not include drainage or vegetation. Both these could be generated in vector form from Landranger separations, though not without significant costs. In the interim 1:250,000 data could be used for these elements until addition vector data is either generalised from the larger scales or digitised from the 1:50,000. The major problem lies with point features such as churches, etc as suggested by Richard, but which I would extend to include isolated buildings, or at least those significant as landmarks which would be expensive to capture, but which would be essential to any long term success of the series. Again some interim use could be made of those that exist at 1:250 000.

An article about 1:100,000 GB topographic map design experiments, showing what may be possible, is currently being written. As we hope to include colour illustrations it is most likely to appear in the Cartographic Journal.



## Cycling maps

Richard Oliver

Not the least interesting of the papers given at the recent British Cartographic Society symposium was one describing an experimental Dutch cycling map at 1:75,000 scale.<sup>1</sup> The map differs considerably from the sort of thing which I had in mind when I wrote my piece in *Sheetlines* 51<sup>2</sup>, partly in the range of tourist symbols (which include cycle repair and rental shops, cafes, snack bars, and bakers' shops, which are certainly not often met with on British tourist maps), but also in the detail of the cycling tracks: this includes width (over or under 1 metre), accessibility (including gates difficult of passage for tandems and tricycles), and four classes of surface: 'good quality: like smooth asphalt or concrete', 'moderately paved: paving stones or moderate asphalt', 'loose paving: shells, gravel or solid sand' and 'unpaved/bad surface: loose sand, bumpy tracks'. I excluded consideration of these partly because of a desire not to suggest something that would compete too closely with the OS 1:50,000, but partly also because of the problems both of drawing (which might have to be done *ab initio*) and of classification, which would have to be carried out by perambulation (or pedalling). Depiction would presumably have to take account of both public rights-of-way status ('white road', byway open to all traffic, bridleway) and of surface characteristics. Correspondence with the Cyclists Touring Club suggests that they would prefer to see off-road routes on a 1:100,000 or 1:125,000 cycling map. Were the rights-of-way to be shown by magenta symbols similar to those on the 1:50,000, some other method would be desirable for showing surface characteristics. In my experience there are six types:

(1) Tarred, concrete, or other 'sealed' surfaces, equal to a public motor road: these are quite common as farm access roads.

(2) 'Unsealed', but good smooth consolidated surface, on which it is possible to ride a bicycle as fast as on a tarred road. These differ from (1) in that, being unsealed, the surface is more likely to deteriorate over time.

(3) (1) or (2) which have potholes, large semi-permanent puddles, and possibly projecting stones, which call for some caution by cyclists.

(4) Unsealed surfaces breaking up, where it is not generally possible to cycle at full speed due to uneven surface and the need to avoid protruding stones, potholes, etc.

(5) Unsurfaced: roads or ways well marked on the ground, but liable to be muddy or waterlogged in wet weather.

(6) Routes where there is a public right of way for cyclists, but is not well-marked on the ground, and passage is not easy: they may be partly obstructed by vegetation.

(1) to (4) roughly correspond to the OS's 'white roads'; (5) and (6) to those rights of way which are shown by magenta symbol only, or to 'path'. Only (1) to (3) are probably worth considering for long-distance cycling purposes, which is what I envisaged in my scheme for a 1:125,000 map as serving. One possible cartographic solution might be

<sup>1</sup> Willemijn Simon van Leeuwen and Corne P.J.M. van Elzakker, 'Investigations into the use of Dutch cycling maps', *The British Cartographic Society 35th Annual Symposium ... Proceedings*, (London, British Cartographic Society. 1998: ISBN 0-904482-22-7).

<sup>2</sup> Richard Oliver, 'Ordnance Survey maps for the cycle-tourist', *Sheetlines* 51 (April 1998), 14-31.

annotative numbers in a distinct colour; as most of the routes would be rural, there would presumably not be much problem with 'clutter'.

~~~~~

Letters

As a new member, and one who is not too well versed in U.K. mapping matters, I wonder whether somebody could please lead me in the direction of a publication which describes the background of the road numbering system. The clockwise numbered spokes of the wheel radiating out from London (disregarding Scotland for this purpose) are clearly evident but I would like to know the history of it all. I also remember coming across 'C' category roads in Norfolk on a holiday there in 1947 and would like to know if these still exist.

Michael Mills

Cycle Maps

Further to Richard Oliver's plea for a set of maps at or near the old "Half Inch" scale (*Ordnance Survey Maps for the cycle-tourist, Sheetlines 51*), Fadon's map is based on this scale, and manages to mark every road, avenue, village, hamlet and farm within its radius. I too am a keen cyclist, and have found that the old Bartholemew Half Inch series are still quite adequate for cycle-touring. As a cyclist I am completely uninterested in motorways and modern bypasses, but try to follow the old B-roads and minor unclassified roads as much as possible. Last year I managed to cycle all the way through Cornwall, Devon and Dorset using just four of these wonderful maps, and was only let down once, when a mile long section of road leading round a headland was found to have fallen into the sea several decades ago. However, the Bartholemew showed an old road leading over the headland (now just a rough grass track) by which means I managed to regain the road. I am also rather fond of the old Half Inch OS Large Sheet Series, where my vividly contour-coloured and landscape-shaded 1909 copy of the London Area (sheet 34) makes the North Downs appear as impressive as an alpine mountain range.

Pete Ansell

Errors on OS Maps

I read with interest, and with general agreement, David Kimber's suggestion that as new OS maps are reviewed by people living in the area, and I read his review of Landranger 139 with equal interest. I do somehow actually recollect doing something similar in "Some thoughts on Explorer 133" in *Sheetlines 50*, although that article also covered the wider subject of the depiction of National Trust properties on OS maps. I now look forward to the *Aldershot* Landranger progressing to a C edition and the chance of another review. But I fear

you will receive so many such articles that I may well be “spiked”.

According to David Kimber OS is open to suggestions for subjects for map cover photos. I suppose that the present policy of having covers with coloured photos is commercially inevitable. I wish it were not so, and I guess virtually every CCS member would happily back a move to bring back the artists.

The reasons for extending the use of laminated covers and colour photos is obviously to do with making maps stand out at point of sale -visibility above every other consideration. Some year ago an OS speaker at the AGM made the point that the Pathfinder series retained integral covers because of the difficulties of fitting covered maps into protective map cases . Am I a lone voice in wishing that 1:25,000 could again be treated as walkers' map and revert to an integral cover.

Correcting those errors

Accuracy, errors, and the means available to correct errors, was a common theme running through several contributions to *Sheetlines* 52. CCS Members who are also walkers will have seen the article in *Rambling Today* Autumn 1998 edition which highlights the role that Rambler Association volunteers play in checking the accuracy of rights of way information on 1:25,000 maps. For my very small part I did help to check some local Haslemere paths on the 1:10,000 definitive map some time ago. In fact it was more a case of noting every feature of the path - signs, waymarks, stiles, culverts etc, recording them and passing the information via a coordinator to Surrey County Council who are building a rights of way database. Gerry Jarvis in *Sheetlines* 52 gives a OS contact point to report errors. For rights of way mistakes it might well be better to write to the highway authority on whose definitive maps OS relies for such information. It is claimed in the *Rambling Today* article that OS is using the production of Explorers an opportunity to update its rights of way definitive map record.

Finally, one of the more curious choices of a coloured photograph for the cover of an OS map is the use of a picture of Sandsend, North Yorkshire for Routemaster 1:250 000 sheet 6 East Midlands and Yorkshire in 1984 (edition F). Sandsend (north of Whitby) is covered by sheet 5 and does not appear at all on Sheet 6. Are there any other examples of cover pictures which are off-sheet?

Richard Evans

Landranger 172

Hurray! Landranger 172 is now at edition C of 1997 and Barrow Gurney and Dundry are now literally ‘back on the map’.

But, once again in relation to names omitted, on Explorer 154 recently issued at Edition A, 1998 at 3530,1745 we have **Haber** rather than **Haberfield** i.e. the lettering east of

Ha Hall

‘Easting’ 53 has been omitted. How does this happen?

Also, further to my comments on ‘authoritive’ additions, when and how often do the OS re-survey and remove items long since gone? On Explorer 141 at Edition B of 1998 on the Westhay Moor Nature Reserve we still have Decoy Pool House on the site of the present

parking place at ST3456,1437. This house still appeared on Pathfinder 1218 (ST44/54) at issue A1 of 1992, which edition was 'compiled from large scale surveys dated between 1967 and 1984'. Perhaps it was there in 1984 but has certainly been gone for many years, i.e well before 1992.

Incidentally the Decoy Pool House was probably associated with the one-time Decoy Pool at ST458431 next to Decoy Rhine - about half a mile away

Donald C Clayton

Donald C. Clayton's letter in Sheetlines 52 (p.59) inadvertently answered a question that has puzzling me for over a year.

He noted the disappearance of the placenames Dundry and Barrow Gurney from Second Series Edition B1, published March 1996. This was followed in August 1997 by Edition B1/. On comparing the two sheets, I find that the correction that justified the 'bar' reprint was the reinstatement of said placenames. Their omission had evidently been in error, though the reason remains elusive. Edition B1/ has in turn been superseded by Edition C, with the modified specification for cycle routes referred to by Richard Oliver in Sheetlines 52 (p.43).

William Henwood

Wolverhampton on One Inch OS Maps.

With regard to David Kimber's note in Sheetlines 52 he is a little pessimistic in stating that it is over 70 years since 'Wolverhampton' appeared on the title of a one-inch OS map. The Popular Edition sheet 61 titled 'Wolverhampton' appeared in 1921. It remained in print until 1939¹ with almost certainly an outline and water' printing in 1942². Sales copies of Military printings, in both War and 2nd War Revision² would then be available until Popular Edition sheet 61 was replaced by New Popular material in 1946-7³. It is therefore only just over 50 years since the name 'Wolverhampton' on the title of a one inch (or 1:50 000) OS map.

The title of Landranger sheet 139, Birmingham and Wolverhampton was also used as the title of a one-inch District sheet first published in 1927 and reprinted until 1938⁴.

Brian Dobbie

¹ Y.Hodson. Sheetlines 33. A preliminary list of states of the Popular Edition 1" map of England and Wales.

² R.Hellyer. Sheetlines 48. Some notes on the civilian use of OS small scale mapping during the Second World

³ To cover the area of Popular Edition sheet 61 four New Poplar sheets are required; Sheet 119 Stafford published in 1946 and Sheets 118 Shrewsbury, 129 Ludlow and 130 Kidderminster published in 1947. Sheet 131 Birmingham published in 1947 also overlaps onto the area covered by Popular Edition sheet 61.

⁴ Printings of the Birmingham and Wolverhampton special sheet were at least :- 1927(a); 5000/27,6000/30(b); 1934(a); and 4038, M38, R37(b).

(a) Bodleian Library 'A list of OS District Special and Tourist maps 1861 – 1939'.

(b) Maps in my possession.

Landranger 139 - a postscript

Merry Hill Monorail

I was right in my article in stating that the monorail is not currently operating. However, I was wrong to state that the vehicles had been sold abroad (I obtained this information from the local newspaper the Express & Star rather than a site visit).

However, a recent article in the Express & Star now states that the owners of Merry Hill Shopping Centre are carrying out maintenance checks with a view to re-opening the monorail in 1999?

Motorway Service Area - Hilton Park

I was correct in my assumption that owners Granada, wanted to change the name of the service area to Birmingham North. I do not travel along this section of M6 Motorway very often but recently, I had reason to call there. From discussions with a representative of the Royal Automobile Club (RAC), the name was changed from Hilton Park to Birmingham North but due to complaints from motorists, the name was changed back to Hilton Park. On that basis. Landranger 139 is correct.

Major roads

With regard to the list of major roads, I forgot to include the Heartlands Spine Road (classified as A47) in Birmingham in the schedule. The road extends from the Nechells/Duddeston area of Birmingham out towards the Castle View housing area. Its claim to fame is that it is the most expensive local road ever built in Birmingham (M6 Motorway is part of the National Roads Programme).

On the recent issue of *Landranger* sheet 139 published in March 1998, the Heartlands Spine Road is shown as open to traffic. The road did not in fact open to traffic until Monday 13 July 1998. If Ordnance Survey maps are expected to be a snapshot of the topography at a specific date, then the road should have been shown as 'under construction'. The alternative view from a map user point of view is that if a major road is to open to traffic soon after publication date, it should be shown as 'open to traffic'.

David C Kimber

A Map for Navigation

I would like to add a note to Richard Oliver's criticism of Outdoor Leisure Map 29, Isle of Wight. Those of us who go cruising in small open boats not only go to sea, but often go to the very limits of navigation of rivers and creeks. For this the OS maps, particularly at 1:25 000 scale, are more useful than maritime charts. They are more detailed and usually more accurate in depicting narrow channels in the upper reaches of rivers and, of course, show a great deal of useful land detail that is absent from the charts. It does not matter that the maps do not show sea marks as these can either be annotated, or 'read' at sea as you come to them.

I recently bought a copy of OLM 29, Isle of Wight before going on cruise in the area, unaware that the map format had been changed. I found that it was particularly useful for the very reason that it does cover all the Solent and quite a lot of the English side, including all the tidal Beaulieu River and most of Portsmouth Harbour. It seems doubtful, however, that it was for the very small number of people who go dinghy cruising that the OS decided to increase the area covered.

There is one significant error on OLM 29, claimed to be revised in 1998. At the mouth of the Beaulieu River there is a channel marked between Needs Ore Point and Gull Island, known, but not marked, as the Bull Run (SZ430976). This channel was blocked up in 1988 when the beach was built up from the mainland bird sanctuary all the way along to the east end of Gull Island, which is no longer an island.

Aidan de la Mare

~~~~~

### **Extracts from Ordnance Survey Field Bulletins of the early 1950s**

John Cole

1. The grade 3 surveyor in charge of examination at Winchester reports having made contact with no less famous a personage than Colonel Sir Charles Arden-Close. Working in a garden he was approached by the owner (permission to enter having been obtained of course) who chatted to him. The gentleman's obvious survey knowledge caused him to enquire whom he had the pleasure of addressing. He admits to being 'staggered' when Sir Charles revealed his identity.

2. To be asked by a high Festival of Britain Authority for the true bearing to  $01^\circ$  of the alignment of the steps in front of St Paul's Cathedral caused initially some surprise. Actually the information is required in connection with the provision of shade on the dais to be erected for the opening ceremony - on the optimistic assumption that there will be hot sunshine on the day!

The answer (for those interested) is  $174^\circ$ .

3. Our sympathies are extended to the Grade 4 finaller who whilst plotting (on the map contained in a sketching case) at a mental institution, was addressed by an ambulance attendant with the remark 'So they have given you something else to play with today'.

4. C.S. T.G.11 has received a visit from His Worship, the Mayor of Stockport Alderman W.H. Russell, who joined the Ordnance Survey at Larne, Ireland in 1901 and spent the following six years on Detail Survey - his Division Officer at the time being 2/Lieut. A.J. Wolff - subsequently Director General. T.G.11 were very interested to hear stories of the old days from His Worship. He was employed at a wage of 12 shillings per week for the first year and out of this paid 9-10 shillings for accommodation. With the remaining two shillings he bought his weekly supply of cigarettes at 1d per packet (Woodbines) and his evening ale. In 1902 he gained an additional 6d per day after surveying a test triangle containing 150 acres. No re-chaining was necessary and the cost of the survey was  $2\frac{1}{4}$ d per acre! He walked 5-6

miles daily to work and his only recreation in the evening consisted of long walks in the country! With the improvement in his financial situation Alderman Russell commenced saving money and fell victim to the charms of one of the village girls. This change of circumstances did not however prevent him from chaining his customary 175-200 chains per day. Once he had to visit a small village in order to re-chain some work done originally by an R.E. section. He was unable to find a picket which had been cut at the corner of a farm building and asked the lady of the house if she knew of a mark the ‘Miners’\* had left behind. The lady retired and then returned with a rather charming small girl.

\*Royal Engineers were known as ‘Sappers and Miners’.

5. The detachment of T.G.14 at Norwich were shown an inscription from the back of an etching of Norwich Cathedral now in the possession of the Dean and Chapter. The inscription records that the view illustrated in the etching ‘was taken in the autumn of 1843 when the Ordnance department took advantage of a scaffolding that was erected by the Dean and Chapter (for the purpose of putting a new cap stone on the spire) and adding thereto a large platform on the top of which was placed a tent to cover and protect their instruments, they completed their maps and survey of the North and Eastern coasts of Norfolk. A party of nine partook of a Dinner in the tent which they themselves erected.’

The event occurred during the heightening of the spire by 7ft. and the erection of a new cock surmounting the spire. The height of the spire is 315ft. The dinner mentioned in the inscription took place on 12<sup>th</sup> August 1843. No record is available as to whether the time was returned as ‘lost by wet’.

~~~~~

Yet another Guidebook with Ordnance Survey map extracts

John Seeley

In 1947 it seems it appears that the Saint Catherine Press published a series of Footpath Guides. The list of these numbered 1 – 22 with authors in the two volumes I have, XXV and LXV (sic); they are *Hampshire Highlands* by R.H. Brown and *Around Aldershot* by Jill Denisthorpe. These books are tiny, 134x90 mm approximately to B7 or “crown sixteenths” as was; never mind huge modern maps not fitting into poachers coats, these guides were intended for the hip pocket! They were illustrated, inexpensive, “written by people who know”. Better yet, the jacket over their card cover was an OS map extract which opened to a useable 195x134 mm when removed (just larger than B6 size). Predictably the extracts were “reproduced from the OS Map with sanction of HMSO Controller...”. Barmicotts of Taunton were the printers, and chose and outline style with pleasing solid blue and solid green added.

Textual content is also pleasing, Mr Brown being enthused by antiquities (particularly churches) and Ms Denisthorpe by countryside and the recent effects around Aldershot of government activity. Her introduction advises tracing out paths on the OS one-inch beforehand, then leaving the map at home (too precious, maybe?) and taking the little book out instead. The author next cheerfully picks her way around various tank and military training grounds, WW2 ploughing, and the perimeters of research establishments in the

district: she does this without naming any: not long after I as on the other side looking out! She also describes the newer airfields without naming them where Mr Brown gives pre-WW2 RAF Odiham its full title and description. Those same airfields never did get on the to maps, except (later) Blackbushe though in its early days Farnborough's location was indicated (before becoming secret) as the Royal Air Craft Factory, sic!

The map extracts are from whichever OS small-scale sheet is most suitable to the area: thus *Hampshire Highlands* uses pre-WW2 Quarter-inch Sheet 11, whereas *Around Aldershot* uses sheets 33 and 34 of the Half-inch edition. Interestingly 33 and 34 do not overlap; the butt joint can clearly be seen in the illustration of the book jacket opposite. Unfortunately it happens that the sheetline ran through Fleet and consequently two sites are shown for the railway station, one either side of the B3013 road. Referring to the OS sheets a (different) site is indeed found on each, but whereas Sheet 33 it is uncoloured indicating closure, on Sheet 34 it is coloured red. This later is the actual location shown on later maps such as I have seen¹ show the site from Sheet 33, so perhaps the station was relocated at some intermediate time. If so, unlucky Barnicotts.

The jacket-maps are rather elegant and the little books altogether charming, being an affectionate description of the countryside in districts less familiar and of a previous time. The full set, if one could be got, would be a minor source to treasure.

~~~~~

### **Improvements and changes to 1:50,000 and 1:25,000 mapping**

Richard Oliver

Starting with *Landranger* 172, *Bristol and Bath*, which was published on 15 July 1998, several sheets of this series have been issued with surfaced cycle routes shown by bold green dashes, national cycle routes by dots at 0.5 cm spacing (in place of the magenta bicycle symbol hitherto used), and regional cycle route numbers (in blue, boxed). Several 1:25,000 *Explorers* (including 158, 159, 176 and 178) now employ a blue 'Park and Ride' symbol, in reversed-out and open-boxed forms, for all-year and seasonal facilities. London Underground stations appear around Heathrow Airport on *Explorer* 160 (TQ 076758, TQ 080745, TQ 096754); they are shown by the familiar London Transport circle-and-bar and named, in magenta. As they are shown in areas of fairly open detail it remains to be seen what the effect will be in inner London.

There is a curious passage in OS Information Paper 18/1998, on the National Interest Mapping Service Agreement, where one of the uses of the funds to be made available to OS is 'Ensuring that mapping of security-classified sites complies with government policies'. This sounds sinister, but there would appear to be a more benign explanation. On the C editions of *Landrangers* 171 and 172 the armaments depot at Caerwent appears in full detail (ST 4791, etc) and on *Explorer* 158 the former airfield at Welford, which it is understood is also used for armaments storage, is likewise shown in detail. Both sites are 'undescribed'.

---

<sup>1</sup> Including OS Half-inch Map *Country around Aldershot* of 1909, and Bartholomew's *Royal Atlas* of 1899.



However, there would appear to be limits to openness: one looks in vain on *Explorer* 159 for any sign of the Atomic Weapons Research Establishment at Aldermaston (SU 590630, etc) or the Royal Ordnance Factory at Burghfield (SU 680680, etc). Both ‘sites’ have appeared on small-scale maps in the past, that at Aldermaston on at least two editions of Bartholomew half-inch Sheet 9 (in the later 1960s, as ‘Works’), and as an airfield (its earlier use) on later editions of OS one-inch New Popular Edition Sheet 168, and that at Burghfield on the later (B and B/\*) editions (1971, 1972) of one-inch Seventh Series Sheet 169 and 1:50,000 First Series Sheet 175 (1974), where it is actually ‘described’!

~~~~~

Baker’s Map of the University and Town of Cambridge 1830

The Cambridgeshire Records Society has recently published a facsimile of Baker’s map. Drawn on a scale of 9 inches to the mile, this beautiful example of Victorian cartography captures the city and its immediate surroundings at a time when the townscape had begun to change dramatically as a result of enclosure. The folded map, in a folder incorporating an account of Baker and his maps by Sarah Bendall, is available from the Society at the Cambridgeshire Records Office, Shire Hall, Cambridge, CB3 0AP for £8 (including postage and packing). Overseas price, plus postage and packing, £9 (in sterling, please). A few copies are available unfolded, please contact Mr Peter Bryan (01233 233002) for information on availability and postage and packing costs.

Rosemary Horrox

~~~~~

### **The Charles Close Society - Publications list, December 1998**

#### **Ordnance Survey maps: a concise guide for historians,**

by Richard Oliver, 192pp, B5, softback, £12.95

**ISBN 1 870598 13 X**

*“..an invaluable replacement to Harley’s standard work and an essential source for archivists, librarians, historical and environmental researchers alike”.*

#### **A guide to the Ordnance Survey One-inch Seventh Series,**

by Richard Oliver, 48pp, pbk, £4.20.

**ISBN 1 870598 06 7**

*“The standard text for this popular series”.*

#### **A guide to the Ordnance Survey One-inch map of Scotland, Third Edition in colour,**

by Guy Messenger, 36pp, pbk, £3.30.

**ISBN 1 870598 07 5**

#### **“An inch to the mile”: The Ordnance Survey one-inch map 1805-1974,**

edited by Yolande Hodson, 64pp, pbk, £2.00.

**ISBN 1 870598 08 3**

*(Prepared as the catalogue to the RGS OS Bicentenary exhibition. It is the fullest account of the One-inch map at present in print.)*

**The sheet histories of the Ordnance Survey one-inch Old Series maps of Essex and Kent,**

by Guy Messenger, 52pp, pbk, £4.50.

**ISBN 1 870598 09 1**

*(Prepared as a cartobibliographic update to the Margary volume of Old Series facsimiles.)*

**The sheet histories of the Ordnance Survey one-inch Old Series maps of Devon and Cornwall,**

by Guy Messenger, 44pp, pbk, £4.20.

**ISBN 1 870598 10 5**

*(Prepared as a cartobibliographic update to the Margary volume of Old Series facsimiles.)*

**The “Ten Mile” maps of the Ordnance Surveys,**

by Roger Hellyer, 212pp, A4, softback, £17.95.

**ISBN 1 870598 12 1**

*“The definitive text on this complex subject including much valuable information on Irish OS involvement. Tremendous value”.*

**The maps of the Ordnance Survey: a mid-Victorian view by Captain H Riall Sankey, RE**

with an introduction by Ian Mumford,

36pp, illus. A4, softback, £5.00.

**ISBN 1 870598 14 8**

*“..a must for anyone interested in OS maps, printing or technology generally”.*

**SHEETLINES**

Reprints in combined volumes: 1-6, 7-10, 11-14, 15-18, 19-21, 22-24, 25-27, 28-30, £6.00 per volume.

Single issues 31 onwards, £4.00 per volume.

**Discounts to members:-**

|                        |              |
|------------------------|--------------|
| Any 1-4 volumes        | No discount  |
| Any 5-20 volumes       | 10% discount |
| Any 21 or more volumes | 15% discount |

If 21 or more volumes are purchased in batches within a six month period, all will attract the full 15% discount, which will be awarded on the final invoice.

**Ordering:**

All cover prices include postage and packing.

Please make cheques payable in STERLING to: “The Charles Close Society”.

Please allow 28 days for delivery. No publications sent “On Approval”.

**Available from:**

Publications Manager,  
The Charles Close Society,  
11, Riverdale, WETHERBY,  
Yorkshire, LS22 4RP, U.K.