This edition of *Sheetlines* was published in 1997 and the articles may have been superseded by later research. Please check the index at [http://www.charles closesociety.org/sheetlinesindex](http://www.charlesclosesociety.org/sheetlinesindex) for the most up-to-date references.

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Published by

THE CHARLES CLOSE SOCIETY
for the Study of Ordnance Survey Maps


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.
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NOTICE

The Editors and contributors to Sheetlines are individually responsible for which they express therein; the Charles Close Society as a body does not necessarily agree with all or any such opinions.

Contributions
to Sheetlines, long or short, profound or trivial (but related to Ordnance Survey matters, however tenuous) are always welcome.

Deadlines for next issues of Sheetlines

Sheetlines 50 (December 1997 cover date) 12 November, 1997
Sheetlines 51 (April 1998 cover date) 11 March, 1998

Chairman, Charles Close Society:
Dr Christopher Board, 36 Wakefield Gardens, Upper Norwood, London, SE19 2NR
(tel/fax.: 0181 771 9503)

Society Secretary:
Rob Wheeler, 38, Little Common, Stanmore, Middlesex, HA7 3BZ
(tel.: 0181 420 6105)

Membership Secretary:
Roger Hellyer, 60 Albany Road, Stratford-on-Avon, Warwickshire, CV37 6PQ
(tel.; 01789 295752)

Publications Manager:
David Watt, Flat 9, 33, Cotswold Way, Langley Avenue, Worcester Park, Surrey, KT4 8LN

Sheetlines Editors:
Jim Cooper, Iona, High Street, Whixley, York, YO5 8AW
(tel.: 01423 330615)
Jon Risby, 2, Sennocke Court, Lime Tree Walk, Sevenoaks. Kent, TN13 1YQ
(tel.: 01732 461026)

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The various authors and the Charles Close Society

Cover design by Chris Higley
Editorial

When Jon Risby and I attended the AGM at Nuneaton in May neither of us had any idea of what it would lead to. I was a new member and this was my first meeting. It was just by chance that we sat next to Lionel but when it was revealed that he was hanging up his editor’s hat we wanted to know more about it. That was my first mistake! As the day progressed it became apparent that there were no volunteers to take up the burden so in a moment of weakness Jon and I offered our services as joint editors. This in spite of the fact that neither of us have any experience and we live several hundred miles apart. We are though very willing to learn and to do our best to maintain the standards that you have come to expect.

Having been an Ordnance Survey man for 37 years I have had maps around me all my working life and before that as a child, I spent many a happy hour drawing on my father’s pre-war OS half inch maps. However, since joining the CCS I have realised that there are gaps in my education and having read some earlier editions of Sheetlines I find I’ve still a long way to go.

My thanks go to Lionel for all his past endeavours and his help and advice at our initiation. I hope we will soon be able to get to grips with the job. We are still feeling our way at the moment which accounts for the delay in getting this edition out. So that’s my first apology! No doubt the first of many.

It’s good to see so many contributions for our first edition. Any future ones can be sent to either Jon or myself. You will find our addresses on the back cover.

Jim Cooper

Marginalia

School of Military Survey to change name

It is with pleasure that we note that Her Majesty the Queen has been graciously pleased to grant the title ‘Royal’ to the School of Military Survey, which is henceforth to be known as the ‘Royal School of Military Survey’.

Ordnance Survey Director General awarded Royal Medal

The Charles Close Society has pleasure in congratulating Professor David Rhind on his award of a Royal Medal for his contributions to mapping and geographic information systems. Her Majesty the Queen approved the award of the Patron’s Medal by the Royal Geographical Society with the Institute of British Geographers, the presentation being made by the President, Earl Jellicoe, at the Society's annual meeting in May.
**Alan Godfrey sells his one millionth map**

In April Alan Godfrey sold his one millionth map. The occasion was marked on 4 July by the presentation to him of a full-size colour reproduction of the 1:2500 County Durham first edition sheet showing where his house would have been had it been built then. The presentation was organised and carried out by Ann Sutherland, Convenor of the Map Curator’s Group of the British Cartographic Society; the subscribers included several who are also well-known members of the Charles Close Society, including its Chairman, Dr Christopher Board, who was present at the presentation ceremony in Alan’s offices. The presentation was arranged as a complete surprise, and its planning depended in considerable degree on Alan’s not having access to electronic mail, so that the ‘plotting’ took place in perfect secrecy!

Alan Godfrey was one of the fifteen founder-members of the Charles Close Society and was present at the inaugural meeting at the British Library Map Library in December 1980. He was one of the three members of the original committee, and had responsibility for membership matters: it was not quite so onerous fourteen or fifteen years ago as it is today!

It is expected that the one thousandth Godfrey Edition title will be published in a few months time: it is intended to mark it by a complete listing in *Sheetlines* of Godfrey Edition publications to date.

To conclude: purely by coincidence, on the morning of 4 July I received a letter from a member who, as a retired Ordnance surveyor, is in a particularly good position to appreciate the merits of Alan Godfrey’s work. ‘With their local histories, fascinating directory extracts and views of the area, this must surely be the best idea since sliced bread.’

Richard Oliver

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**The Map Collector**

From time to time the editor of *Sheetlines* receives notification from *Map Collector Publications* of sale items, which cover the whole range of mapping but nevertheless might be of interest to members of the Charles Close Society who themselves are not subscribers to that journal. Members who might wish to avail themselves of new books at sale prices, or could be interested in the selection of second-hand books should write directly to: Map Collector Publications, 48, High Street, Tring, HP23 5BH.

(I was somewhat surprised to see included in the second-hand list a copy of *Map Cover Art* at £25 when it is still available new at £10.95)

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**Roads and Road Transport History Conference**

A question was raised at the Annual General Meeting as to whether there is a society for historians of roads analogous to the Railway and Canal Historical Society, although that Society does take a wider interest in transport than its name implies.

The answer to the question is that there is what one might describe as an ‘umbrella group’; the Road and Road Transport History Conference was founded in 1992 and has both corporate members (societies and other bodies active in its field) and associate members (individuals who wish to receive copies of its Newsletter and other information.) Its objective is to promote, encourage and co-ordinate the study of the history of roads, road passenger transport and the carriage of goods through:

* acting as a clearing house for information,
* providing a meeting ground for amateur and professional transport historians,
* arranging meetings and symposia (the next is on the history of Road Freight Transport, in Coventry, 18 October, 1997),

---
* publication of a twice yearly News–letter, and providing advice on the disposal of archives.

However, the interests of its members tend towards the history of specific vehicle manufacturers or transport undertakings rather than the road network as such.

Further information can be obtained from the Conference’s Honorary Secretary, Mr G. Knowles, 7, Squirrels Green, Great Bookham, Leatherhead, KT23 3LE.  

Rob Wheeler

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**Nothing like the real thing!**

Peter Walthall believes that the following quotation is particularly relevant to the aims and objects of the Charles Close Society:

“That’s another thing we’ve learned from your nation,” said Mein Herr, “map-making. But we’ve carried it much further than you. What do you consider the largest map that would be really useful?”

“About six inches to the mile.”

“Only six inches!” exclaimed Mein Herr. “We very soon got to six yards to the mile. Then we tried a hundred yards to the mile. And the came the grandest idea of all! We actually made a map of the country, on a scale of a mile to the mile!”

“Have you used it much?” I enquired.

“It has never been spread out, yet,” said Mein Herr; “the farmers objected: they said it would cover the whole country, and shut out the sunlight! So we now use the country itself, as its own map, and I assure you it does nearly as well.”

From Lewis Carroll’s *Sylvie and Bruno Concluded*, 1893

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**STOP PRESS**

*Landranger Sheet 173, Swindon and Devizes*

The Ordnance Survey have just published the C edition of Landranger Sheet 173, Swindon and Devizes, but in the process also managed to produce a unique(?) hybrid. Having printed the new cover with a photograph of Avebury, for some reason it was married to edition B of 1993. Some of these maps escaped to the big wide world, but I understand that the OS recalled those which were with their distributors. However some copies made it even further and reached retailers. A diligent search might reward the collectors of oddities. (The proper edition B has a cover photograph of the bridge over the River Avon at Bradford-on-Avon.)
RGS/OS Education Consultative Committee

Gerry Jarvis

I have been nominated as the Charles Close Society representative on this committee, and I recently attended my first meeting.

The committee is one of eight consultative committees established by the Ordnance Survey. Each committee meets twice a year, and each round of meetings is followed by the Director-General’s conference, which is attended by representatives from each committee. The committees provide both the Ordnance Survey and the communities represented by each committee with a sounding board and a channel for gathering and disseminating information, as well as providing informed support for and criticism of the Ordnance Survey and its operation.

The last points in the previous paragraph indicate a vehicle for Charles Close Society members to pass on information for and criticism of the Ordnance Survey: if any members wish to use this vehicle, they should contact me direct.

Various consultation and information papers are presented at each meeting, and it is the stated intention of the Ordnance Survey that such papers should reach the widest possible audience. To achieve this aim the Ordnance Survey advertise the availability of these papers to a wider audience in two ways. If you have access to the Internet, copies of papers produced since 1994, and other information about the Ordnance Survey, are available at the following address:-

http://www.ordsvy.gov.uk/

If you do not have access to the Internet copies of recent papers are available from:-
Consultative Committee Liaison,
Room C632, Ordnance Survey,
Romsey Road, Southampton, SO16 4GU
Tel: 01703 792545, Fax: 01703 792039

Previously Richard Oliver has taken the responsibility of summarising such papers in Sheetlines, and I shall now endeavour to take over that work. However members should recognise that I have neither the knowledge nor the turn of phrase to easily replace Richard.

Rather than produce a lengthy report of each meeting, I intend to précis briefly each paper, and comment in more depth where obvious items exist of interest to members. But I would be happy to produce more information or copies of other papers for members with specific needs. I would also welcome comments from members as to whether such information as I produce is of interest to them, and more particularly I would like to know of any members who take up direct access to this information. You can contact me at:-
Rulow House, Buxton Old Road,
Macclesfield, Cheshire, SK11 0AG, Tel: 01625 611594
or at 100747.1033@compuserve.com

The following items summarise papers from the last two meetings:

Information Paper 6/1996
The National Geospatial Database – progress towards delivery.
What is the National Geospatial Database.
Actions and Management Structure.
Information Paper 7/1996
The contribution of Ordnance Survey to standards for geographical information.
  Introduction to and scope of standards.
  Why and how the Ordnance Survey supports such standards.
  Future implications.

Information Paper 8/1996
Boundary Changes and Ordnance Survey.
  Background and Responsibilities.
  Meeting customer demand.
  Interpretation and consultation.
  Digital data availability.
  Administrative Areas Diagram**.
  Other mapping. Future Developments.

(**The original 1:100,000 scale Administration Area Diagrams were made obsolete from 1 April 1996. A new series of maps has been created to reflect the new administrative areas. These have been published at 1:250,000 scale for local government areas and at 1:625,000 for Parliamentary areas.)

Information Paper 9/1996
Superplan Data and Landplan.
  Superplan Data.
  Superplan agents with plotting systems can offer this service on demand.
    Selection of areas by customer.
    DXF format on floppy disks for compatibility.
    Incorporating surveys from latest available data, maybe within 48 hours.

  Landplan plots.
  Over the next three years the entire 1:10,000 scale series will be replaced progressively by a plot-on-demand service available from Superplan agents, with the following options:-
    Colour or monochrome, with contour option.
    Choice of extent of plot.
    Only 1:5,000 and 1:10,000 scales available initially.
    Costs for each plot in range from £30–£75.

Information Paper 10/1996
Reformatting the 1:25,000 scale map series.
  Full national cover at 1:25,000 scale.
  Gradual phasing out of Pathfinder maps, to be replaced entirely by Explorer maps.
  About 300 large format Explorer maps will completely replace the 1200 plus Pathfinder maps.
  The highly popular Outdoor Leisure maps will continue with up to 50 maps covering the National Parks and larger Areas of Outstanding National Beauty, whilst Explorer maps will complete the cover for whole of Scotland, England and Wales, to give a national series totalling 350 maps.
  Maps will be based on geographical areas rather than fixed National Grid sheet lines in order to best cover area of tourist or leisure interest.
Explorer maps will appear either as single sided maps covering 30km by 20 km, or as double sided maps covering 20km by 20km each side. Both will be sold at the same price and in orange covers. All Outdoor Leisure maps will be double sided, 30km by 20km each side.

Information Paper 11/1996
Promotional events - October 1996 to April 1997.

Information Paper 12/1996
Items of special interest.

Information Paper 13/1996
Price changes for Maps, Atlases and Guides.
Revised prices from 1 November 1996.
No general price increase, but standard series increased:-
(These were reported in Sheetlines 47, p55)

News Release 9 October 1996
Britain at your fingertips.
First Interactive Atlas of Great Britain for computer users on CD-ROM.

News Release 18 October 1996
Computerised Ordnance Survey Helpline wins top national award.
Available on 0345 330011.

Consultation Paper 1/1997
Enhancing the National Topographic Database.
Introduction. Recent Programs.
Main components — Link and Node structure, Polygons and Area Labels, Feature Codes and themes, Networks, Area Symbols, Text association, Pilot Trial.

Information Paper 1/1997
National Interest Mapping Service Agreement — An update.

Information Paper 2/1997
Miscellaneous items of interest.
Ordnance Survey as a ‘place of deposit’.
Now that the National Topographic database is stored in digital form, appropriate for Ordnance Survey to become a ‘place of deposit’ under the Acts. Discussions with Public Record Office to agree:-
Archival approach — annual snapshot.
Content and scope of data to be stored.
Media to be used and proposals for future proofing.
Proposals for public access.
Trading fund update.
Pricing of Ordnance Survey Digital Products.
Geographic Information Charter Standard.
Reference systems and geodetic transformation.
Awards for Ordnance Survey.
UK based training from Ordnance Survey.
Topographic change intelligence.
Reorganisation of customer-facing business units.

Information Paper 3/1997
The National Geospatial Data Framework (NGDF) - The First Steps.
NGDF Work Programme.

Information Paper 4/1997
Europe and beyond - The work of Ordnance Survey International.
Introduction. What we are doing. The future.

Information Paper 5/1997
Promotional events - April to October 1997.

News Release 14 February 1997
All schools gain access to detailed computerised mapping.
How to obtain.

Information Paper 6/1997
Improved specification for Explorer and Outdoor Leisure maps.
Introduction.
As part of the re–formatting indicated in Information Paper 10/1996, the mapping specification will be improved by the addition of extra information of direct benefit to map users.
Specification changes.
Motorways.
Service areas will be depicted by a white “S” within a blue diamond symbol. Junction numbers will be depicted by a white number within a blue square. Both symbols replace textual descriptions.
Other public access (not public rights of way)
Like the 1:50,000 Other Routes with Public Access (so-called white roads) will be shown for the first time using a green dot symbol.
‘Permitted’ bridleways coincident with rights of way will be depicted by an orange horseshoe symbol.
Selected cycle routes will be depicted by orange dots for ‘off road’ sections and an orange cycle symbol for ‘on road’ sections.
Access Land.
Access Land boundaries will be shown by a thin purple line. Where appropriate the ownership will be shown using the symbol of the relevant organisation within the boundary: otherwise by white letters AL within a purple square.
The extent of Danger Areas will be shown more clearly using flat red triangles around the limits, plus the annotation DANGER AREA in red within the area.
Park Boundaries.
Will be shown as a continuous yellow band rather than the previous green band, which tended to obscure underlying detail. Scottish Forest Park boundaries will be shown by a broken yellow band.

Tourist Information.
Additional tourist information will be included using symbols for Theme or Pleasure Parks, Leisure or Sports Centres, Water Activities and Slipways. Symbols will also be used to depict Public Houses and Museums. English Heritage, Historic Scotland and Welsh Historic Monuments (Cadw) sites will be shown as tourist information in blue, using the appropriate symbol. Additional customised symbols will be added as appropriate to each individual map.

Legend (map key) changes
Both the Explorer and Outdoor Leisure legends will be redesigned to include all abbreviations used on the map face.
Roman & non-Roman antiquities, battle sites and earthworks will have their own legend heading - Archaeological and Historical Information.

Implementation
These specification changes will appear for the first time on the new Outdoor Leisure map of Hadrian’s Wall due for publication 31 May 1997.

**Ordnance Survey Topics**

Richard Oliver
(This article is a personal commentary on some aspects of the papers reported above.)

**Enhancing the National Topographic Database (NTD)**
The re–engineering of the NTD was referred to in Sheetlines 44 (Dec. 1995, p.7). OS Consultation Paper 1/1997 describes the proposed data specification, which is to be tried internally in 1997–98, and invites comments by 30 June 1997.

The re-engineering is designed to meet the desire from a number of customers for more sophisticated data about ‘real world objects’ such as property polygons and associated information such as acreages and field numbers, and the new specification is designed to be compatible with the existing one (OS93 and Landline data). An attempt is to be made to associate all text with the feature to which it relates, by, in effect, placing it on the feature.

‘Polygons will be formed such that the entire land surface will be made up of contiguous polygons.... All polygons will contain one feature known as an Area Label describing either the land use or land cover within the polygon’, to be grouped in the following classes: building; structures; inland water; tidal water; road & roadside; railway permanent way and railside; heritage; vegetation & land cover; landform; general. ‘A particular Area Label can only be surrounded by features that relate to the Area Label, e.g. a building polygon cannot have a side coded as an electricity transmission line.’

The number of Feature Codes has been increased significantly as compared with OS93, and have been classified into main themes and sub-themes. Those at present envisaged are (sub-themes in brackets):

The Natural Environment (terrain & height; natural features & natural landforms; tidal water; inland hydrology; specified natural land surface; specified vegetation &
natural land cover; compound natural & geographic landscapes);

The Built Environment (manmade landform; buildings and structures, general structures; manmade structures; general manmade topographical features; communication (road/track); communication (path); communication (railway); compound built landscapes);

Heritage and historical environment (landscape archaeology);¹

Socio–cultural environment (political/administrative);

Survey and mapping process (used by OS to hold survey control and other ‘data management’ information).

¹ What would O.G.S. Crawford have said?!

**National Interest Mapping Service Agreement**

The proposal for this and the report on a consultation exercise thereon was described at some length in *Sheetlines* 46 (August 1996, pp 5-8). Since then difficulties have been encountered, some of which are described in OS Information Papers 1/1997 and 2/1997. The significance of this proposal is that, being designed to ‘balance the books’ by financing otherwise ‘uneconomic’ OS activity, it is a necessary precondition for Ordnance Survey transferring to Trading Fund status, which (there is no official mention of this) is a further step on the way to privatisation.

Although agreement in principle on the national interest services to be provided by OS was reached in a working group of representatives from OS, the Treasury and the Department of the Environment, and was supported by other government departments, this came too late to enable the necessary costs to be quantified so as to be included in public expenditure for 1997–98. It is now hoped to reach the necessary financial agreement by 1 April 1998. ‘To this end, further discussions are taking place within Government to consider how an agreement can be funded.’ Good, if unofficial, verbal information is that every Whitehall department thought it a good idea, but none were prepared to put any money towards it; and, as OS’s sponsoring ministers ‘believe that the costs of maintaining the national interest need to be shared among everyone who benefits from the services’, it is officially admitted that ‘further discussions... will take some time’.

Thus, it is time for some sabre-rattling: ‘We are trying to minimise short-term problems wherever possible, but there will be delays in the medium term to the re-engineering of the database. [See above.] The first Rural Revision cycle will take longer than five years and work on improving the accuracy of Rural mapping will be postponed. Other programmes and services that are likely to be affected include reformatting of the 1:25,000 scale series from Pathfinder to Explorer and Outdoor Leisure maps, creation of Landplan, full incorporation of Welsh and Gaelic names, and levelling... We are investigating the longer term effects of lower levels of national interest funding. We think further reductions in service may be

The centre-lines of all roads, railway tracks, overhead cables and electricity transmission lines will form networks, structured independently of the area polygons. Area Symbols will hold information relating to such ‘real world’ features as pylons, archways and steps.

An internal pilot trial is to be conducted in 1997–98, using an area covered by about 500 maps, ‘probably around Humberside² as this region has the required variety of features and topography over a relatively small area. Once the trial is complete, we will be able to stock and decide on the future direction of the project.’

² One hopes that this is the only mention which *Sheetlines* will be obliged to make of this deplorable term.
necessary, particularly if revenues are affected by a slowing down in investment.’

This prompted a reaction from the Royal Institute of Chartered Surveyors, which held a meeting in London on 29 May to discuss the future of the Ordnance Survey, which was followed about three weeks later by circulating a letter to certain interested parties, apparently with the object of lobbying the new minister with responsibility for the OS to put the Service Agreement into effect.

**Ordinance Survey as a ‘place of deposit’**

OS Information Paper 2/1997 reports that OS considers that the best way for it to discharge its responsibilities for safeguarding the National Topographic Database is for it to become a ‘place of deposit’ under the Public Record Acts. To that end, it is negotiating with the Public Record Office with a view to agreeing the archival approach, ‘which is likely to be an annual snapshot commencing in 1997’, ‘the content and scope of data to be stored’, the storage media, and proposals for public access. OS does not envisage any change in its arrangements with the legal deposit libraries under the Copyright Act of 1911. ‘Indeed the respective responsibilities can be regarded as complementary rather than mutually exclusive.’

**Reference systems and geodetic transformations**

Following on from the short item in *Sheetlines* 48 (April 1997, p.79), OS Information Paper 2/1997 reports that it is intended to put on sale this year two new transformations between OSGB36 and ERTF89, at 0·2 and 1·0 metre accuracy respectively. The associated Customer Information policy paper no. 21 repeats what has been said before, that OS will retain its mapping in the National Grid (OSGB36) referencing system for the time being, but will review periodically the possibility of adopting ERTF89 ‘or a related system’.

**The Ordnance Survey annual reports for 1994–95 and 1995–96**

One of the less-sung benefits of ‘the web’ is the availability of the two most recent OS annual reports. Not only that: only the text is given; there is the great benefit of no illustrations.

Given that cartography and surveying are graphic in nature, that might appear a perverse statement. However, over the past twenty years the published OS annual reports have metamorphosed from a text fairly well supplied with ‘hard facts’, supplemented by progress diagrams for map revision, publication and digitising, into bland text supplemented by photographs of OS staff, with a distinct bias towards the Great (who are also, ones hopes, the Good). The whole was printed on glossy paper, and a price quite disproportionate to the verbal content (though doubtless explained by the pictorial garnishings) was charged. The version on the OS’s home page (http://www.ordsvy.gov.uk) has the advantage of coming free, so in the circumstances one can hardly complain about the proportion of hard information.

At any rate, these reports indicate that cost recovery was 72 per cent in 1993–94, 78 per cent (target 75 per cent) in 1994–95 and 76·2 per cent in 1995–96; the (unstated) target for 1995–96 would have been met but for having to make exceptional provision for early retirements. (Elsewhere, it is stated that OS has been able to reduce its staff considerably without any compulsory redundancies.)
Names of Railway Stations

R. C. Wheeler

The intermediate stations on early railways were often sited at a considerable distance from the places they purported to serve. Thus the London & Birmingham Railway’s station for Harrow was established a mile away where the district of Wealdstone subsequently grew up, whilst that for Pinner was established at the hamlet of Hatch End. Nevertheless, for much of the nineteenth century, these stations were simply known as ‘Harrow’ and ‘Pinner’.

The Ordnance Survey clearly felt it would be helpful to a man using its small-scale maps to find his way about unfamiliar country if such stations were named on the map. Harrow and Pinner stations are indeed so named on the New Series one-inch.

By the end of the nineteenth century the increasing density of stations (at least in Middlesex) and the growing expectations of their customers caused railway companies to expand such names. Thus, in 1897, Harrow L&NWR station became ‘Harrow and Wealdstone’, Pinner became ‘Pinner and Hatch End’.

In 1902, the Second Revision of the New Series covered both these stations.

Nevertheless, they retained their old names on the map, and continued to do so even on the earliest state of the Popular Edition Sheet 106 Watford. Ordnance Survey thinking seems to have been that a station called ‘Pinner and Hatch End’ located in Hatch End could be located easily enough; if they chose to leave the less obvious part of the title on the map, that would help rather than hinder identification.

On 1 February 1920 Pinner and Hatch End station was renamed ‘Hatch End for Pinner’. This change was reflected on the One-inch Popular, not on the 7/21 reprint but at least by the 5000/28 printing, which changed the wording to ‘Hatch End Sta’. By that printing also, ‘Harrow Sta’ was deleted.

There seems to be a general rule at work here that stations named ‘A and B’, located at the (lesser) place B might be marked on the map merely as ‘A’ if that was convenient. It was not, however, acceptable so to mark a station named ‘B for A’. Is anyone aware of any further examples to reinforce this?

(Editor’s note: This convention appears to have been mirrored by the half-inch series, and the illustrations are taken from the 1914 and 1925 Sheet 29 North London, St. Albans and Hertford.)
The covers of Sheet 31, Scotland Popular Edition

Brian Dobbie

The illustrations of this article show the inside covers of Popular Edition One-inch map of Scotland Sheet 31, Peterhead. The publication date of the map is 1930 with a print code 2300/30; the Magnetic Variation diagram is dated 1 January 1931.

The card covers seems to be slightly thicker than usual and the portion affixed to the map overlaps nearly all of the adjacent segment, instead of the usual half-inch. There are no distinguishing (i.e. printing) marks on the cover. However, a very small sticker has been placed over the original price at the bottom of the front cover outside to now read ‘Mounted 2/6 net.’

The inside of the front cover is a conventional sign panel named ‘REFERENCE’, which is fully coloured in black, red, blue, yellow, brown and green; the ‘Sand & Mud’ on the shoreline is also colour stippled. This ‘Reference’ panel is in addition to that shown on the map; the only difference between the two panels appears to be that Telephone Call Box is TCB on the cover but T.C.B. on the map. (I am unable to spot one on the map itself!)
The inside of the rear cover is printed in black other than the ‘O’ and ‘S’ of Ordnance Survey, ‘MAPS’, and the tesseract at the italic note at the bottom of the panel, which are all in red.
Cartographic discoveries

Richard Oliver

Over the past few years a number of interesting ‘new’ Ordnance Survey maps have come to light and have been reported as ‘cartographic discoveries’ in short notes in Sheetlines. Some of these maps, notably the six-inch (1:10,560) sheet of 1853 with colour-printed contours,1 and the ‘King Alfred map’ of 1916,2 were known to have been prepared, but hitherto no copy had been known to survive: others, such as a part-drawn Half-inch Second Edition Sheet 50 of 1948,3 were quite unsuspected. Over the past few months there has been an unusual number of ‘finds’, or of maps which had been known about for a little longer being reinterpreted in a new light, and thus a more extended statement is called for.

Early 1:2500 surveys in the Forest of Dean and on the Berkshire-Surrey border

The first two ‘discoveries’ will possibly be regarded by purists as not really ‘discoveries’ at all, as they have been available in the Public Record Office for the past thirty years or more, and one actually appears in the printed PRO catalogue.4 Nonetheless, I do not think that either have been mentioned in secondary literature before, and they constitute a small extension to the mid-Victorian 1:2500 database.

The first is PRO MR 1333, ‘Plan of part of the Forest of Dean in the County of Gloucester’. It is in manuscript, and measures about 45 by 60 inches overall. It appears to have been prepared in connection with a proposal for a barracks (the PRO catalogue suggests an encampment). Outline is in black, building outlines and altitudes (no datum is stated) are in red, water outline is dark blue, with blue infill, and buildings are infilled in carmine. Gardens are indicated by grey diagonals. Marsh is in black with blue flecking. There are no field numbers: the altitudes run in straight lines, presumably corresponding to tertiary trigonometrical lines. The lettering is practically up to engraved standards. The map is described as surveyed and drawn under the direction of Captain John Cameron, and is signed by Lt-Col Henry James, 27 August 1855.

The second is PRO WO 78/577, which was probably omitted from the published catalogue because it was a year too late for its terms of reference. It is printed, and bears the title Ordnance Survey of the Royal Military College Estate. It was zincographed (with customary hand-colour of roads, buildings and water) under the direction of Captain A. de C. Scott, and carries the date July 1861. There are no field numbers or acreages, but a note gives the content as 890a. 1r. 2p. of land and 35a. 3r. 0p. of water, total 926a. 0r. 23p. (This is in contrast to all other printed 1:2500s known to me, which give acreages in decimals, to thousandths of an acre.) Otherwise, the style is generally that of the standard 1:2500 of the period, although the map, which measures about 36 by 48 inches, is oriented to the north-west.

Something not shown on standard 1:2500s, or indeed 1:500s and their kin, are the services to the college: a note explains that red lines are drains, blue lines are water mains and yellow lines are gas mains, and for good measure (or for the convenience of users of uncoloured copies?) these are annotated thus on the face of the map as well. Details shown include manholes on drains, a Vent Shaft, Gymnastic Posts (a group of dots), a Skittle Alley, steps to buildings, bench marks (but no spot heights), ‘S.Dial’ (sundial), the

1 See Sheetlines 29 (January 1991), p27.
3 Ibid.
Berkshire–Surrey County boundary (long pecks) and dots (similar to the convention for township boundaries on standard 1:2500s of this date) round the estate boundary.

The borders on early One-inch Old Series quarter-sheets

It is well known that in circa 1829 it was decided that in future all One-inch (1:63,360) Old Series sheets would be engraved as quarter-sheets rather than as full sheets: the first thus to be published was sheet 54, which appeared (nominally, anyway) on 7 May 1831. The object of ‘quarterming’ was to speed up output: it was possible for four engravers to work simultaneously on one full sheet, though I don’t know whether this ideal was ever realised in practice!

One of the striking characteristics of the standard Old Series ‘design’ is the ‘keyboard border’, which was also used by contemporary commercial publishers such as Christopher Greenwood, and occasionally on manuscript estate and like maps. It was used on the Faden/Mudge mapping of Kent of 1801, the design of which may have owed as much to Faden, a commercial publisher, as to Mudge and his Ordnance subordinates: the border was only engraved on what would be the outer edges when the four sheets were mounted as one. This practice was followed on some later issues, for example, the eight Devon sheets (20–27) of 1809; others lacked any border (e.g. the ‘Pembroke group’—sheets 28, 38–40, 58—of 1818–20).

For those who wanted keyboard borders on mounted sheets, a sheet of keyboard border strips was engraved, and Old Series sheets are sometimes encountered to which such a border has been added. The Isle of Wight sheet, 10, of 1810, was notable for both the first known use of the words ‘Ordnance Survey’ and for carrying a keyboard border on all four sides, though this was because the sheet was regarded, in effect, as a one-sheet entity. The addition or completion of keyboard borders on published Old Series sheets and their incorporation as standard on all further publications dates from about 1823–24: the turning point may be marked by the lack of a border on a proof copy of sheet 64, with publication date (evidently speculative) of 1823, although all published copies (first printed early in 1825) have a complete keyboard border. The only exception was on sheet 47, where the neat line was too close to the edge of the plate to allow a full keyboard border to be added. Elsewhere, as on the eight Devon sheets originally published in 1809, the keyboard border was added even though it entailed subsuming various marginal notes. (See Figure 1.)

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6 In Cambridge University Library map library, in Maps 34.01.61. (This state is not listed in the cartobibliography in Harry Margary, The Old Series Ordnance Survey ..., Vol. 5, Lympne, Harry Margary, 1987.)

7 Margary, Old Series..., 5, xxiv.

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Figure 1. The south-west corner of One-inch Old Series Sheet 27 (1809), with the publication date surrounded by the ‘keyboard’ added in the mid-1820s. (Scale as original.)
Given this background, it might seem logical that when the first quarter sheets were put in hand in circa 1829 that they, too, should have had a complete keyboard border on all four sides. However, it can now be stated unequivocally that this was not so. The first three Old Series sheets to be published in quarters at first only had the keyboard border engraved on the outer sides, so that it would appear complete when the four quarters were mounted as one; in effect, this reverted to the practice of the early sheets, except that the ‘entity’ was now a single ‘full sheet’ rather than a group of several full sheets representing a county-oriented group. It may be suspected that this practice did not last very long, and that by about 1832–33 all quarter sheets were being provided with full keyboard borders.

This interesting minor addition to the Old Series story is due to the paucity of surviving copies of quarter sheets as independent entities, as opposed to having been mounted together in fours to form full sheets. The equivalent of 41 ‘full’ sheets were published or (in the case of sheets 1 and 48) republished in ‘quarters’ on 157 copper plates (a few later ones were half-sheets, e.g. 49, 67) between 1831 and 1844: of the thousands of copies which were printed before circa 1850 which are recorded in the carto–bibliographies in the Harry Margary facsimile volumes, only about a tenth are substantially as printed, i.e. have not had the borders removed for mounting, and most of those are a single group in the Royal Geographical Society’s collection, or in a set supplied to the State Paper Office in 1844 and now in the Public Record Office.

Recently, five early printings, with complete margins and on ‘India paper’, of sheets 43 NE, SW and SE and 55 SW and SE, have come to light in a private collection; all five have the keyboard border engraved on the outer edge only. (See Figure 2A.) In the same collection (but of different provenance) are copies of all four quarters of sheets 43, 54 and 55, also on India paper, each mounted as a ‘full sheet’. The mounting was done in such a way as to provide a small east-west overlap where the quarters were joined, and the extreme thinness of the paper facilitates examination, with the assistance of a desk–lamp with a 60-watt bulb. This shows without a doubt that all three were assembled from quarter sheets with only the outer border; a four–in–one copy of sheet 53, from the same original collection as the other three, was assembled from quarters with complete borders, and effectively acts as a ‘control’.

When the ‘inner borders’ were completed on sheets 43, 54 and 55, the join of the old work to the new was not absolutely perfect (see Figure 2B), although without the hint provided by the five India paper copies it is unlikely that this would have been noticed. No such ‘join’ has been found on any other Old Series quarter sheets.

The use of India paper for printing copies the Old Series seems to have lasted from the early 1820s through to about 1840. It is very light, that used by the OS being about a quarter or less of the weight of the standard paper (about 150 gsm) used for printing the Old Series at this period. It has been much more widely used for Bibles, prayer-books and dictionaries, for obvious reasons of compactness. It is unclear why it should have been employed for the Old Series (that ink printed on it was much less liable to discolour than on conventional bleached papers was certainly not the reason), and the form of the surviving copies does not help much; the five loose quarters of sheets 43 and 55 are paper-flat with no backing (and hence very fragile), the mounted copies in the same collection are on fine-quality cloth, folded and in slip-cases (suggesting library use), and four examples of c.1840 (sheets 42 NW and SE, 82 NE and SE) in another private collection have been mounted on stiff paper. It is also curious that the surviving copies all seem to be of the

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9 Margary, Old Series, Vol. 4, p.xxix.
Figure 2. The north-west corner of the One-inch Old Series Sheet 43 SW (published 1831).

*Figure 2A*, as originally published, with the ‘keyboard’ border only engraved on the outer border (here adjoining Sheet 42) but not on the inside edge where it adjoins the north-west quarter of Sheet 43 (by courtesy of Dr Roger Hellyer).

*Figure 2B*, with the ‘keyboard’ border added on the inside; the ‘join’ is arrowed (from a copy printed ?October 1856, in the writer’s collection).

(Both enlarged to about 140 per cent of original scale.)
respective sheets in either first or otherwise very early state. One possible use would be as travelling maps: when mounted on fine cloth, these sheets would be about a third of the bulk of the standard sheets, and this would be of obvious use for travellers on horseback, who would be as limited in their luggage capacity as are modern-day cyclists. But this need would not diminish as the years went by, so it seems an inadequate explanation.

It is possible that other India-paper copies survive in various public and private collections, possibly ‘disguised’ by being mounted on comparatively thick ‘cloth’, and I hope that this note will be instrumental in bringing them to light.

*Western Front* squaring on British one-inch mapping

In my paper on the development of grid systems in *Sheetlines* 43 (August 1995), pp.29–30, I referred to copies of One-inch *Third Edition (Large Sheet Series)* Sheets 107 and 115 which were overprinted with the Western Front artillery squaring system, and, on the authority of the late Guy Messenger’s monograph on the Large Sheet Series, wrote that they were ‘possibly overprinted in 1918 for the Royal Veterinary Corps’. My attention has since been drawn to two further copies of Sheet 115, which suggest that, whatever the motive for producing these squared versions, Sheet 115 at least was probably being printed in this form as early as 1914–15, i.e. contemporary with the two Aldershot sheets, and that there were at least two printings (or overprintings) of this sheet.

The earlier of the two copies has the date-code bottom left ‘8.11’ and price range 1/6 to 2/6, but lacks a sheet name, i.e. is Guy Messenger’s state 115.1u: this suggests that the base-map at least was printed not later than the spring of 1915. Although the red overprinted squaring is nominally based on the mile, the average of the squares is a little smaller, as on the eastern side there is a narrow extra strip tapering from about 0.20 to about 0.07 inch in width. (See Figure 3A.)

The later of the two copies has the same date-code ‘8.11’, no sheet name, and price range 1/6 to 3/–, i.e. is Guy Messenger’s state 115.1v(i): it is assumed that the base-map was printed after April 1915. The red squaring has been redrawn, and is now a much better fit west-to-east, with no extra narrow strip on the east side, though on both the north and south sides there is a gap of about 0.10 inch between the ends of the grid lines and the neat line. However, references theoretically correct to 88 yards (by dividing the sub-squares into tenths) will not be precisely the same for each version of the sheet. (See Figure 3B.)

The importance of this is that, whatever the motive was in adding squaring to Sheet 115, it was not a ‘one-off’: the need was either a continuing one, or else recurred later.

(Just as this article was being dispatched, a third ‘squared’ copy of Sheet 115, state 1u, has been reported to me by Roger Hellyer: it carries 1000–yard squares, i.e. the same unit as used on the Western Front maps. This adds rather than subtracts questions: I hope to report further in the next issue of *Sheetlines*.)

*Early One-inch Fifth Edition sheet lines*

In my article on the sheet lines and overlaps of the One-inch *Fifth* and New *Popular Editions in Sheetlines* 44, I stated on page 27 that the first known index to the *Fifth Edition* sheet lines probably appeared in 1932. Roger Hellyer has since drawn my attention to a 500/31 printing of this index. It shows Sheet 34 as a landscape-shaped sheet (as on the relatively familiar 10,000/36 printing of the index), and Sheet 146 as 5000 yards to the east of its published position (710,000 to 770,000 as against 705,000 to 765,000 yards east), and thus involving extruding Land’s End. No sheet lines are shown for south-west Scotland. (See Figure 4.)

This suggests that the undated index in Public Record Office file OS 1/312 dates from 1931 or earlier, and that by the end of 1931 it had been decided to have Sheet 34 as
Figure 3. One-inch Third Edition England and Wales (Large Sheet Series) Sheet 115, with squaring.

Figure 3A, on a copy of Guy Messenger’s State 115.lu; observe the narrow ‘extra’ strip on the east side.

Figure 3B, on a copy of Guy Messenger’s State 115.lv; observe good fit of squaring with eastern neat-line.

(Both by courtesy of Dr Roger Hellyer. Scale as original.)
a landscape–shaped sheet. Despite this, the *Fifth Edition* progress diagrams in OS annual reports up to 1937 continued to show Sheet 34 as a portrait–shaped sheet, which is perhaps to be explained by inertia or negligence rather than conscious policy.

**A ‘layered’ GSGS 3907 sheet**

Roger Hellyer has recently found a copy of GSGS 3907 (England and Wales One-inch Second War Revision) Sheet 105, print-code 15,000/1/44/16MRS/104, to which layer colours have been added: 350 to 450 feet in yellow, 450 to 550 feet in light brown, and 550 feet and above in a solid brown which is very similar to the brownish orange used for road infills. Roger suggests that it may have been produced for Staff College, Camberley purposes, and points to the printing (documented in Ministry of Defence records: no examples of the maps have yet been recorded) of composites with layers of Sheets 105 and 113, and 113 and 114, both in a run of 500 copies, for the Staff College in December 1947.

**GSGS 4620A: the ‘layered’ New Popular**

In my booklet on the One-inch *New Popular Edition*, I briefly described the military version of this mapping, GSGS 4620, and referred to a layered version, GSGS 4620A, of which I understood that about a dozen sheets had been produced. Thanks to Roger Hellyer’s industry, in pursuing both the maps and ancillary documentation, I can now be more precise. In the late 1940s Sheets
were printed with layers. Roger suggests that they were printed for instructional purposes for the Staff College, Camberley. It is known from surviving copies that at least some were reprinted, and, indeed, 10,000 copies of Sheet 145 were printed as late as January 1962. The lack of a NATO Standard Series Designation on this last is a strong indicator that this (and, by implication, the earlier printings of GSGS 4620A) was a ‘training’ rather than an ‘operational’ map: had it been ‘operational’ it would surely have carried the SSD ‘M.722’.

The 1:100,000 of Northern Ireland

Brief reference to this apparently abortive series was made in Sheetlines 46 (August 1996), p.39. It was known that Sheet 4 had actually been printed, but withheld from publication: recently some details have emerged which will no doubt enable readers to decide whether they are missing anything.

The sheet covers an area of 110 km west to east by 75 km south to north. The paper, untrimmed, measures 1165 mm left to right by 932 mm bottom to top. The title top left is ‘Ireland 1:100,000 Sheet 4’, with ‘Heights in metres’ top right. The bottom margin contains, left to right: the legend; north points information; scale bars (kilometres and miles) bottom centre; relief information, including layer-box; grid referencing instructions and compilation notes; index to adjoining sheets; and ‘Ireland 1:100,000 Sheet 4 South–East Ulster’ above publication notes, which include ‘Edition A’ and ‘Crown Copyright 1993’. There is no statement of by whom the map was printed; it appears to be in the four process colours.

The grid is printed in blue, with Gill Sans figures, at 1 km intervals in the border [5-point] and (in slightly larger [6-point] figures) at 2 km intervals on the map face. Although grid lines at 1 cm interval may seem close, in fact the result here is outstandingly successful: possibly the most successful feature of the map, apart from the principle of its scale.

The legend (in English) indicates the following information:

Roads and paths: Motorways (about 0.7 mm: solid blue; constructing, cased pecks; projected, uncased pecks), Class A (about 0.7 mm: solid red; constructing and projected as motorways), Class B (about 0.7 mm: solid brown), National Primary (about 0.7 mm: solid green; constructing and projected as motorways), National Secondary (about 0.7 mm: solid brown), ‘Minor Routes’ (about 0.5 mm: solid cased, no infill; these appear to be the minor tarred roads shown on the 1:50,000 map, though there are a few omissions, e.g. that from J297781 to 298782, and the bends are rather generalised), ‘Tracks or Trails’ (these appear to be confined to long-distance footpaths: pecks 2 mm, 0.5 mm gap), gradients 1 in 7 and steeper.

General features: built-up areas (screened black); ‘Buildings: standard’ (small black squares); ‘Buildings: public’; churches with tower, spire, without either [as compared with the 1:50,000, the depiction of these is extremely selective, particularly in built-up areas]; approved frontier crossing point (red five-pointed star); windmill (‘collapsing garden shed’ symbol); windmill stump (as on 1:50,000); woods (solid green); triangulation pillar; quarry (side–hachures); windpump; telecommunication mast (usual symbol); lighthouses in use, disused; glasshouses (black cross-hatching); electricity transmission line (pylon symbols at about 8 mm interval).

Water features: cliffs (usual style); flat rock (ditto); sand, shingle or mud (fine screened black); marsh (usual); lake, lough or pond, with Dam (black bar); canals, in use (side-bars, at 1.5 mm interval), disused (ditto, pecked); highest point to which tides flow (change from black to blue casing); ferries, vehicular and passenger.

Tourist information (in red unless noted otherwise, using the customary symbols): information centre, parking, caravan and camp sites, telephone (public) (in black), ditto (motoring organisation) (in red), picnic area,
golf course (with number of holes), youth hostel, bus station, boating activities, way-marked walks (2 mm pecks with 1 mm gap), ‘Beauty spot, place of historic interest, historic house, country park, ancient monument’ (screened red highlighting; where this coincides with woodland, the green is omitted).

**Antiquities**: site of antiquity (black hollow five-pointed star); battlefield (with date) (crossed swords).

**Railways**: solid black (about 0.2 mm), with bridge, viaduct, station, tunnel, level crossing (LC), cutting, embankment (all by the usual symbols), dismantled railway (about 0.7 mm pecks with 0.3 mm gaps).

**Abbreviations**: Cemy, Coll, CG, Hospl, Mem, Mon, P (post office), Sch, TH.

**Boundaries**: International boundary (black pecks: 5 mm, 1.5 mm gap, 2.5 mm), county boundary (black 0.5 mm squares, 2 mm centre–to–centre: these are ‘historic’ counties, named in 22–point open Roman), Local Government District boundary (as on 1:50,000), (named in 11–point open Roman), 4 mm centre–to–centre, county and LGD boundary [as 1:50,000: 6 mm centre–to–centre]; National Forest Park (solid green, cased black), National Trust, always open (red), opening restricted (blue).

**Relief**: spot heights, to nearest metre; contours (brown) at 20 metre interval; ‘Contour layer interval’: 0–60 metres, light screened green; 60–120 metres, medium screened green; 120–240 metres, light yellow–brown; 240–360 metres, brownish–yellow; 360–480 metres, darker brownish–yellow; 480–600 metres, light yellowish–brown; 600 metres and above, lightish grey–brown.

On the face of the map, towns are named following the practice of the 1:50,000, i.e. smaller ones in Univers [about 5–point] and larger in Times [5–point to 9–point]; villages are generally those named on the 1:50,000 in 4.5–point Univers (the same size is used here); almost all the hills named in italic capitals on 1:50,000 are named here, in between 3 and 5 point italic; antiquity names in 3-point ‘Olde Englishe’; minor water names are in 3–point italic Gills Sans; headlands are in 3–point Univers. District and mountain range names are in 8.5–point Univers capitals.

**A curious map of Hampshire**

From the time of the six-inch (1:10,560) survey of Ireland (published 1833–46) onwards, it was Ordnance Survey practice to publish for each county an index, at a scale of from one inch to quarter-inch to one mile (1:63,360 to 1:253,440). At first these indexes showed only the sheet lines of the six-inch maps, but by circa 1880 they were also showing 1:2500 sheet lines, and, by circular hatched areas, towns published at 1:500.

These indexes have not yet been studied closely, but any such work will have to take account of a version of the index to the six-inch of Hampshire which has recently come to my notice in a private collection. As first published in about 1880, at half–inch (1:126,720) scale, the Hampshire index was completely standard, with six–inch and 1:2500 sheet lines, and engraved on, and printed from, copper; it also conformed to the usual pattern for indexes at that scale, in that, as compared with both OS and commercial topographic mapping at that scale, there were comparatively few minor place-names. The version now under notice has, bottom centre, ‘Printed at the Ordnance Survey Office, Southampton, in 1897’, and, though there is no statement to that effect, is printed lithographically or (more probably) zinco-graphically. What is striking is that almost all indications of six–inch and 1:2500 sheet lines have been removed, excepting only three corners in the sea off the Isle of Wight, and another outside the county north–west of Andover. (See Figure 5.) The cross–hatching to indicate towns mapped at 1:2500 has been retained, as has the legend panel giving the key to six-inch and 1:2500 sheet numbers, and the title, *Index to the Ordnance Survey of Hampshire*...
Figure 5. From Index to the Ordnance Survey of Hampshire on a scale of six inches to one statute mile, undated.

Figure 5A, inland detail.

Figure 5B, residual corners of six-inch full sheet lines off the Isle of Wight.

(Scale as original.)
The map poses two questions:

1. Are there any others like it?
2. Why was it produced?

Question (1) will perhaps be answered by readers. As for question (2), it may not be a coincidence that in 1897 local government boundaries had just been reorganised (by the Local Government Acts of 1888 and 1894, which created County, Parish, Urban and Rural District Councils), and that the large-scale mapping of Hampshire was being revised, with the concomitant replacement of six-inch cover in engraved full sheets by photo–zincographed quarter–sheets. One wonders if the intention was to overprint the six–inch and larger–scale sheet lines in red, and the various administrative boundaries in some other colour. Also, for those counties for which the six–inch cover had been first published from 1882 onwards, and hence was wholly by quarter–sheets, the index maps consisted of a black base–map, with table of areas of civil parishes, and six–inch sheet lines overprinted in red; the base-map was issued both with and without the sheet line overprint, and one wonders if this was the intention here. If so, there was a change of policy shortly afterwards, as by 1899–1900 the standard form for county administrative diagrams was to have both base-map and large-scale sheet lines in black, and the administrative boundaries in other colours, including poor law union boundaries in red. Was the combination of red sheet lines and red union boundaries tried, and found wanting?

I need hardly say that a complete catalogue of Ordnance Survey administrative mapping produced at 1:63,360 and smaller scales would be a great boon, both to historians of cartography and to those whose main interest is in change to administrative boundaries.

**Work in Progress**

**1914-18 Last Call:**

Peter Chasseaud is completing his History of Field Survey in the 1914-18 War (Western Front) for publication in 1998, and would be grateful for any information, and possible loan of maps, photographs, documents, etc., relating to engineer and artillery survey and the work of the Topographical Sections, Field Survey Companies, Observation Groups, Sound Ranging Sections, etc..

As far as maps are concerned, I am still anxious to track down ‘A’ Series sheets of France and Belgium (1:20,000), and also the enlargements of the French 1:80,000 to the scale of 1:40,000 or 1:20,000 which were printed at the Ordnance Survey in September 1914; these latter are of the Aisne area, and were presumably quarter sheets of the French 1:80,000 sheet 33 Soissons and surrounding sheets.

Examples of fieldwork such as plane-table sheets or log and notebooks would be particularly useful.

**1939-45 Maps:**

Peter is also looking for British military maps of the Second World War — in particular small or large scale sheets covering Greece, Crete, Sardinia, Corsica, Italy, Sicily, etc.; Alamein, Normandy, Dieppe, Arnhem and other European operations, especially maps relating to artillery fireplans, but also other large-scale maps.

Peter Chasseaud’s address is:
17, St Anne’s Crescent, Lewes, BN7 1SB, Tel: 01273 476265.
Large Scale National Grid mapping in the County of Cornwall

John Cole

At the time of writing the list comprises at least 244 1:1250 maps, 3800 1:2500 (single kms) and 180 1:10,000. These latter derived from the larger scales with the exception of certain coastal sheets and the few in the Isles of Scilly. In certain parts of the county they will have superseded 1:10,560 mapping, since post 1939-45 war survey or revision commenced in the early 1950s.

All early style 1:2500 maps in a 1km by 1km format are to be found in the east of the county. Pre-war 1:2500 mapping of Devon and Cornwall was on separate meridians, a state of affairs which usually caused problems when old maps were re-constituted onto the National Grid, in the immediate vicinity of the county boundary. The revision, mainly during 1950-55 was taken as far west as an irregular line running from Poundstock (south of Bude) to Bolventor; east to Stoke Climsland; south to Pillaton; west to Quethiock, and south again to Seaton. Revision was purely by ground methods (no air photography was used - except possibly for the revision of the low tide mark, but this is no means certain) and the area included 144 of the ‘infamous’ by-passed maps (described by Richard Oliver in Sheetlines 29, January 1991, and elsewhere.) The total number of maps (included by-passed) is again known to have exceeded 900.

Work resumed at the west of the county in 1960. Again it was mainly by ground effort but a total of 21 km covering Penzance and the surrounding area were revised from air photography. The total area covered in this phase of the revision (taking it to 1962/63) was again irregularly bounded being mainly the southern part of West Penwith (up to the 30N grid line) and the countryside up to and including St Ives and Hayle. At this time the OS sought to revise important towns which in the normal course of events were many years ahead in the revision programme. Thus in Cornwall, 8 km in and around Bodmin were completed in 1963.

In 1964 work switched to Truro where built-up area and a further 80 km of surrounding country were revised in the following two years. At the same time 8 km (all but two by air photography) were completed at the R.A.F. ‘village’ of St Eval, north-east of Newquay. Newquay itself was initially attempted by ground methods of revision in 1965, but possibly influenced by problems at Truro, which slowed work considerably, was abandoned and most of the town air-revised in 1967. Helston and its surrounds were tackled by the same means at about the same time, thereafter a short break followed in 1:2500 work.

From 1968 onwards local staff were trained in simple air revision techniques and an immediate acceleration in productivity was apparent. Air photo revision at Southampton continued for the more difficult areas which included parts of china clay country and afforested sections of Bodmin Moor, and also the Isles of Scilly, where 30 km at 1:2500 were revised in 1978. Such revision, done either locally or at OS Headquarters, always required an element of ground completion, but the work was speeded up to such an extent that completion in 1981 also included the originally by-passed maps.

Changes in the areas already published were proceeding apace and one of the early ‘B’ editions in the west of the county appeared at Penzance in 1969. Although from 1959 the 1:2500 format had altered to 2 by 1 km, in the 1970s reprints of the ‘A’ editions emerged in 1 by 1 km style with metric values, revised boundaries and later survey information. Some ‘B’ editions were treated in the same way when there was little or no change on the adjoining km, but by the mid-80s plans were advanced to republish these in 2 by 1 format once again. (Though in fact
none such appeared, at least in west Cornwall.)

Amongst the characteristics of the early 1:2500 to be found are the lack of house numbers and only selected house names; distinctive vegetation symbols for bushes, rough pasture and underwood, and ornamental detail for cliffs and foreshore, etc. Such were phased in or out in 1959, 1963 and 1968 respectively.

On maps covering Launceston and Saltash re-surveyed at 1:2500 in the early 1950s, Revision Points (RPs) are shown by dots (as opposed to a ‘tadpole’ symbol on the early 1:1250.) These were control points (of a much lower order than trigonometrical stations) which facilitated a skeleton survey by chain measurement. The old 1:2500 was fitted block by block to the road frontages provided by chain, and the whole revised. As the RPs were accurate to approximately 0.2m on the National Grid the result was considerably superior to the reconstituted and overhauled maps of the rest of the 1:2500. Several kms in the Plymouth area contained 1:2500 on the Cornish side of the Tamar and 1:1250 on the Devonshire side (the latter reduced to 1:2500.)

Saltash (in 1967-68) and Torpoint (in 1981) were eventually re-surveyed at 1:1250 scale. Elsewhere in Cornwall 1:1250 were published for: the City of Truro; the towns of Camborne, Redruth, Falmouth, Penryn, St. Austell and Penzance; the villages of Charlestown, Newlyn and Flushing; the parish of Illogan (and its districts of Park Bottom, Vogue Beloth, Paynters Lane End and West Tolgus), and the urban district of Carlyon Bay.

Camborne and Redruth with their intermediate built up area of Tuckingmill, Pool and Illogan Highway was the first 1:1250 re-survey in Cornwall originally totalling 53 maps and taking from 1963 to 1967 to complete. The skeleton survey was by tacheometer, a theodolite with distance measuring capability (but not as sophisticated as modern electronic distance measuring.) St Austell - 38 maps including Charlestown and Carlyon Bay, and Falmouth/Penryn (including Flushing) – 46 followed in 1967/68. In the case of these towns the skeleton survey was provided by air photography plotted on stereo machines – a method employed for the majority of 1:1250 areas from that time on. Ten maps at Illogan, two at Redruth and one at Penryn were surveyed by this means in the early 1980s. Two others in the Redruth area were produced from tachy surveys. Finally, Truro, 1986, and Penzance/Newlyn, 1987, (25 and 26 maps respectively) were re-surveyed by private contract overseen by the OS. All the sheets were published on chart paper, as well as digital tape, but the last four at Penzance appeared in a chart form known as automated map production.

Digitising of the 1:1250 and 1:2500, as well as continuing to produce on chart paper, commenced in Cornwall in the mid-1970s, but at the same time 47 maps in the 1960s West Penwith area were also digitised without the chart paper copies being re-published – no revision taking place in this sector (with the exception of Sennen Cove) until 1988.

With Continuous Revision in operation from mid-1960s on, many 1:1250 and 1:2500 maps were re-published as ‘B’, ‘C’ and even ‘D’ editions, but it is not thought that this letter was exceeded in Cornwall by the end of chart paper production.
The Rivals
Richard Oliver

Following my article in *Sheetlines* 47 on the Ordnance Survey’s commercial rivals, a number of corrections and additions have come to my notice, for most of which I am indebted to Eugene Burden.

**Bacon fifth-inch map**

This started life in 1792 as ‘Cary’s New Map of England and Wales’. The plates were re-engraved in 1816. After Cary’s death the plates were purchased by Crutchley, but not used; at Crutchley’s sale in 1877 they passed to G.W. Bacon, who added railways and revised spellings and then used them in his *New Ordnance Atlas of the British Isles* in 1883 and from about 1885 as ‘Bacon’s Cycling Road Map of England in Seven Sheets’. They continued to be reissued until c.1927 as ‘Bacon’s Motoring and Cycling Map of England and Wales’, in eleven sheets, and finally with Ministry of Transport A–road numbers!

**The Bartholomew quarter-inch map**

This was first published as ‘Black’s New Large Map of England and Wales according to the Ordnance and Admiralty Surveys’, by A. & C. Black, apparently in 1866 (the copy in the Royal Geographical Society (E. & W. G.43) was presented on 1 October 1866), and as ‘The Imperial Map of England and Wales according to the Ordnance Survey’ (e.g. R.G.S. E. & W. G.44). This implies that in the far north of England the data was obtained either from the OS six-inch, or else from non-OS sources, as 1866 is a shade too early for complete OS one-inch cover, even in the uncontroled and untree’d outline version.

Anyway, by 1880 the mapping was published as ‘The Large Map of England & Wales’, by 1890 it was ‘The New Series Road Map of England and Wales’ (still in sixteen sheets), and by 1898 it had been recast in twelve sheets as ‘Road Map of England & Wales’.

**Bacon fifth-inch map**

The Bartholomew half-inch map of the River Thames with hachures, though no doubt derived substantially from the OS One-inch *Old Series*, has a somewhat chequered history. It started out as a plate in Weller’s ‘Dispatch Atlas’ in 1863, was revised by Dower and reissued by Cassell’s in 1865, then went to Bacon, who published an edition in 1869, and finally reached Bartholomew in 1875! They did not replace it until *circa*1908.

**Bartholomew’s engravers**

As part of a contribution to a wider discussion of engraving and lithography which took place in February on the Maphist e-mail ‘list’, Margaret Wilkes, head of the map library at the National Library of Scotland, posted a memorandum by Mr John C. Bartholomew on the last engravers to work for the family firm. From this it appears that the last major engraving project was completed in 1959: *The Times Atlas of the World—Mid-Century Edition*, in five volumes. Further plate revision of the half-inch series continued until 1968 as back-up for revision on glass or film. The last new plate, *Map of Scotland*, was engraved by David Webster in historical style with royal arms and six city or county crests in 1970 or soon thereafter. (A limited edition (100 copies) is at present on sale by the Carson Clark Gallery, 173 Canongate, Edinburgh EH8 8BN.)

**Gall and Inglis half-inch**

This started life as a half-inch map published in parts by G. & J. Cary between 1820 and c.1830, before being collected as ‘Cary’s Improved Map of England & Wales’.
in 1832. After Cary’s death the plates were bought by Crutchley, who at first printed directly from them, and then later by lithography. In 1877 the plates were purchased by Gall & Inglis.

**Philip/Ravenstein half/third-inch map**

This was originally engraved at 1:200,000, 1 inch to 3.15 miles, and this scale was retained for later issues, into the 1930s.\(^1\)

The half-inch maps were photo-enlargements of the 1:200,000, which explains their rather bold detailing.

**Stanford three-mile (1:190,080) map**

This was originally published in 1815 as Aaron Arrowsmith’s ‘Map of England and Wales – The result of fifteen years labour’. Edward Stanford bought the plates at auction in 1874 and used them for his ‘Railway & Station Map of England & Wales in 24 Sheets’ in 1876, which continued publication until at least 1884.

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**Bogs, safe or otherwise**

Richard Oliver

Recently, whilst looking at my copy of the military map reading manual of 1929, Rob Wheeler pointed out to me something which I must have seen but not observed before: the symbols given there for the One-inch *Popular Edition* include separate ones for ‘Marsh’ and ‘Dangerous Bog’; they are very similar, but whereas the marsh symbols lack a definite band or case, those for ‘dangerous bog’ have a definite shaded limit.\(^1\)

On the legend of the one-inch map from the *Popular Edition* onwards, only a ‘marsh’ symbol is shown, and only ‘marsh’ is shown in the symbols for the One-inch *Fifth Edition* in the 1939 version of the military map-reading manual.\(^2\)

Reference to various instructions to one-inch field revisers issued at various dates between 1896 and 1961 show that for the whole of that period the one-inch revisers were instructed to indicate marsh and bog by ‘M’ and ‘B’ respectively on their six-inch field sheets.\(^3\)

On map legends only the ‘marsh’ symbol appears, but it is of interest that in the 1913 edition of his *Maps and Survey* A. R. Hinks chooses to illustrate ‘marsh’ by a small extract of One-inch *New Series* mapping of Chat Moss in Lancashire, which is definitely cased, but looks rather more like ‘rough pasture’ than ‘marsh’.\(^4\)

On nineteenth century first edition six-inch and 1:2500 mapping there was a single symbol for ‘Marsh or Flow Bog’ in Ireland and Scotland, but separate symbols for ‘Marsh’ and ‘Bog or Moss’ in England and Wales. With the onset of revision, from the 1890s onwards, only ‘Marsh’ seems to have been used, at any rate in Great Britain, and it is somewhat curious that separate ‘Marsh’ and ‘Bog’ distinctions should have been retained, at any rate in revising the small scales.

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\(^3\) Instructions for the revision of the one-inch map in the field (1896), paragraph 22; Instructions to field revisers and draftsmen for the revision and preparation of the small scale maps... (1924), p.18; Instructions for the revision and drawing of the one-inch (Fifth Edition) map (1936), p.9; Instructions for small scales revision (the Green Book) (1961), Appendix A.

A partial clue is offered by the 1914 one-inch drawing instructions (no corresponding field revision instructions are known to survive), where on the drawings for the engravers, ‘The boundaries of marshes, and of dangerous bogs in Ireland, will be indicated by a blue band. M. will be written to marsh, and D.B. to dangerous bog.’ This seems reasonable enough, bearing in mind the economic importance and territorial extent of the bogs of Ireland, but why did the instruction to revisers survive for nearly forty years after the Ordnance Survey of Great Britain ceased to have responsibility for mapping Ireland?

Following a trip to Scotland, Rob Wheeler writes:

‘Inspection of some Scottish bogs ... suggests an answer. The variation between peat hags, squelchy grass, firm grass, short heather, long heather, boulder fields, etc, is of profound interest to the walker, the sportsman and the landowner, but to survey them would require detailed work to a level that the OS, in the nineteenth century, was not prepared to entertain for mountain and moorland. (Marsh is different, in that it is normally bounded by good agricultural land, with a clear division, often marked by an embankment. This was the sort of boundary that the surveyors were accustomed to show, anyway.) Even now the maps only show the wettest areas of bog in a very general way. I suggest that the Irish landowners wished all bogland to be mapped, but that someone in the OS with an understanding of what this would entail but with insufficient clout to stop the proposal altogether managed to water it down to dangerous bogs, a term so difficult of definition that it allows a surveyor to show the very worst bogs, or indeed none at all, without being liable to challenge. I can’t point to any documentary evidence for this, but I can make a prediction from it that could be tested: that depiction of dangerous bogs will depend more on the surveyor than on the country being surveyed.’

Perhaps the answer in practice is that ‘dangerous bogs’ are those impassable to pedestrians.

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5 Instructions for the revision of the small scale maps (provisional) - section dealing with drawing and examination (1” scale), O.S., January 1914, p.9. (Copy in OS Library, Southampton.)

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From the Railway Magazine, May 1935

By special arrangement with the Director General of the Ordnance Survey, a copy of the appropriate one-inch ordnance survey map is being exhibited, framed and glazed at those stations on the L.N.E.R. system which are popular with ramblers as starting points for walks. Each map bears a transparent arrow with the words “This Station” inscribed pointing to the position of the station on the map. No fewer than 170 maps have been provided for posting at a similar number of L.N.E.R. stations in 22 counties of England and Scotland.

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Brian Dobbie
Meeting Reports

Branston, Burton-on-Trent, 25 February, 1997

(This report was held over from the last issue of Sheetlines because of space.)

Five members of the Midland Group gathered at Branston for an informal evening of maps and talk about maps.

The small attendance was more than balanced by the quality of the items on show – these included two maps often talked of, but rarely seen: a fine copy of the Eclipse Map of 1927 with its haunting Ellis Martin cover (Hellyer 77 in Map Cover Art), and the first printing of the Old Sarum sheet of the ill-fated Celtic Earthworks of Salisbury Plain series (see Sheetlines 20, pp10-11). Irish mapping was represented by a large composite map of Dublin area (First edition sheets 101-2, 111-2, 120-1 and 129-30), which by co-incidence could be compared with the Dublin District sheet published in Southampton in 1918 and reprinted in Dublin in 1929. A number of recent Landranger and Explorer products were analysed, and for the technically minded, several OS Procedure Manuals (including Red Books, a Biscuit Book and an Administrative Boundaries Manual) were on view (see Sheetlines 24, pp 24-5).

As usual, as many questions were raised as were answered. Here are three:

1 A folded 1:25,000 First Series sheet with blue integral cover has the printed title SD99, Askrigg, and a price label of £1·00, dating its distribution to 1980-81. It opens to reveal not a part of the Yorkshire Dales, but the Outline Edition B/ (1964) of SU53 New Alresford in Hampshire. What is the explanation, and are there other examples?

2 A Conventional Signs card for GSGS 3907 and 3908 (the One-inch War Revision and Second War Revision), print code 100,000/1/42 L.R., includes an index showing both special sheets 1A and 117A, and the Fifth Edition sheetlines of Sheets 118-9, 127-8, 136-8, and 143-6, on which the War Revision sheets of south west England were based. Why then does the 1947 Description of Ordnance Survey Small Scale Maps include at plate 8 an index to the War Revision and Second War Revision of England and Wales showing sheets 1A and 117A, but with Popular Edition sheetlines in south west England?

3 A Popular Edition One-inch Tourist Map of the Peak District (print code 80/35), originally paper flat, has a cloth edition cover pasted to its south west corner, and across the face of the map in large blue lettering: “Ordnance Survey Map. One-inch to A Mile. 3/- on Cloth.” This was evidently a shop display. Do members know of similar examples; did the OS prepare such items or were they the work of local Agents or shopkeepers? (Answers please to the Editor of Sheetlines)

Bill Henwood

Visit to the Royal School of Military Survey, Hermitage, 11 April, 1997

This visit was one of the best I have been on for a very long time!

Twenty four members assembled in the Officers’ Mess at Denison Barracks Hermitage for what proved to be meticulously planned, information packed and incredibly well hosted visit. Our chaperone for the day was Captain Bob Payne, Training Co-ordinator, who greeted us on arrival. In the opening brief, John Knight, Principal Lecturer, gave a slide presentation outlining the function of Military Survey and within it the School.

This year Military Survey is celebrating its 250th year, taking General Roy’s mapping of Scotland in 1747 at the start point.
Although it was launched as Defence Agency in 1991, the purpose of Military Survey is to “ensure geographic support” for defence purposes. In 1997 this is more frequently seen as providing data rather than maps, as well as advice to commanders in the field. The library has 600,000 maps; 60,000 different map sheets with 19 million sheets in store. There are about 1200 members of staff, of which about a quarter are military personnel.

The School exists to train Military Survey (plus some other defence) personnel and support active operations. Established in 1833, it moved to Hermitage in 1949 has an international reputation for excellence, providing courses to MSc level. Increasingly, there is an emphasis commercial activity in order to Recover costs.

Activity revolves around three main departments, Topographic, Terrain Analysis and Reprographic. Following the brief, we split into two groups in order to visit three departments.

From Major Andy Brookes we learnt that although he had assembled an array of the latest electronic gadgetry for us to inspect, the School was still teaching traditional survey methods for use in field. Why? Because it is fairly easy to knock out modern equipment by jamming, so a fall back position is needed. Map reading is still of major importance and great pains are taken in this area, with grids and datums being the biggest problems to be overcome in teaching. Major Brookes had recently seen active service in Bosnia and was able to ensure that current Operational demands were built into training courses, a key feature in all aspects of the School’s work.

Perhaps the most exciting department was Terrain Analysis, which was in us by Major Peter McManners. A fighting force needs more than a map showing roads streams and villages. It needs to have the area of interest interpreted for it (all part of geographic support). Thematic maps are prepared, showing for example trafficability, in which elements such as soil, slope and geology are analysed to show how easy it is to move about in the area. Maps showing diggability mean just what they imply and are very necessary even today (assuming a conflict exists).

Photogrammetry equipment linked to computers are a basic piece of equipment (or kit as everything was referred to). Images are increasingly being obtained by satellites rather than aeroplanes and it is expected that by the end this year Russian images will be available with one metre resolution which is accurate enough for 1:25,000 mapping.

The computer room provided the science fiction for the day, although it was all real. A Spot satellite image of Hermitage was shown on a computer screen. A nice aerial photograph you might think until it was enlarged to 1:236 and one could see the cars in the car park. By pressing keys rulers appeared on the screen and the cars could be measured, whilst another key stroke produced the exact UTM or British National Grid coordinates. All very impressive, but nothing compared to the next trick. A spot image had been scanned into the computer as had a map of the same area. Again at the press of a button, one was superimposed on the other and the computer could check one against the other to identify any change to the landscape since the map was produced. Think about it, and the implications.

One had the impression that today maps are created on computer screens using pictures rather than by two people on the ground with poles and tripods. Suppliers of high resolution satellite images are competing with, and overtaking, air photography produced by commercial concerns and the Ordnance Survey. Russian images were frequently mentioned and waved about with no obvious embarrassment as to the source.

Major John Stamp guided us through the Reprographic Department which was perhaps the most conventional. Process cameras have been replaced by scanners, the latest being much smaller than one bought a couple of years ago. Not only smaller, but whereas the
first scanners were to replace the cameras, the new generation can manipulate data as well.

The printing room was very conventional with several small twenty-five year old German litho-presses being the pride and joy. Small presses fit onto fourteen ton lorries and can therefore be used on active service.

The final session was a chance to view some of the archive maps laid out for us by Mike Cull, together with a visit to the library where Debbie Barnes helped with some very difficult questions.

I feel that I should stress the tremendous emphasis put on training at Hermitage, which is after all the Royal School of Military Survey. One could spend days slowly moving along the corridors outside each department, studying the excellent displays which explain the work of each department. Every element is detailed in the clearest terms. Once learnt never forgotten. Everywhere, there was a constant mix of teachers and those who had recently been on a tour of duty and had returned to ensure that experience was built into courses. The latest modern gadgetry was very impressive, but so was the sight of new entrants learning to draw maps by hand – just in case!

Tea in the Officers’ Mess (the scene of an excellent buffet lunch provided by our hosts) allowed final questions to be asked along with sad-eyed reminiscences of Hermitage life in the late forties.

As I have said, this was an excellent visit, one of the best ever and we would like to thank Col. Peter Walker and Lieutenant James Prain for sanctioning it, Bob Payne for organising it, our guides and speakers in each department and David Wright for suggesting the visit and making preliminary enquiries.

As I was leaving, I noticed three watercolours on the wall and was pleased to see one by E.M. Jack and another by J.C.T. Willis, both of whom served as Directors General of the Ordnance Survey. Even nicer to see were the bank of eight Willis paintings which adorned another wall. A nice ending to a very nice day.

David Archer

Annual General Meeting, 17 May, 1997

The Charles Close Society’s Annual General Meeting was held at the Town Hall, Nuneaton, on 17 May, 1997, and was attended by yy members of the Society, but absent at that particular moment was the Dr Chris Board, Chairman of the Charles Close Society, who was circumnavigating the environs of Nuneaton. He did arrive in due course, and well before the AGM.

As is the now usual practice, the gathering was addressed on a topic of interest before the AGM, proper commenced at 1200 – except that this year it was by three members of the Society who each talked on some aspect of their own map collecting predilection. It was certainly interesting to hear how others go about gathering their maps, keeping information, or developing an unusual aspect of their collection.

Opening the proceedings was Rod Sladen, who gave us an insight into research into the current 1:50,000 Landranger Series, and keeping information of his ever growing collection on a computer. In the 23 years since the launch of the 1:50,000 scale in Britain, the 204 maps in the series have accounted for 503 revisions, 1347 editions and at least 2028 identifiable printings. Additionally, and not included in those figures, are those editions printed in both 6 colour and 4 colour versions; military printings; Power Line and Obstruction Overprint versions; and two series of navigational overprint. New versions of the maps continue to surface – the “Hardynyms” overprint of Sheet 194, Wales Gas overprint sheet, but the National Trust Overprint sheet on sale at the Nuneaton AGM two years ago
turned out to be (on closer inspection) neatly done by hand!

Having started by keeping map details on index cards, with hand written lists of haves and wants on the back of 80 column computer cards, Rod moved to a personal computer in the early 1980s, using a word processing package, enabling the list to be updated with editions and allowing easy print out. However it was still laborious with the need for different lists for different purposes. A database package provided the breakthrough – initially dBaseII, but progressing through dBaseIII and dBaseIV, which might be regarded as old hat by some but entirely adequate for his purposes and 80386 computer! The flexibility of output was easily shown by the examples of the printings known for a couple of Landranger maps local to Nuneaton, and a list of sheets known to bear the new OS logo.

Rod closed by telling us that there is a 1:50,000 Study Group and emphasised the need to err on the side of recording too much information on a database rather than the minimum.

The middle turn was taken by Nick Krebs who told us of his collection of maps with a diminishing rate of return in respect of the information contained thereon – ‘Maps without a lot on them’. Nick started by showing us a copy of One-inch Old Series Map Sheet 28 (of south Carmarthenshire), which included Lundy Island, part of Devonshire, – ½ square inches of land in 840 square inches of sea, 0·17%. And at a cost of 6/6d.

Having had his appetite whetted, Nick found a number of maps of similar character, or better: amongst those he showed us were a Six-inch map of Rottingdean with no land, which was a result of the 1841 Survey Act which required Administrative Boundaries to be mapped as far as the Mean Low Water Mark; DGMS map of Tristan da Cunha and Gough Island (0·03% of sheet); DGMS map of Ascension and St Helena, with the former being in the upper bleed edge and the latter being an extrusion on the bottom sheet line. The Bolivian Institute of Military Survey has mapped Lake Titicaca on the Bolivian-Peruvian border, three maps needed to cover the north-south distance and one map width, with no land present! But Nick saved the best until last – produced by the Ugandan Forestry department in 1997 to show Land Use, a map of the middle of Lake Victoria without longitude or latitude, but merely titled. Now there is a ubiquitous map!

Finally, David Parsons showed us some of his older maps, the presentation including a demonstration of the advantages of maps being mounted in sections on good old fashioned linen, by flapping them about as if in a fairly fierce wind! His interest in OS maps arose from an O/A question and his aim (as I understood it) is to own one of each map in every edition of OS One-inch at 1/1 condition on the David Archer scale.

David’s special interest is in collecting any map which covers all or part of Cheshire, Congleton or Macclesfield; one problem is that Congleton always appears on the edge of a map. Arrangements have already made for this collection to go eventually to the Congleton Museum. David explained that his maps have come from the usual trawl of bookshops, bric-a-brac market stalls, fund raising events and scrabbling through apparently innocuous boxes of junk at car boot sales, his best find being a Charles Smith Map of Cheshire, mounted in sections, at 50p!

Thank you to Rod Sladen, Nick Krebs and David Parsons for an enlightening and entertaining set of talks.

The Annual General Meeting commenced pretty well on time, and the full record of this part of the morning is reported in the Minutes which are circulated with this issue of Sheet lines.

An ample Lunch provided by the Council’s Catering Service was enjoyed by all, whilst those who had booked space at the Mapmart set out their wares in anticipation of eager customers! Those of us who waited in
equal anticipation of finding the long searched for gem were not disappointed. Where do other members find those maps?

The day finished with the provision of a welcome cup of tea before we disappeared in our different directions, well satisfied with the day, with meeting fellow collectors and most likely the owners of a ‘new’ item for our ever growing collections!

Lionel Hooper

This page of the original edition of Sheetlines 49 included four photographs, taken by David Webb, of the speakers and the Society Committee at the AGM. Unfortunately the poor quality of the printed images means that they could not be reproduced for this digital version.
New maps

**Ordnance Survey of Great Britain**

Since compiling the list in *Sheetlines* 48, I have been supplied by Ordnance Survey with a complete list of current editions of 1:25,000 *Explorer* and *Outdoor Leisure* maps, 1:50,000 *Landranger* (coloured editions) and 1:250,000 and 1:625,000 *Travelmaster* (coloured editions). This list includes the day and month (but not the hour!) of issue for sale, but to be consistent I have quoted below the month only.

The following list, of maps published between 1 August 1996 and 31 May 1997, together with some placed on sale since (dates in square brackets) completely replaces that in *Sheetlines* 48.

1:250,000 and 1:625,000 *Travelmaster*:

- 1 (1:625,000), B (3/97)
- 2 (1:250,000), B (3/97)
- 3 (1:250,000), C (3/97)
- 4 (1:250,000), B (3/97)
- 5 (1:250,000), B (3/97)
- 6 (1:250,000), B (3/97)
- 7 (1:250,000), B (3/97)
- 8 (1:250,000), B (3/97)
- 9 (1:250,000), B (3/97)

1:50,000 *Landranger* (Second Series):

- 8, B (revised 1995-96), (3/97)
- 9, B (revised 1996), (5/97)
- 13, B (5/97)
- 17, B (revised 1995), (9/96)
- 27, B (revised 1995), (11/96)
- 40, B (revised 1995), (4/97)
- 43, B (revised 1995), (3/97)
- 45, B (revised 1996), (2/97)
- 47, B (revised 1996), (2/97)
- 56, B (4/97)
- 59, B (revised 1995), (2/97)
- 64, B4 (1/97)
- 65, C (5/97)
- 66, B3 (2/97)
- 68, A1 (5/97)
- 74, B (4/97)
- 76, B (revised 1995), (5/96)
- 82, B (revised 1995), (1/97)

1:125,000 *Explorer* (Second Series):

- 8, A1 (8/96)
- 12, A (8/96) (*Lleyn Peninsula West*)
- 13, A (8/96) (*Lleyn Peninsula East*)
- 16, A (9/96) (*Newhaven to Eastbourne*)
- 17, A (9/96) (*... Steyning to Newhaven*)
- 18, A (10/96) (*Ashdown Forest*)
- 19, A (11/96) (*West Pennine Moors*)
- 20, A (11/96) (*Isles of Scilly*)
- 21, A (1/97) (*Pitlochry & Loch Tummel*)
- 22, A (11/96) (*Quantock Hills & Bridgwater*)
- 23, A (12/96) (*Norfolk Coast West*)
- 24, A (1/97) (*Norfolk Coast Central*)
- 25, A (2/97) (*Norfolk Coast East*)
- 26, A (4/97) (*Nidderdale*)
27, A (3/97) (Lower Wharfedale & Washburn Valley)
28, A (3/97) (Sherwood Forest)
29, A (3/97) (Lyme Regis & Bridport)
30, A (5/97) (Exmouth & Sidmouth)
31, A (3/97) (Torquay & Dawlish)
104, A [6/97] (Redruth & St Agnes)
107, A [6/97] (St Austell & Liskeard)
138, A [6/97] (Dover, Folkestone & Hythe)
149, A [6/97] (Sittingbourne & Faversham)
150, A (5/97) (Canterbury & The Isle of Thanet)
1:25,000 Outdoor Leisure maps (Second Series):
3, A (1/97) (Aviemore and the Cairngorms)
14, A (2/97) (Wye Valley and Forest of Dean)
21, A1 (12/96)
22, A (10/96) (New Forest: extended sheet lines)
28, A3/ (8/96)
29, A4 (12/96)
32, A (3/97) (Galloway Forest Park)
39, A* (8/96) (Loch Lomond)
42, A [6/97] (Kielder Water)
43, A [6/97] (Hadrian’s Wall)
1:25,000 Pathfinder (Second Series):
NS 81/91 (482) [?late 1996]
NX 47/57 (527), 9/96
SN 40/50 (1106) [?early 1997]

[I am advised verbally by Ordnance Survey that there will be no further 1:25,000 Pathfinder publication*]

Ordinance Survey of Ireland

The following 1:50,000 Discovery series sheets have recently been published:
‘First edition’: Sheets 55, 58, 64, 72, 76, 79, 80, 81, 82.

The following sheets are reported as having been reprinted in 1994-96: 1, 2, 10, 11, 24, 37, 56 (as ‘Second Edition’), 83, 85.

(It should be noted that Ordnance Survey of Ireland (Suirbhéireacht Ordonáis na Éireann) does not issue publication reports, and so the lists of new publications which appear in Sheetlines depend on what appears on sale in Britain.)

The Godfrey Edition

Between 15 March 1997 and 5 June 1997 coverage was extended to the following places: Bridgwater; Bristol; Christchurch (Hants); Fordingbridge; Lyme Regis; Normanton (Yorks. WR); Petersfield; Sacriston (Co. Durham); Shincliffe (Co. Durham); Shipley & Saltaire. One-inch England Sheet 3 is New Series Third Edition Sheet 3, revised 1901, and includes a 1:2500 of Cornhill, Northumberland, revised 1896, on the reverse; One-inch England Sheet 255 is New Series Sheet 255, in outline, as published in 1886, with a 1:2500 of Chalfont St Peter, revised 1897, on the reverse. The reproduction quality of Sheet 255, a ‘difficult’ sheet of which originals are often of rather uneven appearance, is excellent.

Richard Oliver
Ilkeston and District Local History Society and Sawley Historical Society reprints

Ilkeston and District Historical Society currently reproduces a map Ilkeston (West) of 1937, although not actually published by the OS until 1942. It is a well produced reproduction and is similar to the Godfrey Editions in that it is reduced from 25 inches–to-the-mile (1:2500) to approximately 15 inches–to-the-mile (no actual scale given).

The area to the immediate west of Ilkeston and covered by the map is a fascinating array of railway junctions, marshalling yards and two collieries, in the middle of which is the ‘Municipal Golf Course’!

Nothing of this now remains, other than the golf course.

The reverse of the map has a history of the area, together with notes on ‘Old Ordnance Survey plans of the Ilkeston area’.

The present map costs £1.75 including postage, and is available from Andrew Knighton, 28, Kensington Gardens, Ilkeston, DE7 5NZ. Cheques should be made payable to ‘I & DL H S’

A similar map is due ‘soon’.

Also available, from the Sawley Historical Society, but not to hand, is a six-inch map of Sawley (south west of Long Eaton) of 1921 vintage. It is part of two sheets revamped to single sheet size. The area shown is to the north of the Trent and Derwent rivers.

Brian Dobbie

1:25,000 matters

Richard Oliver

More curate’s eggs: recent Explorer maps

The advent of 1:25,000 Explorer maps numbered as part of a coherent national series, rather than in approximate order of publication as hitherto, was mentioned briefly in Sheetlines 48. These Explorers and the Outdoor Leisure maps will replace all the remaining Pathfinder sheets: it is proposed to convert the country in ‘layers’ of about fifty sheets each, working south to north, as follows:

- by March 1998: south of the M4,
- by March 1999: south of a line from Aberystwyth to Ipswich,
- by March 2000: south of a line from Liverpool to Skegness,
- by March 2001: south of a line from Carlisle to Newcastle,
- by March 2002: south of a line from Fort William to Aberdeen,
- by March 2003: the conversion should be complete.

Six of these sheets are now available: 104, 106, 107, 138, 149 and 150, covering a large part of west Cornwall and east Kent. A list inside the cover of these new maps gives Explorer sheet names and numbers up to 169, covering the whole of England roughly south of a line from Bristol to London, plus Glamorgan and a large part of Gloucestershire: they are to be published in 1997 and 1998. I am told that the index to these sheet lines is still ‘commercially confidential’, which is perhaps due as much to reduce the risk of OS and map sellers being left with large stocks of the obsolescent Pathfinders as to the risk of a commercial competitor getting in quickly and spoiling the market. Nonetheless, the limited indexes on the back covers of the published maps and the list of sheets inside together enable a reconstruction of the sheet lines, from which it is apparent that at least nine of the sheets in this block will be two 20 by 20 km sheets published back–to–back. It would be interesting to know what the justification for this irritating practice is. Although the
publication of back-to-back mapping may be cheap to the purchaser, I submit that it is too cheap, and that this is a unique example of Ordnance Survey underpricing. Has anyone at Ordnance Survey ever attempted to reverse a back-to-back map out of doors? I doubt it. Why cannot we have a standard sheet size, of an area of about 30 by 20 km, single-sided, with standard price, standard numbers, standard cover, and standard content?

Perhaps there is an explanation; there could even be a rational explanation, in which case it would have to be elaborate and ingenious. Perhaps someone could provide it?

These six sheets, together with Outdoor Leisure maps 42 and 43 and Explorers 26 and 30, have what Ordnance Survey Information Paper 6/1997 is pleased to describe as an ‘Improved specification’. This may be cited as a good example of the subjective masquerading as the objective and includes: the addition of routes with public access which are not public rights of way (including orange horseshoe and cycle symbols), Access Land (unmistakable purple bands with various symbols according to ownership, e.g. an oak leaf for the National Trust); Danger Areas by danger flat red triangles at intervals round the perimeter (an improvement, though a continuous red line, as used by the Ordnance Survey of Ireland on their 1:50,000 maps would be better still); National Park and Forest Park boundaries in yellow rather than green (a decided improvement); and additional tourist symbols (in very blue blue) for Theme or Leisure Parks (a roundabout-and-horse), Leisure or Sports Centres (suggestive of an asymmetrical aerobist), Water Activities (a sailing boat: are canoeists excluded?), Slipway (somewhat reminiscent of the ‘wreck’ symbol on Admiralty charts), Museums (‘M’ in a ‘classical’ surround) and Public Houses (a beer–mug symbol). It must be assumed that these have been designed to appeal to less sophisticated map users: the purple and blue rather detract from the aesthetic improvement of the green vegetation symbols and the multi–coloured roads. (It is a pity that blue seems so established as the Motorway colour: the use of purple would give a proper sense of hierarchy, as on the French 1:100,000 Serie Verte.)

In short, we appear to have a map which is evidently better suited to those who go through the countryside rather than to it. Motorists and those afraid of using their legs for more than a few hundred yards, or metres, at a time will have little to complain of. However, those of us who believe in substance rather than show are less easily pleased. Comparison of four and a half sheets (the western half of 106, and the whole of 104, 138, 149 and 150) with the superseded Pathfinder mapping and the current 1:50,000 is not very encouraging: only 150 seems to be in a comparable or better state of revision for features in common between the two. Elsewhere, on 149 there are considerable discrepancies in the depiction of orchards, and on the others there are considerable discrepancies in the depiction of the extent of woodland. It might be argued that these are of no great moment, in that most of the areas affected are less than about four hectares (about ten acres) in extent, and that they rarely intersect public rights of way or access land: but in that case, why are they revised at the smaller scale, where they are much less conspicuous, but not at the larger? And occasionally the discrepancies are more conspicuous, notably in the depiction of the extent of the Penhale Sands and Gear Sands around SW 770560 on Explorer 104 and 1:50,000 Landranger 200, edition C: the two were published nearly simultaneously. Only investigation on the ground will reveal how out–of–date the depiction of field boundaries may be, but it appears to me a good rule that wherever an Explorer shows large areas of field boundaries unchanged as compared with the predecessor Pathfinder there must be a strong presumption that, in the very nature of the subject, it does not represent the true state of things at the time when the map was being prepared for the press. Yet field boundaries and similar detail are the primary justification
for the 1:25,000 scale in the first place: as far as the ‘new’ detail is concerned, a straight photo-enlargement of the 1:50,000 Land-ranger, suitably garnished with beer-mugs, lashings of purple, lurid horseshoes and the rest, would do just as well, and might suit better THOSE WHO LIKE TO BE SHOUTED AT (or to shout at others, such as those who drive cars in an atmosphere of continuous thumps), and whose wallets Ordnance Survey evidently desires to dip into deeply.

No doubt Ordnance Survey would reply: ‘This is all very well, but the necessary rural large-scales revision is not yet available: we must do the best we can.’ No doubt: but perhaps this could be made clearer. As it is, a policy of stating ‘Revised 1997’ is likely to lead the thoughtful user, drawing on the experience of the 1:50,000, to expect a full revision: which, by comparison of the 1:25,000 with the 1:50,000, would appear to be manifestly not so. Until about three or four years ago the dates of large-scale survey (rarely much later than 1980, and sometimes going back before 1950) were given on all 1:25,000 sheets: then ‘Revised for selected change’ (invariably the year of publication or the year before) was substituted, begging the question, ‘OK, what ‘selected’ change??’; and now we have the ambiguous ‘Revised’. The difficulty, of course, is that quoting a date substantially earlier than the date of publication leads some potential purchasers (and the modern Ordnance Survey is all about people purchasing maps, or ‘products’) to suppose that the map is out of date, and so they don’t buy, which Won’t Do At All. So the issue must be fudged.

A possible solution would be to take a leaf from the past, in the form of the revision statements on two of the specimens accompanying the Davidson Committee report of 1938: evidently supposing compilation from surveys of various dates, they are described as ‘Revised to 1936’. It would probably answer the present problem were Ordnance Survey to adopt a policy of stating ‘Revised in 19xx’ where there has been a ‘full sweep’ on the ground, as is present practice on 1:50,000 mapping, and ‘Revised to 19xx’ where there has not, and as is definitely the case with the majority of recent 1:25,000 Explorer publications. Those who look at the ‘headline date’ and no further would be suitably gulled; the thoughtful and knowledgeable would be suitably warned.

The end of 1:25,000 Pathfinder publication

I have been advised verbally by Ordnance Survey that no new editions of 1:25,000 Pathfinder sheets are to be published; the last such were published in October 1996. All future work on new 1:25,000 mapping will be on the Explorerss and Outdoor Leisure maps. Of course, the remaining Pathfinders will be kept in print until replaced by the larger sheets. It seems, therefore, that the three process–colour-printed sheets — a style at first proposed as standard for this series — will be the only ones of their sort.

The three sheets are NS 81/91 (482), NX 66/76 (541) and SN 40/50 (1106). They can be identified readily by the new multi-colour boxed OS logo on the spine and front cover, and of course by the variety of colours for road infills. Together they differ in a number of details from the colour scheme seen on recent Explorer maps and Outdoor Leisure maps: the grid and grid figures are still in black, and there is no additional ‘blue’ tourist information. Each of the three differs in detail from its fellows: vegetation symbols on NS 81/91 and NX 61/71 are still in black, though they are in green on SN 40/50; administrative information is in black on NX 61/71 and in ‘grey’ on the other two; and SN 40/50 shows cycle routes and permitted paths in ‘brown’.

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1 Final report of the Departmental Committee on the Ordnance Survey, London, HMSO, 1938: specimens 1 and 2. (Added emphasis.)
List of 1:25,000 Second Series editions

As I expected, the list of these published in Sheetlines 48 was incomplete, and I am grateful to Michael Bell, John Fowler, Peter Haigh, Bill Henwood, Rob Wheeler and an OS list of current editions for the following additions. Dates have been given where available and where I feel them to be reliable, but many ‘bar-without-star’ printings do not carry any alteration in date, whether of compilation, revision or copyright.

<table>
<thead>
<tr>
<th>Code</th>
<th>Edition</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJ 43/53</td>
<td>A/</td>
</tr>
<tr>
<td>SK 05/15</td>
<td>A/; A//</td>
</tr>
<tr>
<td>SK 66/76</td>
<td>A/</td>
</tr>
<tr>
<td>SN 40/50</td>
<td>A1 [? 1997]</td>
</tr>
<tr>
<td>SP 28/38</td>
<td>A/</td>
</tr>
<tr>
<td>SR 89/99</td>
<td>A/</td>
</tr>
<tr>
<td>SY 67/776</td>
<td>B/</td>
</tr>
<tr>
<td>TA 20/30</td>
<td>A/ [1980]</td>
</tr>
<tr>
<td>TQ 61/71</td>
<td>A/</td>
</tr>
<tr>
<td>OLM 9 (Exmoor)</td>
<td>A/*; survey dates 1954-73.</td>
</tr>
<tr>
<td>HU 39/49</td>
<td>A/</td>
</tr>
<tr>
<td>NC 00/10</td>
<td>A/</td>
</tr>
<tr>
<td>NG 15</td>
<td>A/</td>
</tr>
<tr>
<td>NG 42/52</td>
<td>A/ [1970]</td>
</tr>
<tr>
<td>NG 88/98</td>
<td>A/</td>
</tr>
<tr>
<td>NH 96/NJ 06</td>
<td>A/</td>
</tr>
<tr>
<td>OLM 17</td>
<td>B/</td>
</tr>
<tr>
<td>OLM 18</td>
<td>B2: publication date to read (12/93).</td>
</tr>
<tr>
<td>OLM 19 (Howgill)</td>
<td>A: publication date to read (11/95).</td>
</tr>
<tr>
<td>NL 69/79</td>
<td>A/</td>
</tr>
<tr>
<td>OLM 23 (Cadair Idris)</td>
<td>B2: publication date to read (5/93).</td>
</tr>
<tr>
<td>NO 66/76</td>
<td>A/</td>
</tr>
<tr>
<td>OLM 25</td>
<td>A1 [1988]</td>
</tr>
<tr>
<td>OLM 27</td>
<td>A2: publication date to read (5/93).</td>
</tr>
<tr>
<td>NS 81/91</td>
<td>A1 [? 1997]</td>
</tr>
<tr>
<td>NS 87/97</td>
<td>A/</td>
</tr>
<tr>
<td>NT 29/39</td>
<td>A/*/</td>
</tr>
<tr>
<td>NT 63/73</td>
<td>A/</td>
</tr>
<tr>
<td>OLM 28</td>
<td>A// [1986]</td>
</tr>
<tr>
<td>OLM 21 (S. Pennines)</td>
<td>B/</td>
</tr>
<tr>
<td>OLM 29</td>
<td>B/</td>
</tr>
<tr>
<td>NX 66/76</td>
<td>A1 [? 1997]</td>
</tr>
<tr>
<td>Explorer 11</td>
<td>A: publication date to read (3/96).</td>
</tr>
<tr>
<td>NY 85/95</td>
<td>A/</td>
</tr>
<tr>
<td>Explorer 14</td>
<td>A: publication date to read (6/96).</td>
</tr>
<tr>
<td>NZ 25/35</td>
<td>A/*/ [? 1974]</td>
</tr>
<tr>
<td>SD 08/18</td>
<td>A/</td>
</tr>
<tr>
<td>OLM 20</td>
<td>A/</td>
</tr>
<tr>
<td>SD 21/31</td>
<td>A/</td>
</tr>
<tr>
<td>SD 37/47</td>
<td>A/</td>
</tr>
<tr>
<td>SE 43/53</td>
<td>A/; A//= (12/87)</td>
</tr>
<tr>
<td>SE 44/54</td>
<td>A2 [1989]</td>
</tr>
<tr>
<td>SE 85/95</td>
<td>A [also printed with 1995 copyright date]</td>
</tr>
<tr>
<td>SH 47/57</td>
<td>A/</td>
</tr>
</tbody>
</table>

It will be seen that SE 85/95 was reprinted with ‘Copyright 1995’; I would be interested to know how many more sheets have been ‘re-copyrighted’ thus!

I would be very glad to learn of any further additions and corrections to the list.

P.S. One for Nick Krebs?

From a list of public transport maps:

‘3011 India Bombay Bus Map (this map actually carries the following phrase “Because of the complexity of our bus services, they have not been delineated on the map.”)’
A map in my collection

16 – Maps in wrong covers

In Sheetlines 45 I commented on a Seventh Series map in the wrong cover, but perhaps such a mistake is not so uncommon. I have also recently bought a copy of Popular Edition Sheet 103 Stroud and Chepstow in a cover for Popular Edition Sheet 92 Gloucester and Forest of Dean.

More interesting, and probably no accident, I also have a copy of Popular Edition Sheet 146 Lands End & Lizard mounted in sections in covers of Alfred Wilson, Map & Bookseller of 18 Gracechurch Street, London, purporting to be a Large Sheet Series sheet 152, Falmouth. Was this common?

In fact both maps cover almost the same area. Why should a map seller sell the map as an earlier series other than to use up the stock of ‘New Large Sheet’ covers?

Lionel Hooper

19 – Print code suffixes

The print-codes about which Michael Bell asks in Sheetlines 48 were used by the Ordnance Survey and the War Office between 1939 and 1946, in order to indicate which printer was used. The system was originally devised purely for use on War Office mapping, as Peter Clark and Ian Mumford explained in Sheetlines 5, but was subsequently extended to civil mapping. The reason for this would appear to have been that the air raids on Southampton on 30 November and 1 December 1940 destroyed most of the OS’s stock of civil mapping, and so it was necessary to replace it. Although, as is implicit in Roger Hellyer’s listing of the post-1940 printings of the half-inch mapping in Sheetlines 48, most of the replacement small-scale printing was undertaken by the OS at Crabwood, London Road and Chessington, most of the replacement large-scale work was carried out by outside firms. The use of the suffix may have served both administrative convenience and a security function: from 1940 to 1944 the sale of OS mapping at larger than one-inch scale was restricted to those possessing the appropriate permit, and the suffix might have been intended to help identify ‘unauthorised’ copies.

The following list repeats that by Mumford and Clark, which drew on a War Office file which, as far as I know, is not yet transferred to the Public Record Office, with additions from PRO OS file OS 1/197, which were published in Sheetlines 9, plus codes for which no printers have been found, and printers for whom no codes have so far been found.

Codes known

<table>
<thead>
<tr>
<th>Code</th>
<th>Printer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Adams Bros &amp; Shardlow*</td>
</tr>
<tr>
<td>B</td>
<td>John Bartholomew, Edinburgh</td>
</tr>
<tr>
<td>BJ</td>
<td>B. Johnson*</td>
</tr>
<tr>
<td>BR</td>
<td>Browne*</td>
</tr>
<tr>
<td>B.R.</td>
<td>? same as ‘BR’</td>
</tr>
<tr>
<td>C</td>
<td>Causton</td>
</tr>
<tr>
<td>Ch</td>
<td>OS, Chessington, Surrey</td>
</tr>
<tr>
<td>CK</td>
<td>A. Cooke*</td>
</tr>
<tr>
<td>Cr</td>
<td>OS, Crabwood, Southampton</td>
</tr>
<tr>
<td>C &amp; R</td>
<td>Charles and Read*</td>
</tr>
<tr>
<td>E</td>
<td>OS, Esher (Hinchley Wood),</td>
</tr>
<tr>
<td></td>
<td>Surrey</td>
</tr>
<tr>
<td>F</td>
<td>Forman (of Nottingham)</td>
</tr>
<tr>
<td>G</td>
<td>Greenslade*</td>
</tr>
<tr>
<td>H</td>
<td>Howitt*</td>
</tr>
<tr>
<td>HAY</td>
<td>Haycock Press*</td>
</tr>
<tr>
<td>HU or Hu</td>
<td>Hubners*</td>
</tr>
<tr>
<td>J</td>
<td>W. &amp; A.K. Johnston</td>
</tr>
<tr>
<td>K</td>
<td>Cook Hammond and Kell</td>
</tr>
<tr>
<td>L</td>
<td>Laird*</td>
</tr>
<tr>
<td>LR</td>
<td>OS, London Road,</td>
</tr>
<tr>
<td></td>
<td>Southampton</td>
</tr>
<tr>
<td>M</td>
<td>Mardon (of Bristol)</td>
</tr>
<tr>
<td>Mc</td>
<td>McCorquodale</td>
</tr>
<tr>
<td>McL</td>
<td>McLagan &amp; Cumming*</td>
</tr>
<tr>
<td>NI</td>
<td>Ordnance Survey of Northern</td>
</tr>
<tr>
<td></td>
<td>Ireland</td>
</tr>
</tbody>
</table>
Printers known, but codes not known

British Colour Printing*
Brown and Bibby*
Chromoworks*
Fields*
Fosh & Cross*
H. Hildesley*
J. Weiner*

It may be noted that the OS printing establishment at Waddon was in a requisitioned establishment, the Britannia Printing Works, and that Forman’s of Nottingham were likewise wholly requisitioned for OS and WO war work, and effectively functioned as a Midlands branch of the OS. Whilst some of the firms listed above are well known, such as Causton’s and Waterlow, it would be useful if someone could provide a location and fuller title for those which I have marked with an asterisk.

Although the prefix ‘W.O.’ had probably been used since at least 1923, and is usual on, for example, pre-war printings of GSGS 3906, 3907 and 3908 (the 1:25,000 and 1:63,360 military series of Great Britain), I cannot recall seeing a letter-suffix on a map with a print-code earlier than 1939, when ‘C’ appears on a considerable number of sheets of GSGS 3907 and 3908. The print-runs of these series increased considerably during 1939, no doubt in response first to the introduction of conscription in April and then to the outbreak of war in September, and presumably outstripped the capacity at that time of the OS and WO presses, so (assuming that ‘C’ in 1939 does indeed represent work by the long-established firm of Sir Joseph Causton) recourse was had to assistance from outside. From about July 1940 onwards print-codes started to include a month of printing, and this seems to have been standardised from about April 1941 onwards for military maps, though it was less common for civil mapping, and seems to have been unusual for six-inch and 1:2500 mapping. The use of suffixes for civil mapping was abandoned after July 1946 for civil mapping, but was retained for military mapping.

Richard Oliver

21 – Really a Reduced Map Area?

The 1/25000 Second Series sheet 87/97 Padstow & Wadebridge is shown on the cover index as an oversized sheet but in the lower green panel is the wording “Reduced Map Area”. Inside, the map itself is the standard 20kms East to West but the North to South distance is 12 kms instead of 10 kms which would appear to be an enlarged map area!

What wording is carried on other non-standard sheets and is the wording on 87/97 an aberration?

OS studiousus

22 – One-inch Old Series maps

I recently bought a number of small batches of One–inch Old Series maps and, as usual, their study and comparison raised more questions for me than it answered. I am an enthusiastic amateur and all my knowledge has been gained from Sheetlines. I have no doubt that many of the answers are obvious to the experts and, from reading Sheetlines, it would appear that much will be in ‘Margary’. In the hope that I am not alone in not having these and in my ignorance, I wonder if my observations will spark a response for the edification of myself and other members with either a collection of, or the odd one, Old Series maps.
My observations are based on maps bought in four main batches which I have named for convenience of reference:

a) “ANSON”: Sheets 1–6, 7–12, 39–45 in boxed sets. The latest publication date is 1844; they have watermarks 1843–46 but no latitude/longitude.

b) “FOLIO”: Sheets 57–91. These were originally in a nondescript disintegrating binding. The latest publication date is 1852; there are watermarks 1845–46 and are pre 1858.

c) “CANOEIST”: Twenty-five quarter sheets between 57 & 102. Crudely mounted, no margins, but extensively annotated with Old Series numbers and dates, 1884–92. (So named because the three groups of maps were marked with dates and camp names from canoeing expeditions!)


My observations and the questions which arise are:

1. Are sheets 1–90 only known in ‘hachured’ form?
2. What is known of the decision to introduce contours?
3. Had contours been used on maps before Ordnance Survey?
4. I have sheet 98SE which is hachured, pub. 1865, elec. 1865, but sheet 98NE bought at the same time has multiple trig. points and heights but neither contours nor hachuring. The legend is present but the publication date and ‘Hills by’ are not completed. Lat/long is blank. Is this unusual?
5. The Anson sheets have a firm green cardboard cover with a tab showing the sheet number when folded. The ‘boxes’ are imitation books in black and gold leaf, split horizontally, with Volume Number (1, 2 & 6) on the ‘spine’ and a crest with ‘Hon. George Anson’ on the front. Were such sets common?
6. Does anyone have other Anson volumes or any details of the original owner (circa 1846)?

7. Included in Anson Vol.1 is an ‘Index to the Ordnance Survey of England & Wales’ showing Sheets 1–84. It has a Legend of Plates with names (e.g. 24 Plymouth), the number of parts in each sheet and the cost. The basic price is 8/– for a full sheet with allowance for blank sea areas (sheet 5 is 7/–, sheet 4 is 3/–), with reduction of the basic price to 7/– for the narrower north central rows. I note that the price of quarter sheets rose from 6d to 1/– on 28/11/66, yet everything points to the Anson set being bought at 2/– soon after 1846. As the prices in the Folio group are also 2/– and in a nondescript folder, I do not think the superior mounting accounts for the price. I also note that four of the Folio sheets are much cheaper at 2/– for all four plates, but these would all appear to be electrotypes. The single map 98SE (elec. 1865) is 6d. and Box quarters (elec. 1862–67) are 1/–. Are there dates to explain these prices / can the prices be used to date the maps?

8. On the Anson and Folio maps (1846 & 1852), road mileages are missing in sheets 4, 5, 9, 10, 11, 12 (pub. 1810–17) although sheet 9 has rail mileages. They are present on Sheet 8 (1816) and remainder up to 90 (1817–52) but missing above 90, except for 91NE. Are there any directives to aid dating?

9. Up to sheet 90 railway mileages seem to be the same as roads, with the exception of eight sheets which have railways on but no mileages. All these are in the narrow north columns. Is this coincidence?

10. Many of the later Canoeist sheets have rail mileage added. Above 90, some sheets have rail mileage, some not,
though as noted above, road mileages have disappeared. Can the mileages / lack of mileages be an aid to dating?

11. I assume T.P. to represent ‘Turnpike’ and T.G. to be ‘Turngate’ (not ‘Tollgate’ as I originally thought.)

There seem to be:

- i an early group (pub. 1810–22) where T.P., T.G. and even Turnpike are used.
- ii a middle group (pub. 1824–33) where only T.P. appears, and
- iii a late group (pub. 1831 onwards) with T.G. only.
- iv Sheets 90+ revert to T.P.

Is there an historical explanation? (Incidentally I recently read in a Scottish local guide that toll bars were officially abolished in 1869.)

12. On sheet 3, I note ‘Telegraph’, ‘Signal House’, ‘Signal Staff’ and ‘Signal’ are annotated; on sheet 5 there is ‘Signal House’ and on sheets 1 and 2 ‘Signal Staff’. All these are of course on the sensitive south coast. The relevant dates for telegraphy are as follows. In 1837 Wheatstone invented a practical instrument; in 1843 the first public line was contructed from Paddington to Slough and in 1858 the first transatlantic cable was laid. I presume the ‘Signal’ may have been visual, but wonder why telegraph points were not recorded sooner. Is this a sign of their perceived importance (Osier Beds are prominent!) or have I missed them?

13. Is there any history on the use of the words ‘Signal’ and ‘Telegraph’?

14. On Sheet 77, I find ‘Post Office’ but can spot no other recognition of these until the New Series. (1516: first Master of the Posts; 1840: Penny Black.) Did ‘Post Office’ appear on any other Old Series maps?

15. As noted in Sheetlines ‘Now you see them, now you don’t’, it seems to me that two distinct symbols for mills were used in the Old Series – Type ‘A’: a foreshortened ‘bullet’ standing on a triangle, and Type ‘B’: full-length ‘bullet’ on a flat base with a more distinct ‘door’. Is there a pattern? I have found ‘A’ in sheets 1–9; none in sheets 10–62. In sheets 63–90, ‘A’ in some published 1824–41, none in some published 1837–43, and ‘B’ in some 1835–40. Above sheet 90, none. I also realise how little I know about engraving. The mill symbols are so consistent that I presume a punch was used. Is there a pattern?

16. The last map in the Folio, 91 in four quarters, is hachured. 91SW looks to be on a different quality of paper, has no lat/long., has an adjacent sheet no. of ‘91’ (surely a mistake) and a water-mark ‘RUSE & TURNERS (sic) 1846’. (90NE has ‘RUSE & TURNERS 1846’). Lat/long is overprinted on the piano of NW, NE and SE. 91SW also differs in having no trig. points or spot heights, which pepper the other three quarter sheets. NE is the only quarter with road/rail mileages, and these stop at both north and south (from sheet 89) edges of SW and SE. I am not entirely sure if all this is consistent with the advice in Sheetlines 38. Does it mean the Folio sheets are 1/57 at the earliest?

Forbes C. Robertson.

Letters

**Bagshot Manoeuvres Map – 1792:** from Eugene Burden

My article in Sheetlines 40 speculated on the identity of the surveyor of the above map and suggested that it was William Gardner.

Several CCS members made helpful comments. Michael Holroyd pointed out that the Hampshire section of the map was a close copy of part of the map of Hampshire by Thomas Milne also published by Faden in 1791. I must agree with him. The 1792 map even copies the mis-alignment of the
Basingstoke Canal which was not opened until 1794. The map corrects Milne when he goes over the border into Surrey.

Robert Wheeler pointed out significant differences between the 1792 map and the 1818 OS map as reproduced in Volume 3 of Harry Margary’s The Old Series Ordnance Map. The 1818 map shows several rides not shown on the 1792 map and the course of the Emm Brook near Bagshot Rails (Hannikins) is very different. The next edition of the OS map erased a number of rides. The 1792 map confirmed the course of the Emm Brook shown on earlier maps and was confirmed by later surveys including the Second Series OS.

It would seem that where the 1792 map disagrees with the 1818 map in the Bagshot area, the 1792 map is more correct.

My present theory is that Gardner would have had insufficient time to conduct a survey of the whole area in time for the manoeuvres. He therefore confined himself to the main area of the exercises and Faden utilised the work of Milne and possibly others to complete the map making it a hybrid.

Another interesting point is that the 1792 map is, as far as I am aware, the first to give Wokingham its modern spelling, and without an alternative. This adds weight to the idea that the map is based on original work.

I am very grateful to Michael Holroyd and Robert Wheeler for their helpful suggestions.

Six–inch sheets: ‘Surveyed’ or ‘Fair drawn’?: from Richard Porter

I am grateful to Dr Oliver for his detailed response in *Sheetlines* 47, pp 65–66; his examples from Yorkshire and references to survey-by-parishes are especially interesting.

I regret to say, however, that he has been misled by the reference in my earlier letter (*Sheetlines* 46, p 49) to the officer in charge approving the plots ‘a couple of weeks after the actual field survey. This phrase was apparently an editorial amendment* of my more tentative and less precise ‘of the order of weeks’. I would not have presumed to nominate a specific period, still less suggest that this may correspond to more recent practice, of which I know nothing.

Perhaps I may take this opportunity, despite Dr Oliver’s comments, to revise the statistics given in my previous letter. Firstly, my 3% of sheets spanning at least three calendar years in fact related only to the sheets surveyed by Bayly. Secondly, I have, by courtesy of the British Library, now looked at all the Yorkshire sheets, and find that on 17% of them the ‘surveyed’ dates span at least three calendar years.

(* An unintentional amendment for which I unreservedly apologise. Lionel Hooper, previous editor.)

Public rights of way on Ordnance Survey maps: from Richard Oliver

Some recent correspondence suggests that it might be useful to point out what the status of this information is on OS maps (in practice the 1:25,000 and 1:50,000 scales). Quite simply, the OS merely publishes information supplied to it by the relevant local authority, and the standard statement on 1:50,000 and 1:25,000 maps that ‘Public rights of way ... have been derived from Definitive Maps as amended by later enactments or instruments held by Ordnance Survey on [date]’ is effectively a disclaimer, meaning that the rights-of-way information is only as good as what has been supplied to OS and (by implication) that OS’s responsibility for the accuracy of the information is confined to transcribing faithfully what the local authority supplies. If the local authority prepares a new Definitive Map but fails to supply it to OS, that is not OS’s fault! OS has never taken any part in collecting rights of way information: that responsibility was laid on local authorities by the 1949 National Parks and Access to the Countryside Act, and that continues to be the position. To put it another way, OS is simply a messenger, not an author.
Railway ownership on the One-inch Popular Edition map: from Peter Braine

As a newcomer to the society I hesitate to raise a point which may already have been well made in past issues of Sheetlines. Brian Dobbie’s article in Sheetlines 48 pp38-39, refers to the Ordnance Survey making errors in ascribing railway ownership. What is surprising to me is that the Ordnance Survey did not appear to use the information provided by the definitive series of Railway Clearing House (RCH) maps, used by the railways themselves and whose only purpose was to show the individual ownership of lines and their mileages.

Zachary Macaulay, an employee of the RCH, published the forerunner of these maps, Macaulay’s Station Map of the Railways of Great Britain, in 1851; this was followed by another employee, John Airey, who published his first area map, Diagram of Manchester and District, in 1869. Airey had earlier published a collection of localised railway junction diagrams. Airey went on to publish fifteen separate area maps, updating them until 1896. The RCH began publishing under their own name in 1897, at one time producing twenty-one area maps covering Great Britain and Ireland, and updating them (with a few exceptions) well into the post-grouping period.

Brunel University Library published in 1986 Railway Maps and the Railway Clearing House: The David Garnett Collection in Brunel University Library which covered the history of these maps.

It’s not too late – a plea to the Ordnance Survey: from Lionel Hooper

The advent of the Ordnance Survey converting the Pathfinder Series of 1:25,000 maps into the Explorer Series could be a great opportunity to re-introduce map covers illustrated with paintings. By that, I do not mean necessarily in the genre of Ellis Martin, but a whole range of styles dictated only by the selection of an illustration suitable for the area of the map. Have members noticed how the photograph on the cover of Explorer 18, Ashdown Forest, looks like a painting?

In contrast, it is a great shame that for the new Explorer map of Bristol and Bath (Sheet 155), the cover picture is yet another photograph of the River Avon at Bath. How much better a painting of, for example Temple Meads Station in Bristol?

The mechanics of obtaining a range of paintings is surely relatively simple – a competition open to both amateur and professional artists with a modest ‘prize’ awarded for the paintings selected: after all it is appreciated that there will be more than 300 maps. The fact that the Explorer maps already published have photograph-covers merely means that they would have to be replaced in the fullness of time when a new edition is produced.

Will the Ordnance Survey be prepared to seriously consider the idea?
Meeting at Bath, 4 October 1997

A ‘surgery’ on identifying states of the One-inch Old Series, and on more recent maps

The meeting will be held at Manvers Street Baptist Church, Manvers Street, Bath, 200 yards from the railway station, starting at 1030 for 1100. Lunch will be available on the premises.

In the morning Dr Richard Oliver will talk about how to identify states of the One-inch Old Series and other nineteenth century OS maps. He will explain about the mysteries of embossed printing dates, piano keys, cropped margins, Gardner and Ramshaw imprints, electrotypes and other mysteries, with the object of enabling anyone who has six squares inches of Old Series map to be able to place and date it precisely: at least, that is the theory! (Richard was the co-author with the late Brian Harley of three volumes in the Harry Margary series of Old Series facsimiles.)

In the afternoon there will be an opportunity to bring out and discuss both mystery items and (possibly) less mysterious maps which nonetheless you would like to know a little more about!

(Details of car parks, etc. are available from Lionel Hooper on Bath (01225) 330006.)

Military Survey 250

Details were given in Sheetlines 48 of Military Survey’s celebration of its quarter millennium, principally an Open Day at Hermitage on 14 September with an associated exhibition and map display.

Members interested in seeing these might wish to note other locations planned:
- 4–29 August Map Display at Imperial War Museum, Duxford
- 18–31 August Exhibition at Royal Engineers Museum, Chatham
- 11–14 September Exhibition and Map Display at BCS Symposium, Leicester
- 22–26 September Exhibition and Map Display at Edinburgh

On 18 October they will be at Hermitage to accompany presentations being given to the Defence Surveyors’ Association by Col Nick Rigby, R.E., who was in Bosnia, and Mr Andrew Fagg, who heads their Library Division. CCS members are invited to attend: names should be passed to David Archer, The Pentre, Kerry, Newtown, SY16 4PD, Tel: 01686 670382.

In addition to the Limited Edition Maps described in the last issue, a number of quality reprints (at £6·50) and Map Extracts (at £2·70) are being produced. The latter include a 277 by 185 mm extract of the Military Survey of Scotland covering the Glasgow area. These can be ordered from Gordonwood Associates, 1, Majorca Avenue, Andover, SP10 1JW.

More details are available on the Internet via http://www.military-survey.mod.uk

The Midlands Group, Branston, 28 October, 1997

‘A history of mapping’: a talk by Roy Hammerton

The meeting will commence at 1930 at the Church Meeting Room, Branston – directions given in Sheetlines 47. Further details are available from Lez Watson, tel.: 01283 541303.
Where one of our new Editors lives.

Top, Seven Oaks from Old Series Sheet VI, electrotyped 1863. Note the railway ends at what is now ‘Bat and Ball’ station. Bottom, Sevenoaks from Landranger Sheet 188, Maidstone and the Weald of Kent (Crown Copyright). Both maps reproduced at approximately 1·4 miles per inch.