

# SHEETLINES

Nos 19 to 21



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THE  
ORDNANCE SURVEY  
AND  
ARCHÆOLOGY

G  R  
Ordnance Survey Office,  
*Southampton.*

Stonehenge  
Ellis Martin

The CHARLES CLOSE SOCIETY for the Study of Ordnance Survey Maps



## SHEETLINES

numbers 19 to 21

*Sheetlines* 19 to 21 were first issued in 1987 and 1988 under the editorship of C. Ian M. O'Brien. For this reissue the original pagination has been retained so as to facilitate bibliographic citation, and continuous pagination has been added at the top outside corners of each page in order to facilitate easy finding using the contents lists below, though the original pagination is also given in brackets, so that e.g. (19,4) indicates *Sheetlines* 19, page 4. Except for a few corrections of misprints and for the removal of some announcements and advertisements the text has been left unaltered, notwithstanding that some of the material has been replaced by more recent research and some of the queries have been answered. However, the opportunity has been taken to rearrange the text of *Sheetlines* 20 and 21 so that Roger Hellyer's two part article can be read as a whole, and the Addenda and Corrigenda originally printed in *Sheetlines* 24 have been added at the end.

*Sheetlines* no. 19 (August 1987)

Editorial	(19,1)	1
Richard Oliver: The earliest Ordnance Survey 1:1250 mapping	(19,2)	2
Tim Nicholson: Ordnance Survey cover designs for district, tourist and miscellaneous maps, 1898 to 1939	(19,4)	4
The First Land Use Survey	(19,12)	12
Richard Oliver: Lithography and the Ordnance Survey 1-inch Old Series	(19,13)	13
Puzzle corner	(19,14)	14
Reviews: Whittington and Gibson, <i>The Military Survey of Scotland 1747-1755: a critique</i>	(19,15)	15
H.E. Wilson, <i>Down to earth</i>	(19,15)	15
Recent meetings: The history of the One-inch map since 1930	(19,16)	16
Notes and queries	(19,17)	17
Publications	(19,19)	19

*Sheetlines* no. 20 (December 1987)

Editorial	(20,1)	20
Roger Hellyer: The archaeological and historical maps of the Ordnance Survey - I	(20,2)	21
ditto - II	(21,6)	28
ditto - Addenda and Corrigenda	(24,15)	38
Richard Oliver: One-inch military maps of Great Britain 1919-1950; some notes on GSGS 3907 and 3908 (including 'War Revision 1940' and 'Second War Revision 1940')	(20,9)	40
Letters to the Editor	(20,13)	44
The seventh Edinburgh Three-Day Event	(20,14)	45
Puzzle Corner	(20,17)	48
Review: Harry Margary, <i>The Old Series Ordnance Survey</i> , vols I to V	(20,18)	49
A Half-inch precursor	(20,20)	50
Completion of the O.S. 1:10,000/1:10,560 Regular Series	(20,20)	51
Review: Richard Oliver's guides to the One-inch Fifth and New Popular Editions	(20,22)	53

(Continued inside back cover)



## SHEETLINES

The Newsletter of  
THE CHARLES CLOSE SOCIETY

No. 19 - August 1987

## EDITORIAL

Readers will see that with this issue a new editor has moved into the hot seat. He is sure that they will wish him to express their thanks to Richard Dean whose first issue of *Sheetlines* was No. 7 in October 1983 and to Neville and Joyce Hausaman who have undertaken typing, reproduction and distribution. The new editor is very aware that he has inherited responsibility for a going concern with a well established character of its own. Nevertheless any incoming editor has to consider how far he should replicate what has been done in the past and how far he should alter course to take account of new trends or changes in readers' requirements. He hopes that his readers will not be slow to express their views on these issues.

*Sheetlines* has established itself in the form and format of a newsletter compact to handle, cheap to distribute and giving plenty of space to short notes and readers contributions. One disadvantage is that the editor can only consider longer contributions (say over 5000 words) if authors will agree to publication in two or more parts. If the Society's budget permitted would readers opt for more pages, a larger page format, better illustrations or, for example, a coloured, illustrated cover?

Content is to a considerable extent determined by the nature of material offered for publication but would readers like to see a change of balance? Given that the Charles Close Society exists "for the Study of Ordnance Survey Maps" how far should we go into fringe areas? For example should CCS see the following maps as legitimate objects for study?

- (a) The Woodlands and Marshlands of England.
  - Map A. Prehistoric.
  - Map B. As deduced from early literature, compiled by H.A. Wilcox. Reproduced under the direction of a Committee of the British Association.

Both maps are based on the 1:1,000,000 physical map of England & Wales and carry OS imprint CR 8791 - 1000/33.
- (b) Aldershot Experimental Map 1:50,000 GSGS 3949 1933.
 

Note: Cartography from OS map at 1" to the mile. Drawn in experimental air survey style at WO 1933. Heliographed at OS 1933 and printed at WO 1933.

- (c) Jamaica, Montego Bay & Environs 1:25,000  
(Extract prepared for examination use)  
DOS 2813A Printed for the Directorate of Overseas Surveys by the  
Ordnance Survey 75/750 0425.

The editor's initial response would be (a) Yes, (b) Strictly speaking "No" but probably of interest to many CCS members, (c) No, but map has cartographic interest in representing one of the last offspring of the parallel OS/DOS experimentation in dual scale map specifications. It also raises the issue of how far CCS is concerned with pre-merger activities of organizations absorbed by OS (eg DOS) and post divorce activities of those separated from it (eg Geological Survey(s))?

Even if we take a restricted view there remain some aspects of Ordnance Survey mapping which have yet to be considered in "Sheetlines". Map extracts produced for examination boards, under strict security wraps, are one. Maps prepared to illustrate official reports are another, for example the fine set produced for the Royal Commission on Canals and Waterways, during 1908/09/10. Yet another is the Ordnance Survey, and its maps and mapping activities as seen in literature, from Wordsworth's "geographic labourer" onwards. Such views have appeared in at least one West End play in recent years. Nosing around a small antique market the editor came across Surveyors Trek by David Anderson (Faber 1939) a partially fictionalised account of a first tour with the Nigerian Survey department. (Although no dates appear in his book, D.L.C. Anderson joined the Nigerian Survey in 1928). The first chapter contains a light hearted outsider's view of OS in the late 1920s where Anderson received his induction to practical cartography in "The Secret Service Department" (so called because it was producing 1:20,000 maps for the War Office).

A much more recent lay person's view appeared in Katherine Whitehorn's column in "The Observer" on 14th June, entitled "Keeping service on the map". It was a bit hard on OS that the paper used one of the 1:25,000 First Series sheets of the "Basingstoke Gap" (SU 44) to illustrate the need for revision when most adjoining areas are now published in "Pathfinders". However most Sheetline readers will sympathise with Mrs Whitehorn's concern that standards should not be sacrificed to short term commercial considerations. One OS commercial initiative will, however, have provided some hours of harmless fun for our readers, the fictitious map produced for the Treasure Hunt which is mentioned on page 14 of this issue.

#### The earliest Ordnance Survey 1:1250 mapping

by Richard Oliver

Hitherto, the "accepted date" for the beginnings of Ordnance Survey 1:1250 mapping has been 1911. As a result of Lloyd George's "peoples' budget", with its new land taxes, there arose a need for a large-scale plan of urban areas with more "elbow-room" than the 1:2500, which since the 1890s had been the largest scale at which the O.S. had published. An easy way out was to enlarge the 1:2500 photographically. These 1:1250 enlargements were thus derivatives produced for special use, do not appear to have been offered for sale, were not sent to the Copyright Libraries, are rarely seen, and thus have the status of a Date to be Memorised, nothing more. (Parenthetically, annotated copies for cadastral purposes, sometimes encountered in local record offices, are often of considerable beauty and absorbing interest.) As a result of recommendations by the Davidson Committee in 1938, the 1:1250 was adopted as the standard scale for urban areas when the great resurvey of

Britain was begun in 1943. Until February 1973 1:2500 coverage of urban areas was obtained by direct reduction from the 1:1250, but since then the publication of this "derived" 1:2500 has been discontinued, and thus the chain of events initiated in 1911 has come full circle. Fanatical collectors and aspiring map libraries may like to note that there are some 52,000 1:1250 National Grid plans, costing £15.30 each, or about £800,000 for the set, excluding the cost of storage.

Collectors, map librarians and others may also like to note that the Ordnance Survey had had experience of the 1:1250 scale long before 1911. As a result of trawling the Public Record Office map-catalogue recently, I was interested to learn that the O.S. had produced 1:1250 mapping as early as 1859: PRO MR 1315 is a 1:1250 survey of Shoeburyness, in Essex, published in April 1859. Although now mounted as a single roll, (which has involved some cropping of margins), it originally comprised four sheets, numbered 1, 2, 3, 4, plus an "area sheet". Only the immediate vicinity of Shoeburyness was mapped, a total (according to the area sheet) of 270.497 acres, plus the adjacent foreshore. In general appearance the maps are very similar to contemporary O.S. handcoloured 1:2500 parish plans, with the title containing the publication details, (and as usual with the 1:2500 before 1872, omitting the survey date), on an otherwise blank part of sheet 1; two interesting differences are the statement "The Datum Line for the Levels on this Plan is 10 feet below approximate High Water Mark", (presumably this refers to the Liverpool (1844) datum), and the use of grey for "herringbone" garden ornament, a practice which I have only previously seen on 1:1056 MS plans of Irish towns. The Shoeburyness plans are drawn on their own local meridian, a practice standard hitherto for such "isolated" surveys, (e.g. those made in 1850-54 for the General Board of Health), but replaced in 1858 by a policy of fitting such surveys to county meridians and sheetlines.

Why Shoeburyness? Why 1:1250? Why has no-one noticed these plans before? Shoeburyness had been adopted some years earlier as an artillery practice and experiment range, (a function which it continues to perform today), and no doubt because it was a hitherto unfortified site there was a lack of existing large-scale Ordnance mapping, which would make a survey by O.S. at least desirable. It was a survey of a rather different nature as compared with the 1:2500 and 1:500 surveys for fortification purposes which absorbed a good deal of O.S. resources between 1859 and 1863.

The choice of scale is interesting, if only because it is symptomatic of the new direction in which the Ordnance Survey was moving from the time of Henry James' appointment as Superintendent in 1854. There is not all that much practical difference between 1:1250 and 1:1056, which latter was standard for urban survey, (not that there was anything very urban about Shoeburyness in 1859), until the early 1850s, when it was first supplemented by 1:528, and then replaced by 1:500. But in the same way as 1:500 was chosen because of its neat relationship to 1:2500, so also must 1:1250 have been chosen, rather than 1:1056 or 1:1000; whatever was the precise purpose of the Shoeburyness plans, it was one for which the standard scales of 1:2500 and 1:500 would not answer.

Why have these plans gone unremarked hitherto? The only reference to them in print seems to be that in Maps and Plans in the Public Record Office: I, British Isles, c.1410-1860, (HMSO, 1967), where they are duly listed, but with the scale expressed (inexactly) as 1 inch to 100 feet, which does not catch the eye as does "1:1250". (The MS list in the PRO map-room does give the scale as 1:1250 - hence my "discovery".) More interesting - and more problematic - is the total lack of contemporary reference to the Shoeburyness survey. It is unsurprising that there is no reference to it in the

voluminous Parliamentary papers dealing with the Battle of the Scales, as 1:1250 would have been far too small for urban use, (nothing less than 1:500 would do after 1855), anyway the Battle of the Scales was not really concerned with urban mapping, and even the 1:2500 had to proceed with circumspection; much more curious is the absence of any mention of the Shoeburyness survey from contemporary O.S. annual reports, which are otherwise not shy in listing in detail areas surveyed or surveying. The only parallel which comes to mind is the similar lack of mention of the quarter-inch map, (see my paper in *Sheetlines* no. 15). Also of interest is the point that, though the title states that the maps were "published", they were not listed in the earliest O.S. catalogues, (published from 1862 onwards), nor do copies appear to have been sent to the Copyright libraries.

But is the Shoeburyness survey unique? Are there other early 1:1250 surveys? Are there other isolated local surveys not listed in the Ordnance Survey annual reports? These are questions which will doubtless be answered in due course, but one may well never be: "And if so - why?"

#### ORDNANCE SURVEY COVER DESIGNS FOR DISTRICT, TOURIST AND MISCELLANEOUS MAPS 1898 TO 1939

by Tim Nicholson

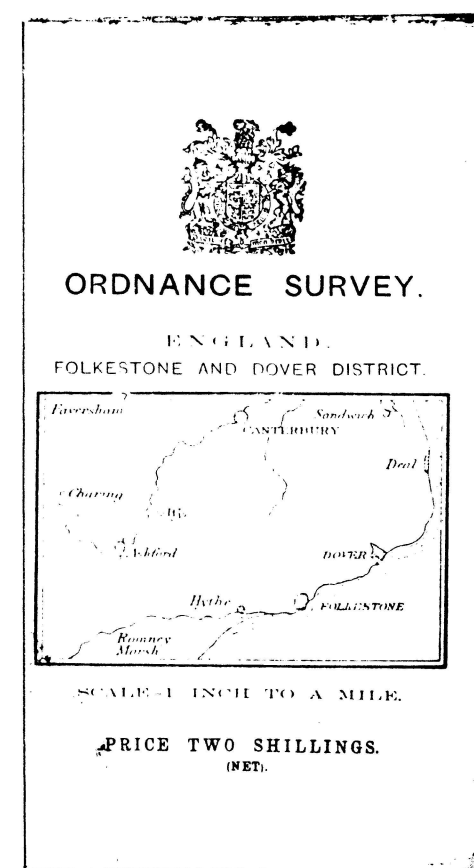
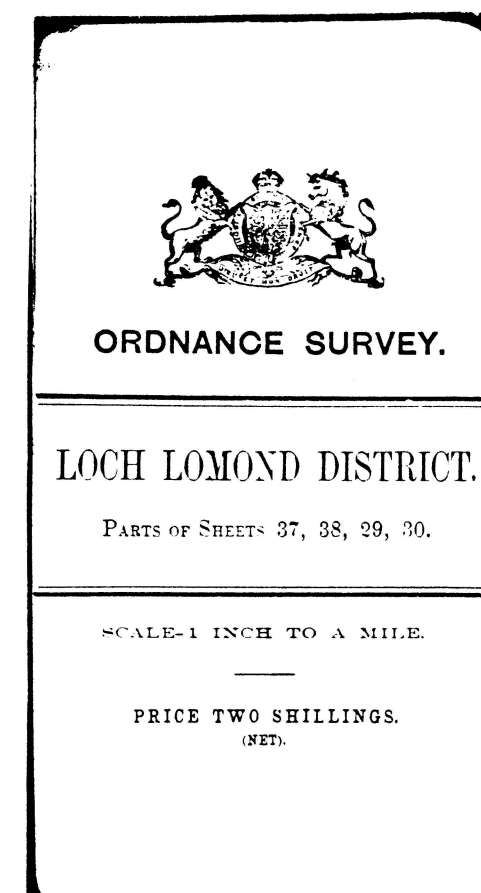
Before 1914, the covers for maps outside the mainstream series lacked distinction, in both senses of the word. No special designs were made for them - they bore the same basic designs as the contemporary standard, mainstream series in all scales; and were therefore very plain.

The first district maps to appear in OS covers were the "black outline, coloured roads" sheets, presented thus from 1898. They were found in the red boards with stick-on Ordnance Survey label that was the earliest OS "own brand" cover, already current on mainstream One Inch maps, and later in the more familiar red, then white, printed card covers (1 - 3). When the few fully coloured district maps derived from the New Series First Revision appeared, they, too, were seen in red or white covers. The same went for the much more numerous Third Edition-based district maps that started to come out in 1904, the handful of pre-1914 Half Inch and Quarter Inch district maps, and miscellaneous maps such as those for military manoeuvres and training areas, the Geological Survey, and the Cotswold Hunt. In common with mainstream series, during the First World War district maps on cloth were sold with the cover design printed directly on to the cloth backing. As at all periods of the Ordnance Survey up to 1940, it is impossible to assign particular covers to maps of a particular kind or date. Old maps were sold in new covers, and new maps in old covers, to use up stocks of either.

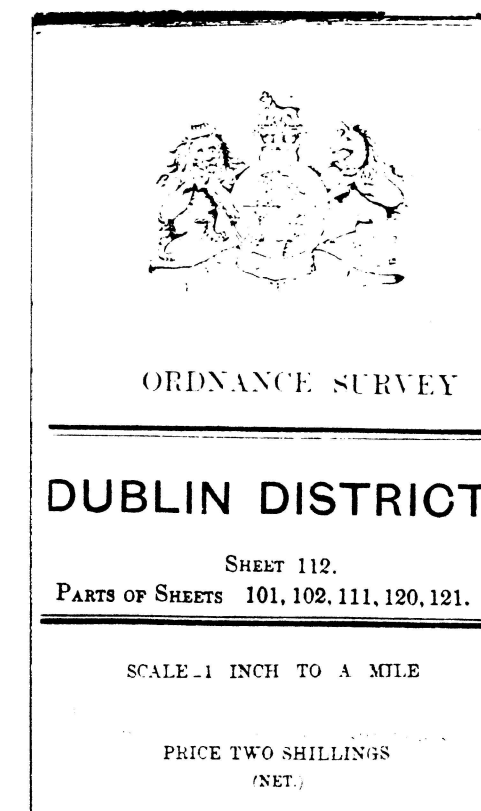
There were innumerable minor variations in the covers of pre-1914 district and miscellaneous maps, as there were in those of the mainstream series. Everyone can make his or her own classification. One that is not too complicated, but takes into account all the major design variations, draws distinctions between red and white, tall (2) and square (1) format, "wide" (1,2) "narrow" (3) coats of arms, serif (2) and sans serif (1,4) lettering in the title, location map (3) and no location map. The "wide" arms may be further divided into those with the St Edward's crown (1) and the Imperial crown (2). But there were "rogue" designs that fitted no tidy scheme - for instance, the distinctive arms on some Irish district maps, with their cheerfully loopy-looking lion (4). And at least one miscellaneous map, for Hyde Park, came in a blue cover.



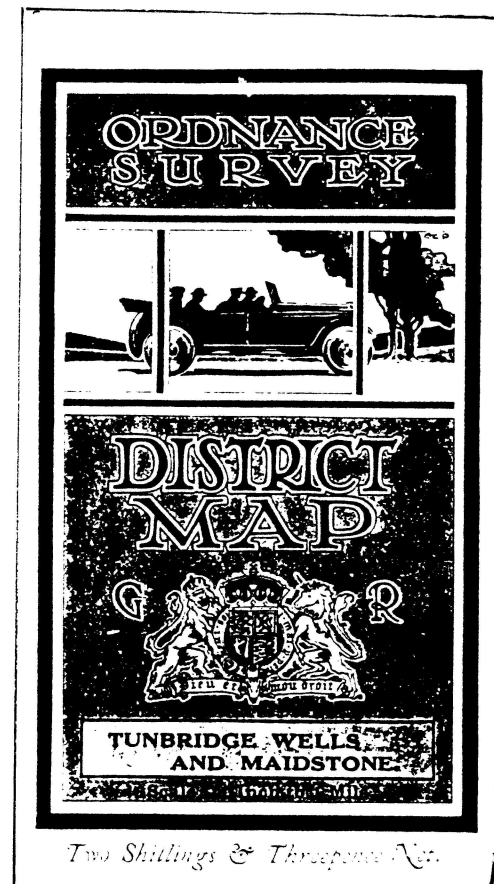
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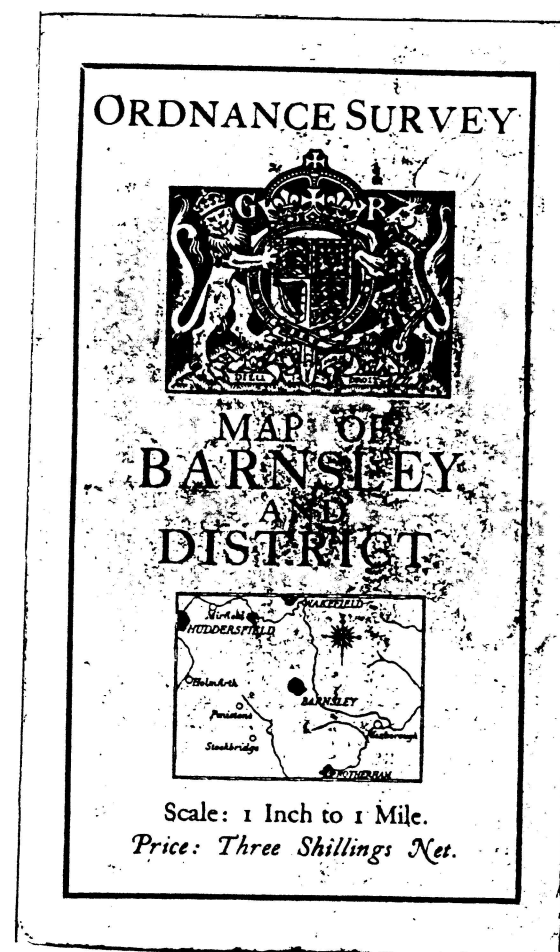


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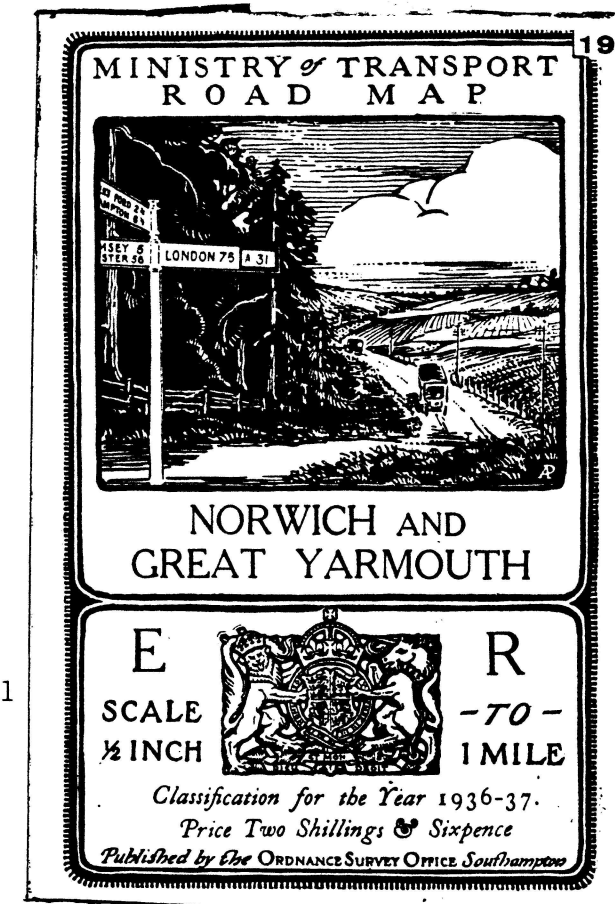
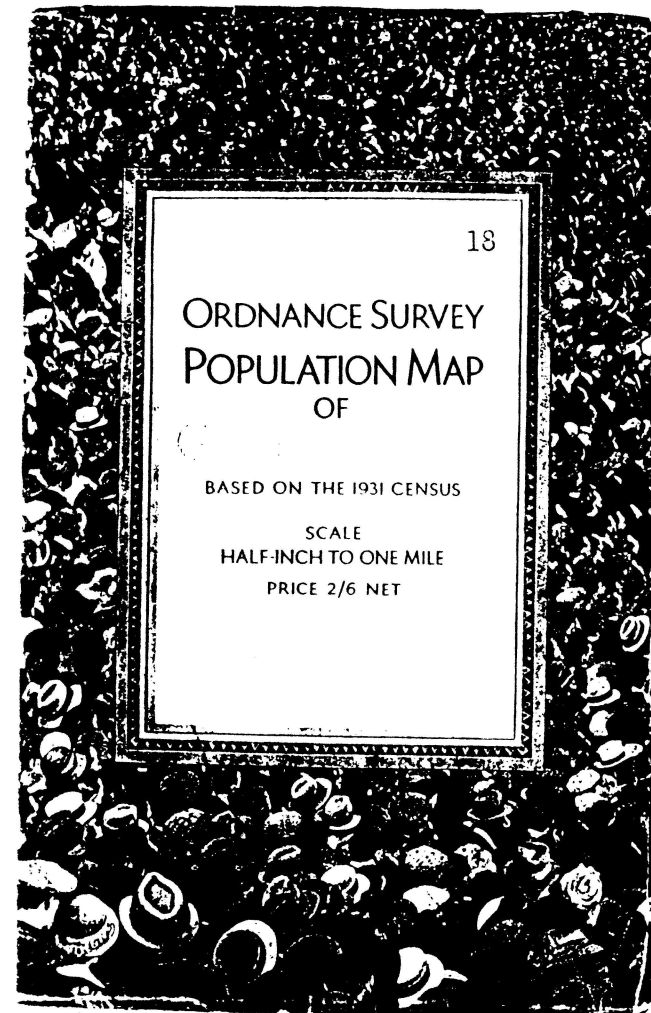
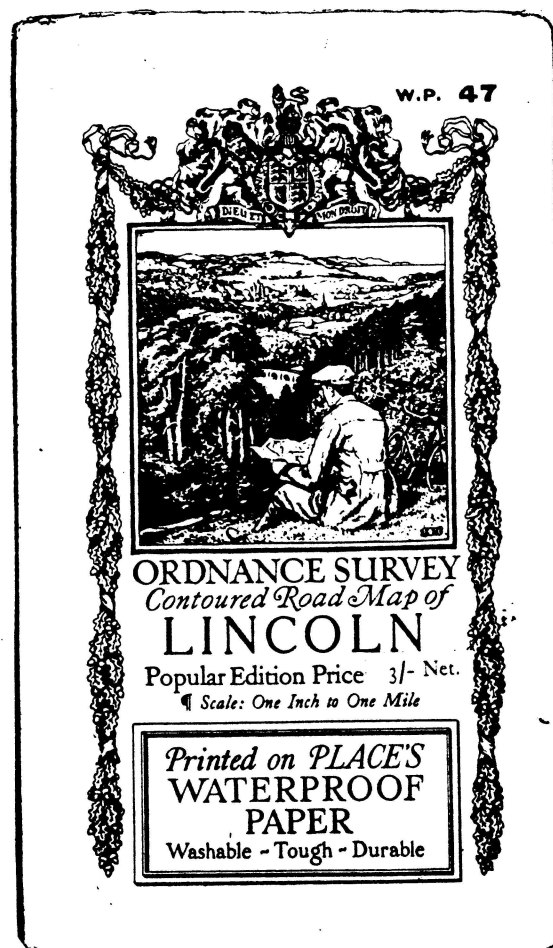
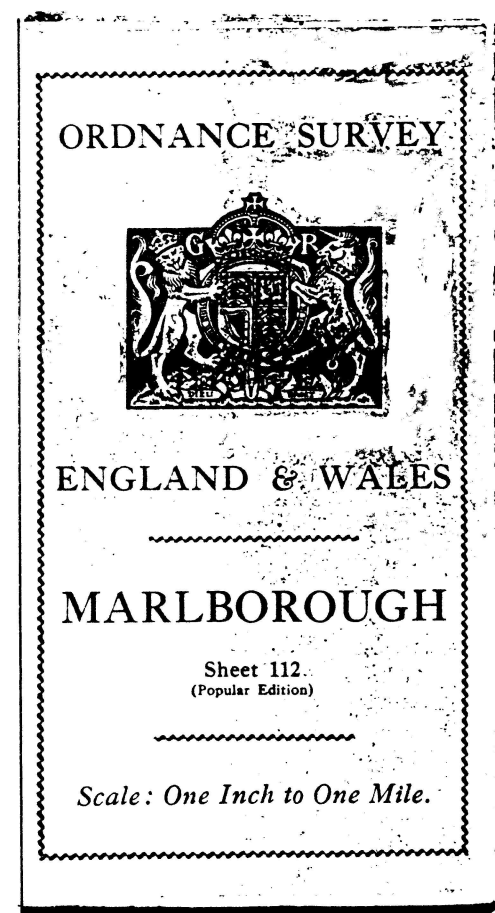
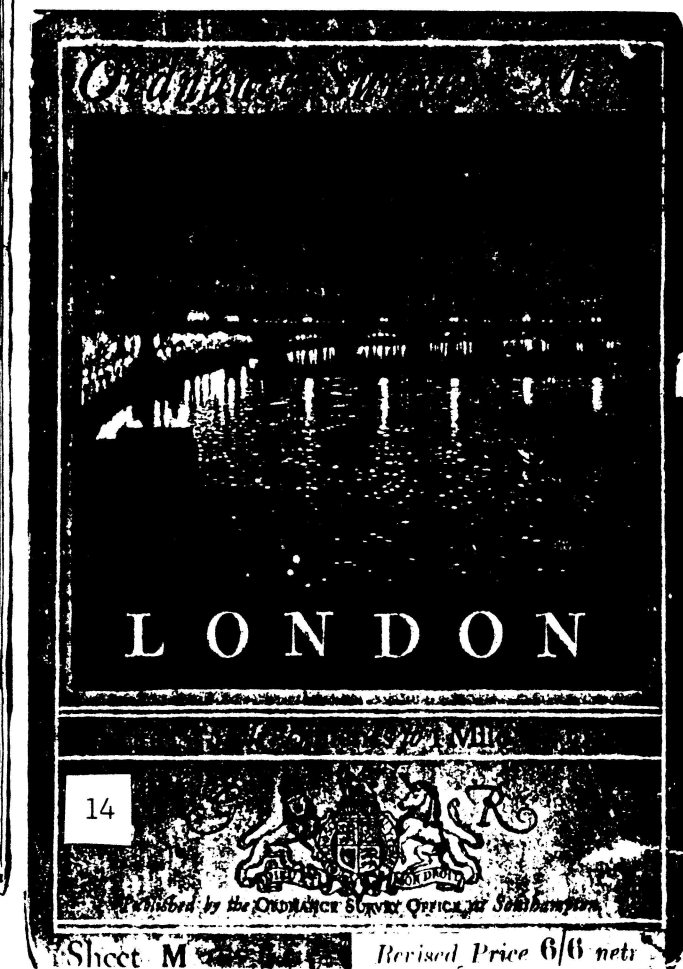
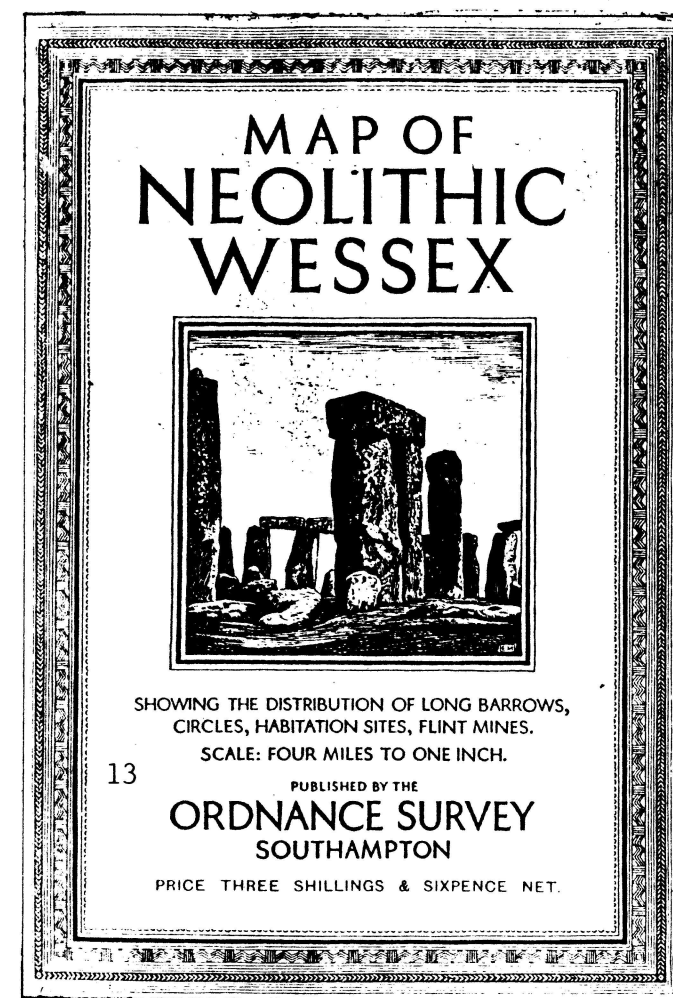
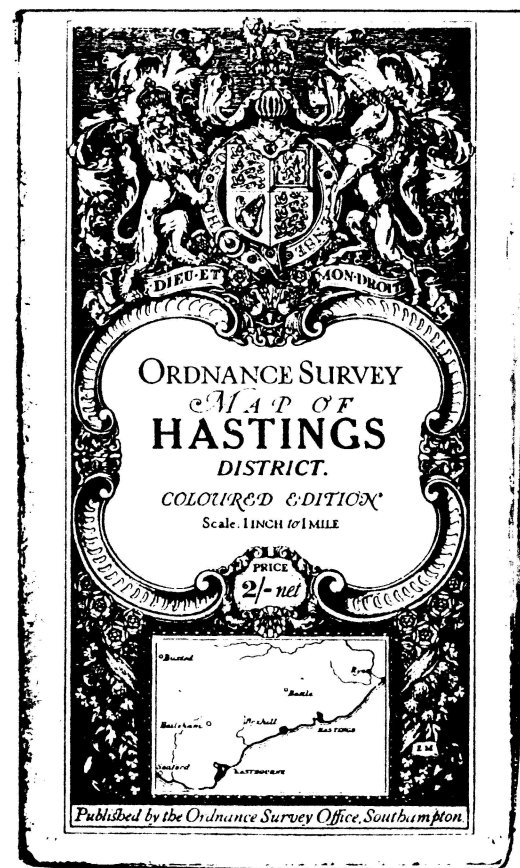
The report of the 1914 Departmental Committee on the Sale of Small Scale Maps - the Olivier Committee - recommended the adoption of more attractive cover designs as a means of increasing a map's appeal. The Survey took the advice to heart after 1918, with usually colourful and good-looking designs by Ellis Martin, Arthur Palmer, J.C.T. Willis and others. All new mainstream series were given their own distinctive covers. So were a few Popular Edition-based district maps (Bristol, Liverpool, Oxford, the Chiltern Hills, Wye Valley), most of the new Tourist maps, the Half Inch district sheets for the Peak District, Cotswolds and London, and many miscellaneous maps. The covers for District and Tourist maps were usually illustrated with a scene from the area concerned. Three of the Tourist maps each had two successive, different designs of their own: Exmoor (without, and with, a huntsman), Brighton (the beach at night, and the Royal Pavilion), and New Forest (a buff ground with the title in a scroll, and a white ground in a black frame).

But covers were still shared. In 1919 a particularly graceful Ellis Martin standard design for Tourist maps was introduced (6), and was seen on at least seven sheets before each was given its own special design. Throughout the 1920s and 1930s, One Inch district maps based on the corresponding mainstream series were seen in the standard covers of these series - the Popular Edition "cyclist on hillside" in both buff and red forms, the two Fifth (Relief) Edition designs, the red "walker on hillside" and coat of arms, and the Fifth Edition blue "walker on hillside".

Three standard covers were found on district and Tourist maps (5, 7, 8), but not, it seems, on series maps. Two Tourist maps - Hertford and St Albans, and Dorking and Leith Hill - were apparently put only into these three covers, never having their own distinctive designs. The standard cover (7) was buff, with red lettering and black arms and location map; but there were variants. The One Inch district map of the Norfolk Broads had black lettering and no location map. The Fifth (Relief) Edition Two Inch district map of the Isles of Scilly also lacked the location map, but had red arms, and lettering in black and red. And when the basic cover was used on Half Inch district maps, such as Birmingham and the Island of Skye, it had the black and red lettering, but black arms. Two other Fifth (Relief) Edition district maps - Dartmoor and Exmoor - were simultaneously and confusingly sold in the covers hitherto peculiar to the Tourist maps of these areas.

Third Edition One Inch district maps continued to be sold while stocks lasted, so were seen in all three standard covers (5, 7, 8), and also in the Ellis Martin decorative design (9) introduced for Third Edition mainstream maps after 1918, in red and brown and red and black variants. The English and Scottish sheets among the experimental, transitional district maps of 1913-18 were sold into the 1920s or later, so are known not just in prewar white covers (3), but also in styles (5), (7), and (9). The Irish sheets such as Killarney were taken over by the Ordnance Survey(s) of Ireland or Northern Ireland, and sold in "local" covers (10). Alongside all the new designs, the basic prewar white cover persisted in modified form after 1918 on prewar "black outline, coloured roads" district maps and their postwar printings. The paper on which the design was printed was now usually brown. There were versions with and without location maps, and with serif and sans serif lettering. The "narrow" coat of arms continued, but a squared-off version was also introduced. The same style was used on at least one mainstream series: the Geological Survey's folded One Inch map.

Four Third Edition Quarter Inch sheets were issued as special district maps - Glasgow, South Central and North Central England, North Wales - and in their early printings were given a brown and white version of the blue and white "motor cyclist" cover of the mainstream Third Edition. South Central England





also appeared in a white, unpriced version. The prewar Half Inch maps continued to be offered after 1918, but the author has seen only prewar cover styles on these maps. It seems not unlikely that they also exist in the post-war standard Ellis Martin covers for the Half Inch mainstream maps.

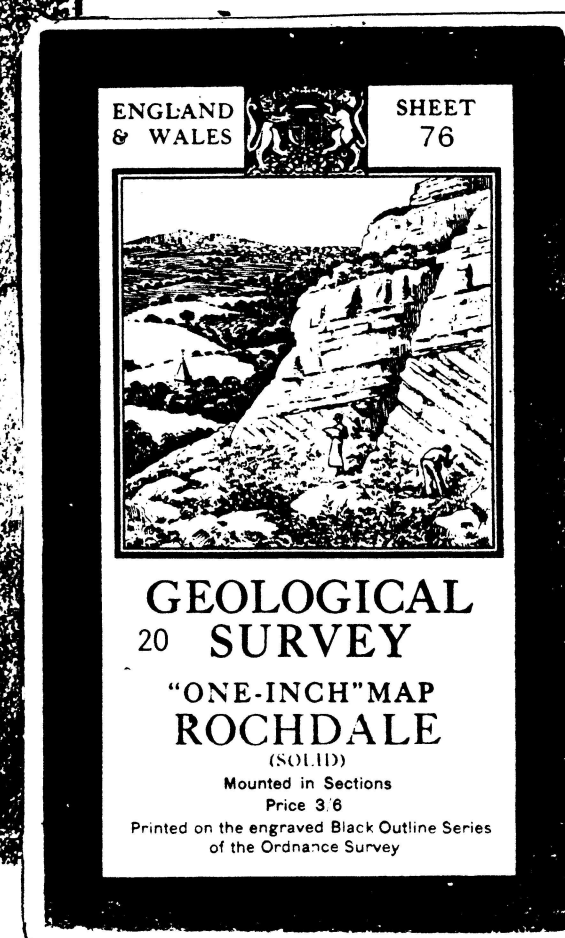
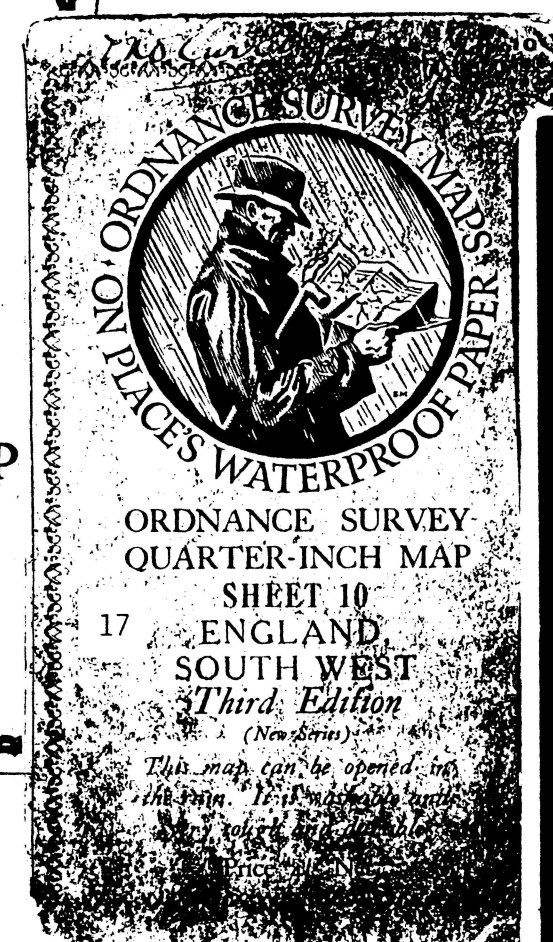
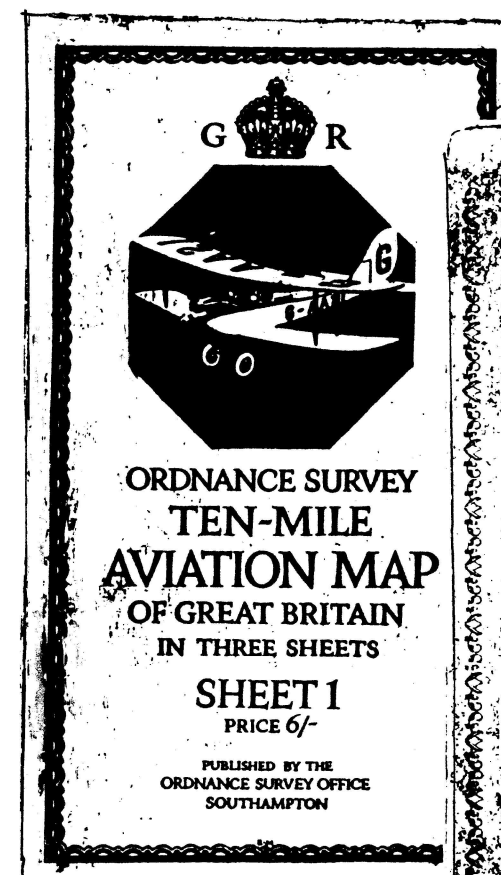
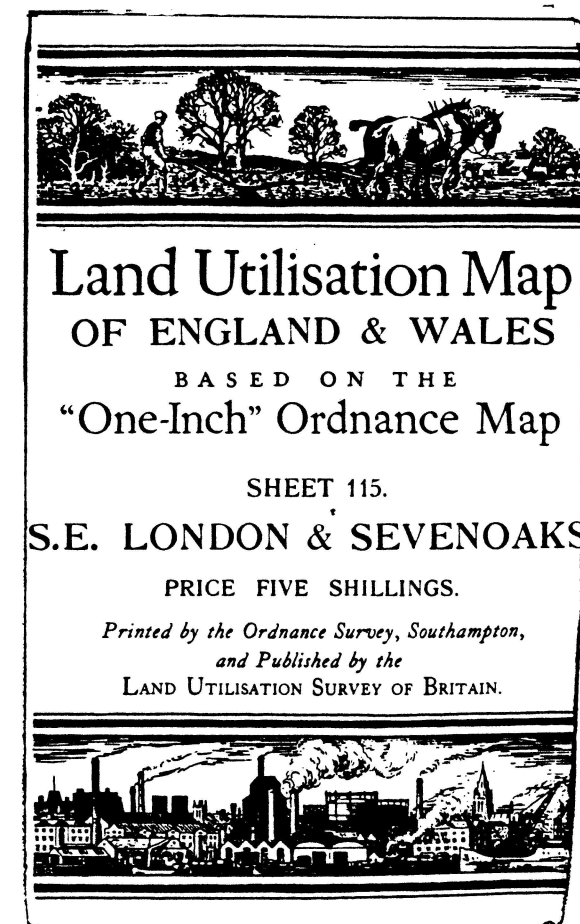
In the early 1930s a new sub-design (11) appeared on a few district and miscellaneous maps. It included features of (7) & also a wavy black border. Among the maps with this cover design are the 1930 and 1931 printings of Torquay district (black outline, coloured roads), the Marlborough "Special Sheet with Hills", the British Association's Half Inch conference map for its Bristol meeting of 1930 (on which the arms were those of Bristol), and the Geological Survey's 25 Mile map of the British Islands. The style is echoed in the 1940s in the covers on the One Inch War Revision maps sold folded by the Ordnance Survey.

The author has found dating the post-1918 standard cover designs impossible. It is easier to put them in their chronological order of appearance. Judging by the printing dates of the map usually seen inside it, style (6) seems to be confined to the first printings of the earlier Tourist maps. Where the Popular Edition "cyclist on hillside" has been seen on a district map, that, again, is an early one - Aldershot North or South, Aldershot Command, Salisbury Plain - and is generally an early printing of it. The three standard covers (5), (7) and (8) appear, from the printing dates on the maps, to have been born in that order. For what it is worth, Ellis Martin's sketch for (8) is dated 1932.

"Miscellaneous" maps came in an appropriate diversity of cover styles. For example, the Eclipse Map of 1927, the 1928 Cambridge conference map for the International Geographical Congress, the Two Inch Jersey Map of 1914, and the pretty J.C.T. Willis paintings of 1933-4 for Jersey and Guernsey were not only peculiar to those maps, but could not have been more diverse in style. But miscellaneous maps that came in series, covering substantial areas of ground, had covers that came in "families". Before 1940 the Survey published historical maps folded in covers (Roman Britain, 17th Century England, Dark Ages Britain, North and South, and Forth, Clyde and Tay in the Roman Period); and some more specialised, archaeological maps, Neolithic Wessex (13), Trent Basin, South Wales Long Barrows and Celtic Earthworks on Salisbury Plain. The covers were all sober, single - colour pictorial designs on brown paper. An Ancient Winchester map had a Martin cover design prepared for it in proof.

The Six Inch Town Map covers, nearly all with their handsome Ellis Martin streetscape and a gazetteer tucked into a pocket, were more uniform. So were the Quarter Inch civil aviation maps with their blue Ellis Martin biplane (16), and the Ten Mile and 1:500,000 maps with a biplane flying the other way (15), in blue and red respectively. Even these series had their variants. The Town Map of York was seen with the red and white arms of the city, the Quarter Inch and Ten Mile civil aviation maps later came in a taller format, and the RAF's version of these two maps had their own, very plain typographical covers. For the series of Six Inch sheets covering London, Ellis Martin designed one of his masterpieces: a night view of the River Thames (14).

Many of the One Inch Popular Edition maps in sheets waterproofed by the Place process were sold in a variant of the standard Popular cover on buff paper, without the location map panel (12). The Third Edition Quarter Inch map on Place's paper could be found in covers featuring the Place logo (17), though it was also seen in standard "motor cyclist" covers.





The four sheets of the Three Inch map of London had a plain buff cover showing St Paul's Cathedral. By contrast, the Ellis Martin cover design for the Population Map, with its crowd scene depicted with photographic realism, was striking as well as appropriate (18). The Land Utilisation Survey's One Inch map covers used elegant little Ellis Martin panels of urban and rural scenes, top and bottom (19), while a One Inch Geological Survey cover pictures geologists at work (20), and was clearly the inspiration for the very similar design on the 1948 Ten Mile geological map cover. Last, and easily least, was Arthur Palmer's lapse: the crude, brick-red horror he produced for the Half Inch and London Two Inch maps devoted to Ministry of Transport road classification (21). Ellis Martin designed a much more attractive cover for the Half Inch map (Sheetlines 8p.15), but it seems never to have been used.

Cover designs produced and used solely for standard mainstream series, such as the various styles for the Ten Mile maps and Ansell-folding maps, are outside the scope of this article. They are the subject of separate studies; as are the descriptions of maps, lists of agents, rules for ordering, index diagrams etc found on the inside or outside of map covers. Finally, a study deserves to be made of cover designs peculiar to Ordnance Survey agents and retailers.

#### The First Land Use Survey

Members will have been disappointed that the talk on the First Land Use Survey, advertised to follow the 1987 Annual General Meeting, could not be given. They may be interested in the recollection of one of the large team of volunteers on whom the survey depended for gathering its field data.

The area around Marlborough had been chosen, I believe, as a pilot. At that time I was at school at the College and had passed the necessary examinations for entry to university, so there was no real necessity for me to attend classes. This must have been the first half of 1933.

Large scale black and white maps had been distributed to schools all over the area around Marlbro' with the request that their pupils should colour in the relevant land use in their locality. These were returned to a centre where they were examined. Where it was found that a field overlapping two adjacent sheets had been differently coloured on these, the actual use had to be resolved. This is where I, and presumably others like me, came in. I would go off on my bicycle to the ground and record the true position for those preparing the map for publication. I alone dealt with numerous such instances.

As we only dealt with the edges of the sheets, goodness knows how much incorrect information was recorded on the inner parts of each sheet.

I was no longer at school when the results were published, but I do have a copy of the resulting map.

J. Wilbur G. Cocke

Ed. Sheet 112 Marlborough, published in 1935, was printed for the LUS by Waterlow. The first 19 sheets had been printed by Ordnance Survey but the work was then switched to commercial printers in circumstances described by the late Professor L. Dudley Stamp in The Land of Britain (Geographical Publications 1948).

#### LITHOGRAPHY AND THE ORDNANCE SURVEY 1-INCH OLD SERIES

by Richard Oliver

In Sheetlines no.18 there appeared a note, 'Mountainous mystery', (written in fact by Richard Dean), describing a lithographed copy of 1-inch Old Series sheet 59 N.E., found in the House of Lords Record Office with the deposited plans, dated November 1861, of the Bala and Dolgelly Railway. In fact, this is a discovery of the greatest importance: what I had hitherto pessimistically assumed to be one of that large class of Ordnance Survey experiments which are documented but not known to survive, proves in fact to exist.

The story of 59 N.E. is recorded in Public Record Office WO 47/1791, pp.6601-2, and PRO WO 47/1792, pp.7007-9. On 1 June 1838 Col Thomas Colby, Superintendent of the Ordnance Survey, submitted a report to the Board of Ordnance, "adverting to the expediency of multiplying impressions of the Ordnance Maps with the lowest degree of cost, & stating that, to meet the contingency of some very low price being fixed upon, which would occasion a demand beyond the 2 or 3,000 Impressions yielded by the Copper Plates, he had caused an experiment to be made by Mr Standidge the Lithographer by taking an Impression from the Copper Plate of the North East Quarter of Sheet 59 in lithographic ink & then transferring it to Stone; & transmitting an Account (£17:2:4) from Mr Standidge for transferring 824 Impressions thereof which he Col Colby considered distinct enough to answer ordinary purposes....." The Ordnance agreed to pay the bill, and the matter then passed to the Master-General of the Ordnance, Sir R.H. Vivian, who observed, "If the Demand for Ordnance Maps was likely to be very great I should be disposed to concur in the proposal of taking lithographic impressions, but I do not expect, however much we may lower the prices, that very large numbers of sheets may be called for, & therefore I much doubt the expense being defrayed - whilst to a certain extent the Sale of the better impressions would be checked. I am therefore not at present disposed to think it will be desirable to resort to this measure."

For the present, that was the end of the matter. Presumably the 824 copies of the lithographed 59 N.E. were put in store, and sales copies of that sheet continued to be printed from copper in the customary way. The question of producing the 1-inch lithographically was revived in February 1846, for somewhat different reasons. Since 1844 the demand for the 1-inch maps for reconnaissance purposes during the Railway Mania had inflicted enormous wear on the Old Series copperplates. Thus Colby proposed, "in view of the actual wear of, and extensive repairs required by, some of the most neatly engraved Copper plates of the Ordnance Maps, that he may be authorised to transfer the Ordnance Maps on the Scale of 1 inch to a Mile, to stone (marginal note: "Expense per Quarter Sheet, including Paper, about 2d. each.") and to supply the impressions of them to the Agents for Sale to the Public. (marginal note: "Publication Price - 1s. each.")" (PRO WO 47/2068, pp.2613-5)

What happened next is not recorded, though it is possible that Colby had experiments made in lithographic printing by O.S. which did not produce a satisfactory result. This need not surprise us: Standidge, the firm which had made the experiment with 59NE, were probably the country's leading lithographers; their skills could not have been acquired overnight, whether by the O.S. or by anyone else. At any rate, in February 1847 Colby recommended to the Ordnance that electrotyping be adopted for the 1-inch Old Series; this method of duplicating copper-plates had recently been developed on the Irish Survey, with great success, (see J.H. Andrews, A Paper Landscape, pp.135-7). The Ordnance agreed, and Colby was authorised to proceed, "without any delay" (PRO WO 47/2104, pp.2865-6).

The one-inch map continued to be printed from copper for many years to come; the gradual introduction of lithographic printing for first large-scale and then later for small-scale maps lies outside the scope of this note. There were a number of practical reasons why lithography was not likely to find favour, for the 1-inch at least, in the mid 19th century: litho stones were very much more bulky than were copper plates, (a copper plate for a 1-inch Old Series full sheet weighed about 35lb, and could be carried by one man, whereas a litho stone of similar size weighed about 450lb, and, according to Sir Henry James, needed three men to carry it); copper was very much better able to accommodate the wide variations in line-width characteristic of O.S. small-scale mapping until comparatively recently; and copper-plates were much easier to revise than were litho stones. Thus electrotyping offered advantages in 1847 with which lithography simply could not compete.

For all this, several questions remain unanswered: how come one of the copies of 59 NE, printed in 1838, came to be used 23 years later for the deposited plans of a railway? Presumably it was purchased by someone, directly or indirectly from the Ordnance Survey? Who? And when? And why were such lithographed copies not sold earlier, or later? How many more of the 824 copies were sold? Do any more survive? Do any copies of the conjectured abortive experiments of 1846 survive? The more you learn, the less you know.

#### PUZZLE CORNER

Guy Messenger has tried to find out from the Route Planner Map 1987 how far you could drive continuously on dual carriageway (including slip roads at legitimately designed junctions) without going over any road twice or back-tracking along the carriageway opposite to one already travelled. He achieved a total of nearly 1,750 miles but was in doubt whether some stretches had in fact been dualled or whether one motorway link (M42/M5) was yet complete. Can anyone improve on this?

Guy says that the additional one inch sheet with a palindromic title, mentioned in last issue, is Scotland (1st to 3rd Edition) Sheet 71 GLENELG.

This summer Ordnance Survey Agents have been displaying a leaflet inviting the public to "Discover £6,000 worth of hidden treasure with Ordnance Survey maps". For Charles Close members the real treasure is likely to be its fictitious map of the country around "Darnton" and "Emovrey". How many members have identified the source of this map? Peter Ennor suggests that a little reflection might solve the mystery.

#### REVIEWS

G. Whittington and A.J.S. Gibson, The Military Survey of Scotland 1747-1755: a critique - Lancaster: Historical Geography Research Group, 1986 - ISBN 1 870074 00 9 Price £2:50.

The military survey of Scotland of 1747-55 gave birth to the "Roy Map", which is really a family of maps, the originals of which are in the British Library, Map Library, and photographic copies of which are in National Library of Scotland and elsewhere. The principal figure involved in its making was, of course, William Roy, who usually gets the credit as the Founder of the Ordnance Survey. Perhaps for that reason, the "Roy Map" has enjoyed a slightly exaggerated reputation in our own time. Roy himself might well have been amused by this, as he dismissed the work (in a much-quoted phrase) as "rather ... a magnificent military sketch, than a very accurate map".

The background to the making of the "Roy Map" was investigated by R.A. Skelton in a booklet, The Military survey of Scotland, 1747-1755, (Edinburgh, Royal Scottish Geographical Society, 1967). Skelton suggested aspects of the map for further investigation, notably place-name recording and depiction of settlement, and Whittington and Gibson have taken him up. They have compared the "Protracted" (i.e. draft) and "Fair" (i.e. finished) copies of the large-scale (1:36,000) map with all the suitable contemporary estate plans, and the net result is more in line with Roy's estimate of his work rather than with that of posterity. However, they acknowledge that the "Roy Map" is an excellent source when - as is very often the case - there is no other evidence available; what they have done is to indicate the degree of caution with which that evidence must be used. I very much hope that their work will be followed by similar studies of, for example, the later 18th century 1-inch county maps of England, and of earlier Ordnance Survey mapping, where the work will be much easier than it was in Scotland because of the much greater number of surviving large-scale estate and enclosure maps. It will be interesting to see when, (or if?), Ordnance Survey work becomes "more accurate" than anyone else's.

By contemporary standards this booklet (66 pages) is modestly priced. In one sense you pay for what you get, though: it is printed from word-processor output, so we are treated to at least two different typefaces, and the placing of the illustrations is often very unhappy; those which ought to face each other are often printed back-to-back, for instance. The quality of the illustrations is extremely variable: the best are those which were specially redrawn, and it is a great pity that the whole lot were not treated thus. All the same, this booklet is well worth the support of all those interested in the pre-history of the Ordnance Survey.

Richard Oliver.

H.E. Wilson, Down To Earth, One hundred and fifty years of the British Geological Survey - Edinburgh and London, Scottish Academic Press 1985, ISBN 7073 0473 3 Price £9:50.

The focus of this informal history of the British Geological Survey is on its development as an institution. This is illuminated by many fascinating character sketches of former directors and senior officers. One of the least flattering sketches is that of its founding father, Henry De la Beche, seen by contemporaries to be "a thorough jobber" who achieved the separation of the Geological Survey from the Ordnance Survey by exploiting his social contact with the Prime Minister, Sir Robert Peel. (His twentieth century successors



must envy him in this respect.) Although up to the Second World War mapping was the Survey's central activity, production procedures changed slowly and were characterised by much duplication of effort as between the Survey's own draughtsmen and those at Ordnance Survey who fair drew the maps for reproduction. Wilson points out that the draughtsmen of 1840 would have had little difficulty in taking up a place in the drawing office of 1940. Almost all has changed since, "But by and large the field geologists still insist on using paper maps".

The author's account of recent decades is highly critical of both Civil Service and Research Council administrators whom he feels showed scant regard for the special character of the Survey. Threatened with manpower economies its future survival as an independent organization now hangs on the success of efforts "to sell itself" to its clients and to fund providers.

#### RECENT MEETINGS

##### The History of the One Inch Map since 1930

About twenty members attended a seminar held in the Geography Department, Birkbeck College, by kind permission of Professor Rhind, on 13 June 1987. Three presentations were made by Richard Dean on the "Fifth" and "New Popular" "Editions" of the One Inch, Richard Oliver on military one inch mapping produced in the 1930s and during the Second World War and by Peter Clark on military one inch mapping subsequent to 1945.

Richard Dean made the point that most of what he had to say would appear in the introductory section of the CCS pamphlet on the Fifth and Sixth Editions, now in preparation, so only a brief reference is necessary here. It seems that when work on the Fifth was started in 1928 a map specification on the lines of the Scottish Popular was contemplated. This was changed when Winterbotham succeeded Jack as Director General and initiated the "Fifth Relief" style and a yard national grid. (For some reason Winterbotham was very hostile to the metre and was to fight a rearguard action against a metric grid, and other Davidson Committee recommendations, in the pages of the Empire Survey Review in retirement). One question unanswered in discussion was "Has anyone seen a non-relief Fifth Edition sheet printed before 1934?"

Richard Oliver's review of military one inch mapping of England and Wales and Scotland of the Second World War period is to be published in a future issue of Sheetlines. He emphasised the complexity of its history and it was notable that notwithstanding the large print runs of the day some variants are now quite rare.

Peter Clark pointed out that Military Survey was (and is) not only responsible to a separate branch of Government to Ordnance Survey, but was (and is) required to pursue quite different objectives. Its use of Ordnance Survey material was influenced by military requirements for stockholding and by its commitment to various international standardization policies. The latter, for example, specified different criteria for advancing edition numbers and for superseding issues than those applied to civilian mapping by Ordnance Survey.\* Operational requirements dictated that grid conversions must be applied simultaneously to all map series over large areas. This had, for example, delayed the adaption, and adoption, of the New Popular one inch map for military purposes. These different objectives had sometimes led to friction between the two organizations but ultimately a broader vision had prevailed notably through the intervention of the late Maj. General "Bruno" Brown during his Director Generalship.

\* The criteria which were adopted for edition numbering on military mapping of the period are described in "Standard Cartographic Practices recommended for International use for Land Maps" presented by Institut Geographique National (France) to the Second Regional Cartographic Conference of The United Nations for Asia and the Far East, Tokyo 1958. Editor.

#### NOTES AND QUERIES

##### Appointments

The announcement in the last issue that Mrs Barbara Bond was to take up the appointment of Head of the Map Library at the British Library turned out to be premature. Barbara was subsequently selected to fill the post of Superintendent of Marine Sciences in the Hydrographic Department at Taunton. Tony Campbell, who has been acting Head, has now been promoted to the British Library post in her place. We also hear that our Membership Secretary, Karen Cook, has been appointed Research Assistant in the British Library's Map Library. Our congratulations go to all three.

##### Early 'Half Inch' District Sheets

David Archer's note on the early small format district sheet, New Forest and Surroundings, 1904, (No. 18 page 17) prompted a reference to the 1908 Ordnance Survey catalogue which lists the following:

Aldershot  
Birmingham  
Salisbury Plain  
New Forest  
East of England Manoeuvres, 1904  
South of England Manoeuvre Map, 1903 (4 sheets)

Apart from the last all were priced at 1s 6d. paper folded or 2s 0d. mounted on linen. The Editor's copy of "Salisbury Plain" (1903) is very similar in specification to David's "New Forest" but lacks the light yellow background tint. The price printed on the red cover is one shilling!

##### Conference Maps

With reference to the penultimate paragraph of Tim Nicholson's article in the last issue, Richard Porter informs us that the Overseas Surveys Directorate at Ordnance Survey holds eight inch to one mile plans of Cambridge as prepared for the 1955, 1959 and the 1963 conferences of Commonwealth Survey Officers. (The reference to 1958 in the article was a typing error). It is believed that copies of a commercially produced plan of the city were bought for the 1967 and subsequent conferences because copyright and royalty problems precluded the continued use of an OS base map.

##### Trinity College Dublin Map Library

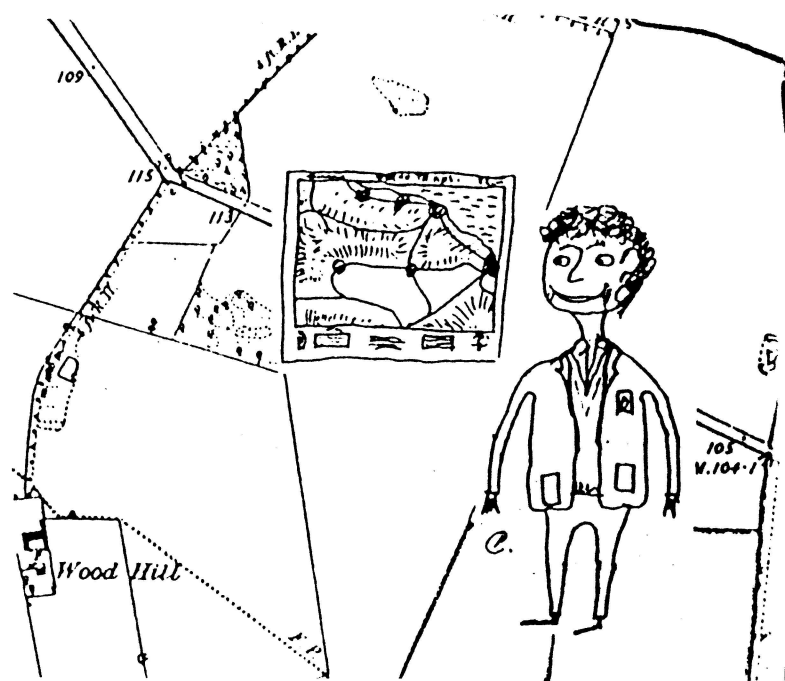
Visitors to Dublin some years ago who asked where the Trinity College Library Map Collection was housed learned that although some material was available in the Berkeley Library and other maps were on loan to the Geography Department, most of the collection was unavailable to readers. An indication that this was soon to change came in the Spring of 1986 when Trinity College advertised for a Map Librarian. This new professional post in the Library was filled by Paul Ferguson, (a CCS member since 1985). A short report on his first few

months work appeared in the Spring issue of the Friends' of Trinity College Library Newsletter.

The collection is estimated to be in excess of 500,000 sheets and consists, in the main, of British and Irish Ordnance Survey mapping. Trinity College Library is a Legal Deposit Library and, like her five British counterparts, is entitled to claim a copy of books, journals and maps published on both sides of the Irish Sea. As a result, the collection includes material from official agencies such as the Ordnance Survey and the Directorate of Overseas Surveys as well as the commercial publications. However, one obvious gap in the collection is the absence of GSGS mapping so coverage of Western Europe, for example, is comparatively poor. With Ordnance Survey mapping of Britain and Ireland so well represented, future researchers are likely to find the Library an important additional source for new states.

The importance of the map collection as a College and a national resource has attracted funding from the Irish Government to refurbish and adapt an existing building for the specific requirements of a map library. This has meant stripping the building back to a four wall shell and the installation of a new roof and new steel-reinforced concrete floors. Completion is due in the summer of 1987 and the maps will be removed there soon afterwards. Once this is accomplished Ireland may be able to boast the most up-to-date map library in these islands. Starting with a huge collection of largely uncatalogued material will provide an unusual, possibly unique, opportunity to set up systems for storing and processing maps to the latest standards, not least in cataloguing.

The size of the task will require the establishment of clear priorities and Paul Ferguson's paper indicates that Irish and small scales maps will be among the first to be made available. Even this will take some time and the Map Library may not open to readers until the Spring of 1988. It is hoped that the Map Librarian will be able then to give Sheetline readers a fuller account of what has been achieved.



## PUBLICATIONS

### Facsimile Reproduction of Earlier "One Inch" Maps

Mr Harry Margary and his associates are to be congratulated upon the publication of Volume V Lincolnshire, Rutland and East Anglia of "The Old Series Ordnance Survey Maps of England and Wales, thus reaching the half way point in this great enterprise. This latest volume includes an introduction by Brian Harley which was the mapping of this area to illustrate the impact of Thomas Colby's reforms on the production of this national map series. The cartobibliography which follows was prepared by John and Barbara Manterfield. Their explanatory notes incorporate a valuable discussion of the sources used by OS when adding newly constructed railways to "One Inch" sheets during the 1830s and 40s. Copies may be obtained from Mr Margary at Lympne Castle, Kent CT 21 4LQ.

News has been received from North of the Border of a project for the reproduction of Scottish "One Inch" sheets in their mid 1890s state. Sheets reported to be available are mostly of mainland areas but do include the island of Skye. The promoters advertise however that "Maps will be printed to meet demand". Further information can be sought from:

Caledonian Books, Collieston, Ellon, AB4 9RT.

### Sir Charles Close

The note in No 18 has provoked two readers to draw attention to other omissions from Professor Freeman's bibliography of Sir Charles' works. That bibliography is complemented to some extent by another which appeared at the end of J. de Graaf-Hunters obituary Charles Frederick Arden-Close Obituary Notices of Fellows of the Royal Society Vol 8 November 1953 pp 327 - 339 but quite a few items appear in neither listing. One such is:

Notes on the Minor Trigonometrical Work of The Ordnance Survey  
compiled under the Direction of Colonel C.F. Close CMG. RE. Director  
General of the Ordnance Survey 1913 (London, HMSO 1914)

which contains the note:

"The first edition of Notes on the Minor Trigonometrical Work of the Ordnance Survey was compiled by Captain C.F. Close RE in 1901. This first edition has been enlarged and revised to form the present pamphlet by Captain H. St J. L. Winterbotham RE, in 1913".

Has any reader seen the 1901 edition?

Sir Charles' paper Antipodes was first published in the Empire Survey Review Vol 5 (No 36 April 1940) pp 334 - 336. It was subsequently revised and republished as Chapter IV of Geographical By-Ways (London, Edward Arnold 1947) which includes two interesting maps of Antipodal Regions. As Sir Charles wrote many short notes and letters to journals that were both pertinent and informative might some CCS member now prepare a truly comprehensive bibliography of his publications?



## SHEETLINES

The Newsletter of  
THE CHARLES CLOSE SOCIETY

No. 20 - December 1987

### EDITORIAL

An enthusiasm for celebrating anniversaries is characteristic of our times. The passage of fifty years, a centenary or even a half millenium can provide an excuse for pageantry, speeches, symposia, exhibitions and (most important for some of us?) a rich crop of ephemera. In 1984 we celebrated the centenary of international acceptance of Greenwich as the Prime Meridian even though a hundred years later the Ordnance Survey still retained its own zero meridian approximately 8 metres to the west. 1986 saw the 250th anniversary of French expeditions to Ecuador and Lapland to determine the shape and dimensions of the Earth (and incidentally to lay foundations for the metric system:- bicentenary due in 1991). 1991 will also see the bicentenary of the foundation of the Ordnance Survey. No doubt many Charles Close Society members, and we hope the Society itself, will actively participate in the celebrations. It may not be entirely co-incidental that the International Cartographic Association has chosen to hold its next General Assembly, and associated technical conference at Bournemouth from 23rd September to 1st October that year. In the meantime in 1987 the Royal Engineers celebrated the bicentenary of General Roy's determination of the difference of longitude between the observatories at Paris and Greenwich. Military surveyors, in Eighteenth Century uniforms, remeasured the distance on 9 September, using satellite observations. Their results only differed from Roy's by about two seconds of longitude:- Our congratulations go to both!

Readers will see that the editor has received some response to his invitation of comments upon the content and format of Sheetlines. He would welcome more. In the meantime readers should take note of the Society's expanding publishing activity, notably Richard Oliver's two guides to the Fifth and "New Popular" editions of the OS one-inch series and Guy Messenger's forthcoming monograph on the Third Edition, Large Sheet Series, one-inch map of England and Wales. Would-be readers of the latter should not delay sending in the enclosed application form to get the benefit of the pre-publication price. Readers are also invited on page 8 to take part in a competition for the design of a new logo to appear on the Society's letterhead and publications, including of course, future numbers of Sheetlines.

Finally the editor would like to wish his readers a happy New Year during which he hopes that he will be able to provide something of interest for them all.

### THE ARCHAEOLOGICAL AND HISTORICAL MAPS OF THE ORDNANCE SURVEY. I

by Roger Hellyer

The arrival at Southampton on 1 October 1920 of their new Archaeology Officer was seen by the resident military establishment as an intrusion by a lone and unwanted civilian. It is easy to understand why he may have been resented: someone appointed to supervise the apparently irrelevant subject of archaeology at a time when the O.S. was still winding down from producing literally millions of maps for the life and death struggle that had only recently ended, and setting up new civilian programmes. Charles Close must have possessed extraordinary vision not only to make such an appointment at all at such a time, but also to find a man like Osbert Guy Stanhope Crawford, possibly unique among contemporary archaeologists, most of whom were amateurs or closeted in university or museum, who was independent and prickly (to use Phillips's word) enough to survive in the alien, even hostile, environment at Southampton, and one who was young, vigorous and energetic. But then perhaps Close only made the appointment because he knew he had found the man.

Close knew Crawford well. They had first met briefly in 1911, and again during the war when Winterbotham, the head of Crawford's mapping section in France, had sent him to Southampton with a delivery of maps. After the war their relationship deepened as Crawford undertook voluntary field-work for the O.S. Crawford profoundly impressed Close, himself a keen amateur archaeologist, as an expert in the subject, with experience in both the creation and the use of maps, an eagle eye in detecting the errors upon them, a specialist in the etymology of place names and a man keenly aware of the potential of the new technique of air photography. Close's primary objective in having Crawford appointed Archaeology Officer was for him to supervise a systematic revision, and where necessary amendment, of all the archaeological sites appearing on large scale maps. The coverage had grown piecemeal through the nineteenth century and in some areas, like Sir Richard Colt Hoare's Wiltshire, had been very competently, even expertly, done, while in others it was virtually non-existent. Whether Close had a clear idea of how this was to be achieved is debatable, and certainly the O.S. had not foreseen that they had employed an Archaeology Officer who intended to inspect sites in the field himself for their accuracy, or for that matter one who intended to continue to speak and write about his science. Crawford himself appears always to have possessed a perfectly clear vision of his aspirations, and how it would be necessary for him little by little to weaken the constraints of O.S. methodology in order to achieve them. He was also fully aware that it would be impossible for him to undertake all the necessary field-work alone, and for that reason one of his early tasks was to prepare his Notes on Archaeology for Guidance in the Field which he wrote for the use of amateur field workers throughout the country in an endeavour to systematise their findings for use on O.S. maps. This single foolscap sheet leaflet is with us still, now grown into a 184 page book.

Crawford began his own field-work in Gloucestershire where the O.S. were currently revising the large scale map, and he was quickly confronted by the realities of the task he had undertaken, so many were the prehistoric sites lacking from existing O.S. maps. We see in his treatment of this new material early evidence that Crawford did not intend to be shackled by bureaucracy: he was not allowed to publish his findings in book form since that was the province of His Majesty's Stationery Office and not the O.S., but he could, and did, write them up in an O.S. Professional Paper, published in July 1922, with the megalithic sites recorded on a specially printed form of 1/4-inch Third Edition Sheet 8. The success of this piece of cartography encouraged Crawford to expand his prehistoric survey nationwide, and independently to turn



his first paper into a book, The Long Barrows of the Cotswolds. He found a publisher in John Bellows in Gloucester, and thus was sown a seed of incalculable importance to Crawford's ambitions which bore fruit when in 1927 Bellows began publication of Crawford's quarterly periodical Antiquity.

Crawford's Sheet 8 was of further significance in that it successfully demonstrated to Close, and more importantly to Jack who within a month was to become the new Director General, the central tenet of Crawford's philosophy, that archaeological maps should be created that depicted one period or type of archaeological evidence at one time. Exploded was Close's idea, developed with Sir Charles Oman at Oxford, that all historical and archaeological sites of whatever period should be added to a small scale map in an attempt to create a cartographical history of England. The Oxford district had been experimentally drawn in this way before Crawford joined the O.S., (a map which he later wrote of as "an appalling amalgam of history and prehistory") and it obviously took him many months to convince his superiors that such an approach could only lead to confusion.

A further stage in his ambition was to bring period maps to the notice of the public, something publication in a Professional Paper was never going to achieve. This in turn meant convincing his masters that the production of a special period map need not be a commercial disaster, and Crawford again demonstrated his independent spirit and an ability to "bend the rules" by first making a model of, and only then seeking Jack's permission to publish, his Map of Roman Britain - permission which he anticipated would have been withheld had he asked for it first. Had that occurred it is hard to see how any period maps could ever have been published. However, Jack grudgingly accepted the fait accompli and permitted the map, which far exceeded the O.S.'s expectations in selling out its first print run of 1,000 within a month. Subsequent printings of a further 4,500 copies were to follow before the second edition appeared in 1928. This was to sell in even greater numbers.

Crawford built slowly upon this success with other period maps. The third of his Megalithic series, of the Wessex area, appeared in 1932 as a map rather than as a Professional Paper, and he was perhaps fortunate in being able to reverse the near disaster of a running error that made nonsense of its catalogue of sites by publishing a second edition a year later. This series of maps he then handed over to others who were experts in their own localities, while he himself continued experimenting with mapping the results of that aspect of archaeological research for which he is perhaps best remembered: the use of the new technique of air photography with its unforeseen potential for identifying, chiefly through crop markings, archaeological sites which might be completely invisible on the ground. His interest in this had begun as an observer in the R.F.C. on the Western Front, and though of course he was not given a budget to undertake his own research of this type, he was allowed access to the R.A.F.'s fragmentary coverage of the whole country, and he found occasional private sponsors who were prepared to pay the expenses of aeroplane and camera. Crawford took every opportunity of publicising the archaeological importance of air photographs, through lectures (e.g. the R.G.S.), articles (e.g. in Antiquity), exhibitions (e.g. London, 1932 and Berlin, 1938, published in book form as Luftbild und Vorgeschichte), and by ensuring that those copies deposited with the O.S. were available to the public. What proved to be his most famous book, Wessex from the Air, compiled with Alexander Keiller, was a collection of air photographs with his commentary as were two more Professional Papers - No. 7 Air Survey and Archaeology, 1924 and No. 12 Air-Photography for Archaeologists, 1929.

Crawford's lead inspired others, notably Major George W.G. Allen, a pre-war pilot who made the photographing of archaeological sites from the air almost a vocation, and most importantly Professor J. Kenneth S. St Joseph, for many years the Curator of Aerial Photography in the University of Cambridge. The work of men such as these has proved of permanent value to the accurate plotting of archaeological sites on large scale maps. In his programme for transferring air photographic data to period maps Crawford was typically ambitious, one project being to publish the Celtic earthworks of Salisbury Plain on six medium scale sheets, and it is a pity that only one of these, the Old Sarum sheet, should have appeared, though Amesbury did reach proof stage. He produced four further maps derived directly from the results of air photographs in Professional Papers - two in No. 7 mentioned above. and two in No. 17 The Strip-Map of Littleington, 1937. In the late 1930's Crawford returned again to the theme of Roman Britain, contemplating again its mapping at the 10-mile scale, and then ambitiously at the 1/4-inch scale. In partnership with St Joseph he began work in the north but regrettably this was to be another still-born scheme, leaving only one map published - Scotland in Roman Times - and a further one drawn - The Border (Roman Period). Crawford was even planning a strip-map of Hadrian's Wall as part of this coverage. But even these series of maps in no way represent the full extent of the widespread nature of Crawford's plans for future period maps, as his Programme of Archaeological Work Projected in 1936 will reveal. (See Part II, Appendix 2)

If few of the new avenues of cartography that he explored achieved completion, Crawford can hardly be blamed: he was a passionate believer in accuracy and quality of work, and knew that this took time and money. He was never given much of the latter, and World War Two, in the end, denied him enough of the former. But his achievement was still prodigious considering the resources he had. At the start he was alone, but he gradually found allies and set up working relationships especially with J.G. Withycombe, of 1-inch Fifth Edition fame, and Harold L.P. Jolly, the Research Officer, and he gradually formed a small team of archaeologically expert field workers and draughtsmen - Roland E. Curtis, Reginald A. Jerrard, Frederick J. Stoneage - led by William J. Whitters. The maps he did produce were of high scientific and cartographic distinction supported by true clarity of characterisation in the use of lettering and symbols. Furthermore they were attractively packaged since Crawford was permitted the services of the O.S. artist Ellis Martin to design map covers and even borders. Many consider Martin's first design, his famous mosaic for the Map of Roman Britain, to be his best. Happily it is with us still, 63 years after its conception, even if the O.S. did rather cruelly expunge his initials from it in 1956. It is good to see them restored to the forthcoming reprint. Martin possessed a true gift for portraying the import of a map through his cover drawing - thus a detail view of Stonehenge for the Map of Neolithic Wessex, a clump of trees on a long barrow for the Map of the Trent Basin, and a lone Celtic ploughman with his bullock conjuring images of the Salisbury Plain field system on the Old Sarum map. For some sheets, borders to map and even key were designed in conformity with the covers: thus Martin adorned the Map of Roman Britain - Second edition, the Map of XVIIth Century England and the Map of Britain in the Dark Ages - South Sheet, and Jerrard, who followed Martin in creating covers for the period maps, the Dark Ages - North sheet. Other than Tom Chester's artwork for Monastic Britain and Ancient Britain, the post-war covers have not portrayed such evocative drawings: where they have not been purely photographic, they have tended to focus upon a contemporary artefact, such as a coin or a window. This tradition began with Jerrard's drawing of the Glastonbury Seal for the Monastic Britain cover done before the war.



The twin strength to most period maps is the letterpress that accompanies them, and in this way Crawford found an eminently practical solution to his problem of publishing the written word. These letterpresses provided expert witness to the information portrayed on the maps, supported by useful bibliographies and careful indexing, and fortunately it is a tradition which Phillips followed in Crawford's footsteps. Both men have ensured that the work be done by specialists: thus one of C.W. Phillips's early commissions was to undertake the Map of the Trent Basin, and W.F. Grimes of the National Museum of Wales was the natural choice for the Map of South Wales. Sometimes the work has been divided among experts - for instance at least seven men contributed to the Map of XVII Century England, and the Map of Southern Britain in the Iron Age letterpress contains a fine article on Celtic coins by Derek F. Allen. Perhaps the most exceptional contribution has been Richard Neville Hadcock's portrayal in map form of the monastic tradition. This was his own conception and his first map had reached proof stage when matters were terminated thanks to the Southampton air raids. Happily, however, Hadcock's own records survived since he worked from his home, and he was ready to begin again after hostilities ceased. Before his death he supervised the creation not only of three editions of his Map of Monastic Britain - north and south - but two of Ireland as well for O.S.I. As for Crawford himself, he considered his own best work to have been for the Map of Britain in the Dark Ages, and it is a fortunate coincidence that it should have been these sheets and the Map of Roman Britain, also Crawford's work, that were the only period maps to survive the war. Post-war reprints kept them on sale until new editions under Phillips's aegis were ready.

After the Southampton bombing in November 1940 which destroyed so much of his life's work, Crawford lost all heart for continuing to work for the O.S., and though technically their employee until his retirement when he reached 60 in October 1946, he spent the war years working for the newly formed National Buildings Record. It was thus William F. Grimes, Crawford's Assistant since 1938, who took charge over a staff of just one (the pre-war Assistant Superintendent Ashley C. Bickers) when the Archaeology Office was reformed at Chessington on 1 November 1945. Though a month later he resigned to go to the London Museum, he retained responsibility for it until C.W. Phillips, his successor, was appointed in January 1947. Thus to Charles William Phillips, one of Crawford's latterday "honorary correspondents", fell the responsibility of setting up from scratch the work of the O.S. Archaeology Division and its systems after the war. It was to remain at Chessington until after his retirement in 1965. Phillips too believed in the concept of the period map, and at one time considered dividing post-Roman British history from 43 to 1714 into seven periods (at 420, 800, 1066, 1377, 1485 and 1603) with a map for each. Even if this is now never likely to come about, thanks to the Map of Southern Britain in the Iron Age (1962) and Phillips's own Britain before the Norman Conquest (1973), this country now possesses a complete cartographic history over some 1,500 years before 1066. Phillips reviewed any surviving scraps of Crawford's schemes, and that he revived no more than he did is due mainly to the requirement that all maps be adjusted to the new metric grid. He also finally achieved the depiction of linear archaeological features on maps of medium scale, and of the three most obvious sites for treatment of this kind in Britain, Hadrian's Wall, the Antonine Wall and Offa's Dyke, only the third has not been done, though it remains under consideration. Upon a base map that retains sufficient intensity to be easily usable Phillips has overlain the fortified lines and associated features, especially road systems, using a colour contrast to distinguish between what is still visible on the ground and what has been established by modern excavation. Decorative borders have once again been used, designed by Tom Chester.

The bibliography that follows might be considered excessive, but it is intended also to support the list of maps that is to appear in the next issue of Sheetlines, and the opportunity has been taken to attempt to list at least all the Crawford and Phillips sources that are relevant to archaeology and the Ordnance Survey, as well as the relevant publications of the Ordnance Survey itself. Any additions that members would like to suggest would be welcomed. I would finally like to add a word of thanks to the many people who have given generously of their time and expertise to help me in this venture - to library and archive staff at the O.S., the British Library, the Universities of London, Oxford, Cambridge, Birmingham and Harvard, the R.C.H.M.E. at Southampton and Salisbury, and to Peter Clark and Francis Herbert at the R.G.S.; also to Professors St Joseph and Grimes, Messrs Curtis and Jerrard, and, in addition, many members of the C.C.S.: John Paddy Browne, Yo Hodson, Tim Nicholson, Michael Ivory, David Archer, John Coombes, Richard Dean, Richard Oliver and our editor for his considerable time and trouble.

#### BIBLIOGRAPHY AND MANUSCRIPT SOURCES

- F. J. Haverfield "The Ordnance Survey Maps from the Point of View of the Antiquities shown on Them" The Geographical Journal XXVII No. 2, Feb. 1906, 165-176.
- O. G. S. Crawford "Archaeology and the Ordnance Survey" The Geographical Journal LIX No. 4, April 1922, 245-258.
- O. G. S. Crawford Notes on Archaeological Information incorporated in the Ordnance Survey Maps. Part 1 The Long Barrows & Stone Circles in the Area covered by Sheet 8 of the 4-inch Map (The Cotswolds & the Welsh Marches). Ordnance Survey Professional Papers. - New Series, No. 6 (O.S.O., Southampton 1922)
- Part 2 The Long Barrows and Megaliths in the Area covered by Sheet 12 of the 4-inch Map (Kent, Surrey and Sussex). Ordnance Survey Professional Papers. - New Series, No. 8 (O.S.O., Southampton 1924)
- O. G. S. Crawford "Air Survey and Archaeology" The Geographical Journal LXI No. 5, May 1923, 342-360. Reprinted, with additions, as: Air Survey and Archaeology. Ordnance Survey Professional Papers. - New Series, No. 7 (O.S.O., Southampton 1924)
- Second Edition (H.M.S.O., London 1928)
- O. G. S. Crawford The Long Barrows of the Cotswolds (Bellows, Gloucester 1925)
- O. G. S. Crawford "Archaeology and the Ordnance Survey" The Geographical Journal LXVII No. 1, Jan. 1926, 66-68. Reprinted in The Work of the Ordnance Survey. Ordnance Survey Professional Papers. - New Series, No. 10 (H.M.S.O., London 1926)
- O. G. S. Crawford (with A. Keiller) Wessex from the Air (O.U.P. 1928)
- O. G. S. Crawford Air-Photography for Archaeologists. Ordnance Survey Professional Papers. - New Series, No. 12 (H.M.S.O., London 1929)
- O. G. S. Crawford The Strip-Map of Littleington. Ordnance Survey Professional Papers. - New Series, No. 17 (H.M.S.O., London 1937)
- O. G. S. Crawford "Luftbildaufnahmen von Archäologischen Bodendenkmälern in England" Luftbild und Vorgeschichte (Luftbild und Luftbildmessung 16) (Hansa Luftbild G.m.b.H., Berlin 1938)
- O. G. S. Crawford "Air Reconnaissance of Roman Scotland" Antiquity XIII No. 51, Sept. 1939, 280-292.
- O. G. S. Crawford Notes on Air-Photography. Typescript dated 13.12.1950 for the Council for British Archaeology (In Crawford Mss 68)
- O. G. S. Crawford Archaeology in the Field (Phoenix House, London 1953)
- O. G. S. Crawford Said and Done. The Autobiography of an Archaeologist (Weidenfeld & Nicolson, London 1955)

- J. G. Withycombe "Recent Productions of the Ordnance Survey" The Geographical Journal LXVI No. 6, Dec. 1925, 533-539.
- C. F. Close "The Ordnance Survey" Antiquity V No. 18, June 1931, 149-160.
- C. F. Close The Map of England (Davies, London 1932)
- G. Clark "Archaeology and the State" Antiquity VIII No. 32, Dec. 1934, 414-428.
- G. Clark "O. G. S. Crawford 1886-1957" Proceedings of the British Academy XLIV 1958, 281-296.
- H. St J. L. Winterbotham The National Plans. Ordnance Survey Professional Papers. - New Series, No. 16 (H.M.S.O., London 1934), especially 85-87.
- H. St J. L. Winterbotham A Key to Maps (Blackie, London & Glasgow 1936)
- ed. W. F. Grimes Aspects of Archaeology in Britain and Beyond. Essays presented to O. G. S. Crawford (Edwards, London 1951), especially Sir John L. Myres "The Man and His Past" 1-17, and "Bibliography of the Published Work of O. G. S. Crawford" 382-386.
- C. W. Phillips "Archaeology and the Ordnance Survey" Antiquity XXXIII No. 131, Sept. 1959, 195-204.
- C. W. Phillips "The Ordnance Survey and Archaeology 1791-1960" The Geographical Journal CXXVII Part 1, March 1961, 1-9.
- C. W. Phillips "The Period Maps of the Ordnance Survey" in J. B. Harley The Historian's Guide to Ordnance Survey Maps (The Standing Conference for Local History, London 1964)
- C. W. Phillips "The Special Archaeological and Historical Maps Published by the Ordnance Survey" The Cartographic Journal II No. 1, June 1965, 27-31.
- C. W. Phillips Archaeology in the Ordnance Survey 1791-1965 (The Council for British Archaeology, London 1980)
- C. W. Phillips "Archaeological Retrospect I" Antiquity LIV No. 211, July 1980, 110-117.
- C. W. Phillips "Archaeology - the Crawford Period" etc. in A History of the Ordnance Survey ed. W. A. Seymour (Dawson, Folkestone 1980)
- C. W. Phillips My Life in Archaeology (Sutton, Gloucester 1987)
- R. A. Gardiner "The International Map of the Roman Empire" The Geographical Journal CXXXIX Part 1, Feb. 1973, 107-111.
- J. B. Harley Ordnance Survey Maps: a Descriptive Manual (H.M.S.O., London 1975)

#### Unsigned Ordnance Survey Publications

- Notes on Archaeology for Guidance in the Field (O.S.O., Southampton 1921)  
- [Second (enlarged) Edition] (O.S.O., Southampton 1924?)
- Field Archaeology. Some Notes for Beginners issued by the Ordnance Survey.  
Ordnance Survey Professional Papers. - New Series, No. 13 (H.M.S.O., London 1932). [First Edition] - Crawford's revision of his 1921 leaflet.  
- Second Edition (H.M.S.O., London 1936)  
- Second Edition, revised (H.M.S.O., London 1947)  
- Third Edition (H.M.S.O., London 1951)  
- Fourth Edition (H.M.S.O., London 1963)
- Field Archaeology in Great Britain (O.S., Southampton 1973). The fifth edition of the above.
- The Ordnance Survey and Archaeology (Ordnance Survey Leaflets: No. 4, 1925?) and several subsequent editions.
- Archaeological Air Photo Sites [ms title] (O.S.O.-200-4.10.1928)
- International Geographical Union - Commission No. 7 - Map of the Roman Empire  
- 1:1,000,000 - First Report 1929 (O.S.O.-200-1.8.29)  
- also editions in French, German and Italian.
- Catalogue of Photographs of Old Cadastral and other Plans of Great Britain  
(O.S.O.-2655-100-9.31)  
- [Second (enlarged) Edition] (O.S.O. 9244 100 11.35)
- Catalogue of Air Photographs exhibited by the Ordnance Survey at the International Congress of Prehistoric Archaeology, London, August 1932  
(O.S.O. 8026 1000 5.32)
- Catalogue of Lantern Slides (O.S.O. 8451-300-3.34) - and later editions.

Tabula Imperii Romani - Map of the Roman Empire based on the Carte Internationale du Monde au Millionième - London Congress, 1935  
(Central Bureau, O.S.O., Southampton - O.S.O. 9109/1 200 7.35)

International Map of the Roman Empire - London Congress 1935 (O.S.O. 9109/3. 300 4.36)

Suggestions for Correspondents of the Archaeology Branch (O.S.O. 250 1.48)

Notes for Correspondents of the Archaeology Branch (O.S.O. 056/300 11.53)  
- [Second Edition] (OSO 907 500 6.58)

Various Ordnance Survey Reports, Catalogues, Supplements and pamphlets.

Collections of archaeological air photographs held by the Royal Commission on Historical Monuments (England), the Committee for Aerial Photography of the University of Cambridge (ex J.K.S. St Joseph), the Ashmolean Museum, Oxford (ex G.W.G. Allen) & the Institute of Archaeology Oxford (ex O.G.S. Crawford).

#### Manuscript Sources

Period Map models and drawings in the R.C.H.M.E., Southampton

The Crawford Mss held by the Bodleian Library, Oxford

The O.S. Central Registry files held by the P.R.O., especially in class OS 1:  
42 (C.R.2731), 43 (C.R.5644), 44 (C.R.8858), 45 (C.R.9331), 46 (C.R.9331/1),  
47 (C.R.5702/1), 87 (C.R.3485), 88 (C.R.7828), 89 (C.R.8486), 90 (C.R.9109),  
91 (C.R.9109/1), 92 (C.R.9109/2), 272 (C.R.7306), 274 (C.R.9331/2),  
275 (C.R.9331/3), 287 (C.R.2865), 288 (C.R.7658), 310 (C.R.5702/2),  
317 (C.R.8620), 327 (C.R.17488), 335 (C.R.8974), 340 (C.R.8985), 345 (C.R.9214),  
352 (C.R.10473), 353 (C.R.10473/1), 440 (C.R.15541), 653 (C.R.8097),  
719 (C.R.17876), 825 (C.R.15929)





# THE ARCHAEOLOGICAL AND HISTORICAL MAPS OF THE ORDNANCE SURVEY. II

by Roger Hellyer

The list that follows includes all the maps with archaeological or historical overprint published by the O.S. that I know about, other than those produced for the various Royal Commissions on Historical Monuments. Those in appendix 1 are the maps prepared until 1931 for the English Place-Name Society, another area of research keenly encouraged by Crawford. Also included are maps considered for publication but which, for a variety of reasons, rarely developed beyond compilers' models. But reference to them is vital for an accurate assessment of the wide-ranging archaeological programmes projected by Crawford and Phillips. Some such maps appear listed with titles in square brackets, and reference is made to more nebulous projects in the notes and appendices 2 and 3. The titles of maps drawn but not printed are not underlined. A chronological order of entries is adopted, with groups of maps, or successive editions of the same map kept together. Numbers with a letter suffix give reprints which somehow have revised information in the overprint: reprints which are unchanged, or change only the base map are confined to the notes. Base maps may be anything from a fully coloured map to a single colour outline sheet, but this information is not often specified here. Details in square brackets are deduced, not given. Where bibliographical and documentary citations in the notes are abbreviated, fuller references may be found in the bibliography (in Part I) which is chronologically arranged by author. I have quoted the relevant details from letterpress print codes because they can provide parallel information for the maps themselves, though, since some maps were sold flat without letterpress, or the letterpress itself might have been on sale without the map, or the two were not necessarily reprinted together anyway, any real correlation between the two must be treated with great circumspection. Lastly, a note on how the overprint was created may prove instructive; Reg Jerrard, from 1936 to 1940 one of Crawford's draughtsmen, described the process in letters to me: 'We normally had blue impressions of the base map on Whatman's hot-pressed paper, at twice the final scale. The finished drawings were then pinned onto a large copy board, using milliner's steel pins. Any linework was then made good across the joins. The assembled "pin-up" was then photographically reduced to final scale, for printing plate making.' (But  $\frac{1}{4}$ " maps were drawn at scale.) 'The reduced photograph of the "fair drawing" was a negative on a  $\frac{1}{4}$ " sheet of optically flat glass somewhat larger than the final scale. From this negative, via a positive, a printing plate was made.'

Headings: 1 Number; 2 Title of map; 3 Date of publication (as given on map); 4 Scale; 5 Print code; 6 Grid/squaring system; 7 Base map; 8 Number of colours in overprint; 9 Compiler; 10 Cover artist.

Abbreviations: Columns 4,7: 1:1m - 1:1 million. Column 6: AN - alpha-numerical squares; ANg - alpha-numerical graticules; gt - graticules; YG - Yard Grid; NG - National Grid; IG - Irish National Grid. Column 9: OGSC - Crawford; WFG - Grimes; CWP - Phillips; KStJ - St Joseph; RNH - Hadcock; ALFR - Rivet; JF - Fox; RGG - Goodchild; DM - Meredith. Column 10: EM - Martin; RAJ - Jerrard; BHT - Hope-Taylor; ATC - Chester.

1	2	3	4	5	6	7	8	9	10
1	Royal Parks - Richmond Park	1911	1:6,336	-	-	[6" Surrey]	1 ?	-	
2	As 1	1962	1:6,336	775	-	[6" Surrey]	1 ?		
1. Map reprints: 1926; L.185.a (1949); L.403.a (1951); the base map was continually updated. 2. With altered sheetlines. Reprinted 1968. N.B. The overprint shows old field boundaries etc. over the area of Richmond Park before the Act of Enclosure of Charles I 1637. The 1911 printing is in the collection of Peter Clark: there may also have been one in the 1890's.									

- 3 Archaeological Features of Hampshire and the Wiltshire Border  
1914 1:253,440 - gt [ $\frac{1}{4}$ " 2nd ed.] 4 JFWF -  
3. In J. P. Williams-Freeman An Introduction to Field Archaeology as illustrated by Hampshire (Macmillan, London 1915)
- 4 Map of Ancient Winchester the Celtic Caer Gwent and Roman Venta Belgarum  
1920 1:5,280 - - [25" Hants.] 1 ? EM
- 4a As 4 1923 do - - do 1 ? ?  
4. A copy of this map is in the School of Geography, Oxford, and two more in Winchester Public Library, one presented by Close on 5 March 1921. They are mounted and folded in covers, price on the map 2/6 unmounted, on the cover 4/-. The cover design is black on brown, the standard combination for pre-war period maps. A cover proof in the collection of Tim Nicholson is illustrated in Sheetlines 8, 16 (N.B. price 2/6!). The base map is sepia, the overprint black. Two drawings for the map dated 1919 survive in R.C.H.M.E. So'ton, proving that it predates the Crawford period. 4a. Two copies are in R.C.H.M.E. So'ton. Further sites are included, and the price is deleted. N.B. Sir Charles Close, himself an amateur archaeologist who lived in Winchester, may have instigated the creation of this map. The O.S. Catalogue 1924, 23, gives the only contemporary reference I know to it.
- 5 Specimen Field-Sheet  
[1921] 1:10,560 - - 6" Wilts. 29SW 1 OGSC -  
1901 ed. 90/11  
5. Accompanying Notes on Archaeology for Guidance in the Field (O.S.O. 1921), written by Crawford "in a pub at Llangorse in Brecknockshire in 1921" for the use of his voluntary contributors. A copy of the map is in R.C.H.M.E. So'ton, but the leaflet has so far proved elusive. Crawford extended this in 1924? to six foolscap pages (copies in the R.G.S. and O.S. Libraries, also the Map Room, National Library of Scotland) and the map was probably reprinted. He revised it again, without the map, as P.P.13, 1932.
- 6 Bowood Park. Showing the Ten Divisions made by the Parliamentary Survey in 1653  
1921 1:10,560 - - [6" Wilts.] 1 EoK -  
6. In Earl of Kerry "King's Bowood Park" in Wiltshire Archaeological & Natural History Magazine XLI, No. 135, Dec. 1921, opp. 406.
- 7 The Long Barrows & Stone Circles in...the Cotswolds & Welsh Marches  
[1922] 1:253,440 - AN  $\frac{1}{4}$ " 3rd ed. 8 1920 2 OGSC -
- 7a Long Barrows and Stone Circles  
1924 1:253,440 500/24 do As 7: 1920/24 2 do -  
7. In P.P.6. With two plates, dated July 1922, of drawings of Barrows and Chambers. 7a. In Crawford 1925. Three further sites are included.
- 8 The Medway Group
- 9 The Sussex Long Barrows  
1924 1:63,360 - - [1" Popular] 2 OGSC -  
8,9. In P.P.8. With drawings and index diagram of  $\frac{1}{4}$ " 3rd ed. sheet 12.
- 10 Neolithic Wessex showing the Distribution of Long Barrows, Circles, Habitation Sites, Flint Mines  
1932 1:253,440 1000/32 AN  $\frac{1}{4}$ " 3rd ed. 11 1919 3 OGSC EM  
[1100/31], o/p 1932
- 10a Second Edition 1933 do 1000/33 do As 10: o/p 1933 3 do do  
C.R.8097. 10. With letterpress: 1000-7.32, including two detail maps The Lacock Roads and The Frome Roads. The maps were drawn by Curtis. Planned as a P.P. (O.S. Report 1926-27), the change to a map was minuted on 4 May 1932. Two proofs are in the P.R.O., one with base map print codes 15750/31, 1100/31. 10a. With letterpress: 1000-5.33: the text apparently

the same, though reset. Errors in the schedule of sites are amended. Four more sites are added to the map. A proof copy is in the P.R.O., a published copy is in my collection. A further edition was planned. (P.R.O. OS 1/653)

- 11 The Trent Basin showing the Distribution of Long Barrows, Habitation Sites  
1933 1:253,440 1000/33 AN  $\frac{1}{4}$ " 3rd ed. 6A 1929 1 CWP EM  
[7500/30], o/p 1933  
11. C.R.8629. With letterpress 1000-3.33. The map was probably drawn by Curtis. The cover design is illustrated in Sheetlines 6, 4.

- 12 South Wales showing the Distribution of Long Barrows and Megaliths  
1936 1:253,440 1036 YG  $\frac{1}{4}$ " 4th ed. 7 1934 1 WFG note  
[4036], o/p 1936

12. C.R.8620. With letterpress: 1,000 3.36. Conceived in 1932 as a P.P.. The map was drawn by Curtis. An outline and water proof copy on base map 2534 (o/p 1935) is in the P.R.O.. 1,000 copies of the finished map, mistakenly printed on an outline and water base, had to be destroyed. A copy is in the P.R.O.. A second edition was discussed. The cover artist is unknown, but was apparently an outsider commissioned by Crawford in 1934 to draw the cover designs for maps 12, 13 and 14. This one was based on a photograph in R.C.A.M. Pembrokeshire (H.M.S.O., London 1925, opp. 243) of the Gors Fawr stone circle with the Presely Mountains in the background. The non-existent cottage was added at Crawford's insistence to distinguish this design from that intended for map 13. The same Ellis Martin border is used as for the covers of maps 10 and 11. (P.R.O. OS 1/317, 335)

#### Unfinished megalithic quarter-inch maps

- 13 The Border [1:253,440]note [YG] [ $\frac{1}{4}$ " 4th ed. 1] OGSC note  
14 Yorkshire [1:253,440]note [YG] [ $\frac{1}{4}$ " 4th ed. 3] CWP note  
15 [North Central] [1:253,440] [YG] [ $\frac{1}{4}$ " 4th ed. 2] note  
16 [North Wales] [1:253,440]note [YG] [ $\frac{1}{4}$ " 4th ed. 4] WFG  
17 [West Country] [1:253,440] [YG] [ $\frac{1}{4}$ " 4th ed. 10] OGSC note

13. C.R.9729. Drawn?, but not printed: Crawford's records were destroyed in the Southampton air raid on 30 November 1940 (Crawford 1955, 217; Phillips 1980, 42f). Conceived as a P.P. (O.S. Report 1922-23), it was nearly completed by 1934. A base map print run had to be destroyed in 1938 because the green wood plate had been included. Crawford therefore ordered a reprint of 2,000 for this and map 43/2, with a 6" side margin for the key (P.R.O. OS 1/317). The cover design was to include some hills, a Scotch fir and a stone circle in the foreground (see note 12). 14. C.R.8974. In preparation in 1934-39, when a print run of 1,000 on a grey outline base map was planned. The map was drawn, but not printed. The cover design was to be an adaptation of the Devil's Arrows (see note 12; P.R.O. OS 1/272, 317, 335). 15. Not drawn. Field-work on sheet 2 was begun at the same time as sheet 3 because of the large overlap, though it seems that no final decision was taken as to the compiler. 16. C.R.8985. In preparation 1934-37, but not drawn. A print run of 1,000 on a grey outline base map was planned in 1939 (P.R.O. OS 1/340). 17. Crawford himself undertook to do sheet 10 but his model was probably never completed. He wanted a dolmen to appear in the cover design (P.R.O. OS 1/272, 317). N.B. Sheet 9 East Anglia contains no megaliths, and was thus to be excluded from this series. (Clark 1934)

- 18 Map I. Finds and Remains attributed to the Neolithic Age  
19 Map II. Finds and Remains attributed to the Bronze Age  
20 Map III. Finds and Remains attributed to the Early Iron Age  
21 Map IV. Finds and Remains attributed to the Roman Age  
1923 1:253,440 - AN [ $\frac{1}{4}$ " 3rd ed.] 1 CF -  
22 Map V. Anglo-Saxon Age  
1923 1:253,440 - AN [ $\frac{1}{4}$ " 3rd ed.] 2 CF -  
18-22. In C. Fox The Archaeology of the Cambridge Region (C.U.P., 1923)

- 23 The Celtic Field-System in Central Hampshire as revealed by Air-Photographs  
1923 1:20,000 - - [6" Hants.] 1 OGSC -

- 24 Celtic Fields on Figheldean Down. Mapped from air-photographs, 1924  
1924 1:10,560 - - 6" Wilts. 48SW 1 OGSC -  
1911 ed. 150/20

- 25 As 24 [1928] 1:10,560 1000/28 - As 24, 1925 ed. 1 OGSC -  
23. In Crawford 1923. Reprints: no code in P.P.7 1924, and 1000/28 in P.P.7 1928. 24. In P.P.7 1924, with Crawford's commentary on the map. 25. In P.P.7 1928, with Crawford's commentary on the map.

- 26 Roman Britain 1924 1:1m - ANg [1:1m phys. 1922] 1 OGSC EM  
26a do do do 1500/24 do do 1 do do  
27 Second Edition 1928 1:1m 5000/28 ANg [1:1m phys. 1928] 1 OGSC EM  
27a do [1931] do 5000/31 do do 1 do do  
27b do [1935] do 235 do - 1 do -  
28 Third Edition 1956 1:1m 4027 NG [1:1m phys. 1954] 5 ALFR EM  
28a do 1956 do 4027/A do do 5 do do  
29 Fourth Edition EM

- 1 North Sheet 1978 1:625,000 A NG [1:625,000 phys.] 5 JF  
2 South Sheet 1978 1:625,000 A NG [1:625,000 phys.] 5 JF

26. With letterpresses dated 1924 and 1926. Inset on the map is The Roman Wall in Scotland. 1,000 copies of the first issue were published in July 1924. 26a. Reprint in August, also 2000/24 (October) and 1000/26 (June 1926), with detail change. 27. C.R.2731, 9214. With letterpresses: 5000-1.10.28; 5000-12.31; 5,000 11.36; 5,000R. 10.49; 3,000R. 5.52. Three proof maps are in P.R.O. OS 1/42: with blue, black base and contours only, with Roman information only, and fully coloured. A (published?) copy of the last is in the Department of Geography, Cambridge. The lack of print code and marginal alpha-numerical system is distinctive, also the wording in the bottom right hand corner which reads: "...Director General. 1924. / Second Edition 1928." 27a. With detail alterations to the overprint. Reprints: 5036; 239? (assumed because of the post-war print codes); 239.6046/Wa (the only period map edition to appear during Grimes's régime); 239.3432; 3432. 27b. A printing of the Roman elements on tracing paper for superposition over Britain in the Dark Ages. N.B. By September 1924 Crawford had begun to plan a second edition, and in 1925 his intention was to keep the 1924 map in print and also to publish an edition based on sheets 2 (enlarged) and 3 of the new 10-mile map (O.S. Report 1924-25; P.P.10 [Crawford 1926]). Withycombe 1925 adds more details: "The Roman information will be incorporated on new black plates which will be used with the water and contour plates instead of the present outline". This plan was abandoned by 14 June 1926. Crawford was also considering a wall map version on four sheets at a scale of at least 1:500,000. 28. C.R.17488. With letterpresses: 10,000 1.56; 10,000 4.56; 7,000 3.57; 5000 1.60; 15,000 12.61; 18,500 8.64, including five detail maps. The map has decorative borders to title and key. 28a. With minor corrections, published in April 1956; reprint with price increase from 3/3 to 5/-; later reprint(s) with price removed and the number of colour layers reduced from nine to four. N.B. There were at least three earlier attempts to publish a "third edition": in the late 1930's Crawford was again contemplating the 10-mile scale, this time presumably on the two-sheet Y.G. base map (Crawford 1939, 280). See also note 43. In 1948 Phillips was considering using the 1:625,000 two-sheet base map expected in 1950. The drawings were made (they are in R.C.H.M.E. So'ton), only to be ultimately transferred to the new 1:1m physical map. Proof copies of this dated 1954 survive in P.R.O. OS 1/825. 29. With letterpress dated 1978, including two detail maps. See also map 95.



- 30 XVII Century England with Description, Chronological Tables, and...  
1930 1:1m 5000/30 ANg [1:1m phys. 7750/28]1 note EM
- 31 ...a Map of London circa 1660. Compiled from contemporary sources  
1930 [1:42,240] - - - - GSCC -  
30. C.R.2865, 7658. With letterpress: 1930, 5000. Crawford organised a team of experts to help compile this map. Preparatory materials for new editions are in R.C.H.M.E. So'ton: one of 5,000 was planned for 1932. See also map 87. 31. Accompanying map 30. Prepared by the Executive Officer, Colonel G. S. C. Cooke, and drawn by H. Talbot.
- 32 Tabula Imperii Romani  
1 Edinburgh 1930 1:1m 500/31 ANg N 30 [10.22] 1 OGSC -  
1a Eburacum note do do do  
2 Aberdeen 1934 1:1m 600/34 ANg O 30 2 OGSC note  
3 Sofiya note 1:1m K 34 [1915] OGSC  
4 Lepcis Magna 1954 1:1m - gt [GSGS 2465] H/I 33 1 RGG EM  
5 Cyrene 1954 1:1m - gt [GSGS 2465] H/I 34 1 RGG EM  
6 Coptos 1957 1:1m - ANg GSGS 4646 G 36 1 DM EM  
C.R.3485, 7828, 8486, 9109, /1, /2. 32/1. Five coloured proofs are in P.R.O. OS 1/87; four outline proofs are in R.C.H.M.E. So'ton. 32/1a. Not printed. A drawing for a renamed second edition dated 1935 is in R.C.H.M.E. So'ton. 32/2. In September 1934 Ellis Martin produced an atypical cover drawing for this map which, though not used on Aberdeen, became the standard TIR design (P.R.O. OS 1/90). It was used for map title and border on four pre-war sheets including maps 32/1a and 32/3, and appeared on nine texts including those for maps 32/4,5,6. 32/3. Not printed. In preparation by the O.S. for 1936 publication. Two drawings for the map are in R.C.H.M.E. So'ton. N.B. Crawford promulgated the idea of an International Map of the Roman Empire at the International Geographical Congress in Cambridge in 1928. Nos 32/4,5,6 are the only post-war maps in the series with an O.S. connection: all were drawn at the O.S., and 32/6, the second edition of the Aswan sheet published originally by the Survey of Egypt in 1934, was also printed by the O.S.. All three were sponsored by the Society of Antiquaries of London and published by O.U.P.. The Condate-Glevum-Londinium-Lutetia sheet was published by O.U.P. in 1983 on base map GSGS 4646 M 30 (enlarged) - London. A new edition of Great Britain north of that sheet was published as Britannia Septentrionalis by O.U.P. in 1987 on base map GSGS 4646 N/O 30. (Gardiner 1973; Crawford 1955, 201ff; Phillips 1980, 30f. See Winterbotham 1936, plate VII [opp. 144] for an index to this series superimposed on that of the original base map, La Carte Internationale du Monde au 1.000.000e)
- 33 South Wales and the Border in the Fourteenth Century  
1 N.W. Sheet 1932 1:126,720 1000/33 - - - WR  
2 N.E. Sheet 1932 1:126,720 1000/33 - - - WR  
3 S.W. Sheet 1932 1:126,720 1000/33 - - - WR  
4 S.E. Sheet 1932 1:126,720 1000/33 - - - WR  
33. C.R.6630, 10389. Maps compiled by Professor William Rees, drawn by H. F. Martin, reproduced and printed by the O.S.. Accompanied by Rees's separate booklet Handbook to the Historical Map of South Wales and the Border in the Fourteenth Century (Western Mail & Echo Ltd, Cardiff 1933).
- 34 Celtic Earthworks of Salisbury Plain based on Air Photographs  
1 [Charlton] [1:25,000] [GSGS 3906 44/16 NW] OGSC  
2 [Everleigh] [1:25,000] [GSGS 3906 44/16 NE] OGSC  
3 [Yarnbury] [1:25,000] [GSGS 3906 44/16 SW] OGSC  
4 Amesbury note 1:25,000 - [GSGS 3906 44/16 SE]1 OGSC  
5 [Grovely] [1:25,000] [GSGS 3906 44/14 NW] OGSC  
6 Old Sarum 1933 1:25,000 500/33 - [GSGS 3906 44/14 NE]1 OGSC EM  
6a do 1937 do 1000/37 - do do  
C.R.8306, /1. Crawford's model for all six sheets on 6" base maps is

- in R.C.H.M.E. So'ton. 34/1,2,3,5. Not drawn. 34/4. Unpublished, proof copies only being printed. One is in R.C.H.M.E. Salisbury, given by Crawford to H. Collin Bowen, once Director there. The A.O. copy is wanting in R.C.H.M.E. So'ton but a photograph of it is there. N.G. marginal figures were added to it after the war. Crawford sent a third to the Peabody Museum at Harvard in 1940. He used a fourth, probably a copy he kept himself, for a monochrome illustration in Crawford 1953, 109. There was an extra symbol for "village". The map drawing (by Stoneage) and overprint positive are in R.C.H.M.E. So'ton. The foreword was printed: 300-4.41. Copies of this are in R.C.H.M.E. So'ton and my own collection (Crawford 1953, 51fn; 1955, 216; Crawford Mss 2). 34/6. With foreword: 300-2.34. The map was drawn by Curtis. 34/6a. A reprint with a brighter base map and additions to the overprint. Copies are in R.C.H.M.E. So'ton and the Department of Geography, Cambridge. An O.S. type-written sticker is appended to the latter: "Ordnance Survey. 1:25,000 Celtic Earthworks of Salisbury Plain. / These maps are intended mainly for use in the field. The sheet shows the system of Celtic Fields as far as these have been discovered. Known archaeological features have been taken as a base and have been supplemented by additional data from air maps and field work. There has been no attempt to complete the map - rather it is a work dedicated to field archaeologists in the hope that their labours will amplify the next edition. / Notice the method of printing. Contours shown with an interval of 5 metres."
- 35 The Woodlands and Marshlands of England (Prehistoric)  
Map A. [1933] 1:1m 1000/33 gt [1:1m phys. 1928/29]1 HAW -
- 36 The Woodlands and Marshlands of England (As deduced from early literature)  
Map B. [1933] 1:1m 1000/33 gt [1:1m phys. 1928/29]1 HAW -  
35,36. C.R.8791. In H. A. Wilcox The Woodlands and Marshlands of England (University Press of Liverpool, Hodder & Stoughton, London 1933). Reproduced under the direction of a committee of the British Association. Map A was compiled from geological, topographical and climatic evidence.
- 37 Britain in the Dark Ages  
(South Sheet) 1935 1:1m 2035 ANg [1:1m phys. 1928] 1 OGSC EM  
(North Sheet) 1938 1:1m 3000/38 ANg [1:1m phys. 1928] 1 OGSC RAJ  
38 Second Edition 1965 1:1m B NG [1:1m physical] 3 CWP ATC  
39  
37. C.R.5644, 8858, 9331, /1, /2, /3. With letterpresses: 1750 9.35; 2500 11.35; 1,600 1.39; 3,000. 1051, including two outline maps. Map reprints: 3035; 3263 (1949) and 3263.. The maps were drawn by Curtis. Known initially in 1928 as Saxon England, and then Anglo-Saxon England (A.D. 450-850), the "Dark Ages" title was Cyril Fox's idea, officially accepted by the D.G. on 2 January 1934. Ellis Martin's original cover design included "The Arryval of the First Anceters (sic) of Englishmen out of Germanie into Britaine" from Richard Verstegan's A Restitution of Decayed Intelligence... (Robert Bruney, Antwerp 1605; cover proof in P.R.O. OS 1/9331/1), but this was rejected as anachronistic. His decorative borders survived to the published cover, and map. 38. C.R.5702, /1, /2. With letterpresses: 2,000. 9/38; 1,850. 1/49; 2,000 9.55, including five outline maps. Map reprints: 3366 (1949) and 3366.. The maps were drawn by Curtis: Jerrard's decorative borders were used. Known initially as Early Scotland. A first print run had to be destroyed, though a copy of it was sent to The Times for review. The published map appeared on 20 January 1939. Most of the stock was destroyed in the Southampton bombing on 30 November 1940. Three proofs are in P.R.O. OS 1/47, one of the overprint only, and two of the water and black plates. 39. With letterpresses: 1966, 10,000 12.65; 14000/75. Map reprint with place of publication changed from Chessington to Southampton. In 1956 Phillips was considering dividing this period between two maps: one for Pagan Saxondom (against a faint Roman background) and the other for Christian Saxondom before the Anglo-Danish period. He eventually decided to effect the distinction by colour contrast on one map. (Crawford Mss 80)

- 40 Roman Malton and District  
1935 1:253,440 200/35 AN [ $\frac{1}{4}$ " 3rd A ed.] 1 MKC -  
40. In Mary Kitson Clark A Gazetteer of Roman Remains in East Yorkshire (Roman Malton and District Report No. 5) (Roman Antiquities Committee of the Yorkshire Archaeological Society, Leeds 1935). The base map is layered. Map reprint: 500/39, on an outline base. Apparently published separately: a copy is in the Institute of Archaeology, London.
- 41 Strip-Map of Littleington  
1936 [7":8000'] 500/37 - [6" Cambs.] 1 OGSC -
- 42 - 1937 [7":8000'] 500/37 - Part of map 41 2 OGSC -  
C.R.11199. 41,42. In P.P.17. A proof copy of map 41 is in R.C.H.M.E. So'ton. N.B. The C.R. file is in R.C.H.M.E. So'ton.
- 43 Roman Britain - Third Edition  
1 Scotland in note 1:253,440 - YG  $\frac{1}{4}$ " 4th ed. Sc. 3 1 KStJ RAJ  
Roman Times 2536, o/p 1939  
2 The Border 1:253,440 note YG  $\frac{1}{4}$ " 4th ed. 1 1 KStJ note  
(Roman Period) [50/37]  
43/1. C.R.9413. No letterpress. The map was drawn by Curtis. Printed and ready for publication when the stock (of 1,000?) was destroyed in the air raid on Southampton on 30 November 1940. Some 50 copies had been held by Crawford, however, for safekeeping, and these he distributed to various archaeologists and libraries, including universities at Oxford, Cambridge, Glasgow, Edinburgh and Aberdeen. Other copies are in the O.S. Map Record Library and R.C.H.M.E. So'ton, probably the residue of his stock. In 1940 Crawford sent two proofs to the Peabody Museum at Harvard, one with red overprint, the other of the overprint only in black (Crawford 1953, 54fn; Crawford Mss 2, 4, 67, 85). 43/2. C.R.11554. Not printed. In preparation 1937-1941, but then cancelled. The drawings (by Stoneage) and overprint positive, with title as above, are in R.C.H.M.E. So'ton, as is the scraper-board cover design by Yolande Moden, inspired by reliefs on Trajan's Column. See also note 13. N.B. Crawford had proposed on 1 August 1925 the coverage of Roman Britain at the  $\frac{1}{4}$ " scale, and by 1940 he viewed this Roman Scotland series as Roman Britain - Third Edition, thus superseding his planned 10-mile map. St Joseph was also busy on field-work for England and Wales sheets 2 and 3. (Crawford 1939, 280; Crawford Mss 85)
- 44 Monastic Britain (South Sheet) [with...]  
note 1:633,600 note YG [10-mile 1936 2] 1 RNH note
- 45 ...Religious Houses in London  
note [1:12,800] 3000/39 - [6" London] 1 RNH -
- 46 Monastic Britain (South Sheet)  
note 1:625,000 NG 1:625,000 1942 2 1 RNH
- 47 Monastic Britain  
1 (North Sheet) 1950 1:625,000 3395 NG 1:625,000 1942 1 1 RNH RAJ  
2 (South Sheet) 1950 1:625,000 3394 NG 1:625,000 1942 2 1 RNH RAJ
- 48 Second Edition  
1 (North Sheet) 1955 1:625,000 3980 NG 1:625,000 1942 1 2 RNH note  
2 (South Sheet) 1954 1:625,000 3927 NG 1:625,000 1942 2 2 RNH note
- 49 Third Edition  
1 North Sheet 1976 1:625,000 B NG [1:625,000 1974] 2 RNH  
2 South Sheet 1976 1:625,000 B NG [1:625,000 1974] 2 RNH  
C.R.10473, /1. 44. Unpublished: a printing of 3,000 was requested in May 1940, but this was never fulfilled. Six 1939 proof copies were printed, and Crawford sent examples to Hadcock and to the Peabody Museum at Harvard. The A.O. copy survives in R.C.H.M.E. So'ton. The map was drawn by Jerrard, also the cover, proof copies of which are in the P.R.O. in black on white and black on brown. Its elegant hand-lettering and dimensions differ from the 1950 map, but the Glastonbury Seal motif is the same. In 1935 both

- north and south sheets were projected on a 1:1m base map, but this was overruled by the Director General. Hadcock's model of the north sheet at the 10-mile scale with Y.G. survives in R.C.H.M.E. So'ton (Crawford 1955, 216; Phillips 1980, 33; P.R.O. OS 1/352). 45. Unpublished: the map was drawn by Jerrard. 3,000 copies were printed, only to be destroyed in the Southampton air raid on 30 September 1940. Copies survive in the P.R.O. and my own collection. Intended to accompany map 44. 46. Unpublished: a proof copy for a 1948 edition is in R.C.H.M.E. So'ton. Without the changes listed under 47/2, this was Phillips's first attempt to publish the map on the metric base with N.G.. 47/1. With letterpresses: two 1950 versions without code number. 2,000 copies of the map printed in the first issue. Map reprint: 3618 (1951) with amended Explanation. 47/2. With letterpress dated 1950. A revised version of the 1939/48 map, omitting the Ogilby road system and enhancing the diocesan boundaries of the original. Modern rather than mediaeval names are used. Including map 45 inset at scale c.1:22,588. 3,000 copies printed in the first issue. 48/1. With letterpresses: 6,000 9.55; 7,800 11.67. Written by Hadcock and, for Scotland, Dr David E. Easson. Map reprint: A (1965). 48/2. With letterpresses: 1954, no code; 11,300 1.68. Map reprint: A (1965). With map 45 inset at scale c.1:22,588, with revised two-colour overprint. N.B. Both sheets were first issued in Jerrard's cover, then in new ones by Chester. 49. With letterpress dated 1978 written by Hadcock and Dr Ian B. Cowan. The Religious Houses in London map inset on N.G. 1:10,000 base map reduced to c.1:22,588, with two-colour overprint. The cover design probably by the Central Office of Information.
- 50 Ancient Britain  
1 (North Sheet) 1951 1:625,000 3624 NG 1:625,000 1942 1 1 note ATC  
2 (South Sheet) 1951 1:625,000 3625 NG 1:625,000 1942 2 1 note ATC
- 51 Second Edition  
1 (North Sheet) 1964 1:625,000 B NG 1:625,000 1942 1 1 note ATC  
2 (South Sheet) 1964 1:625,000 B NG 1:625,000 1942 2 1 note ATC
- 52 Third Edition  
1 North Sheet 1982 1:625,000 C NG [1:625,000 1974] 3 note  
2 South Sheet 1982 1:625,000 C NG [1:625,000 1974] 3 note  
50. Each sheet with letterpress dated 1951. The O.S.'s contribution to the Festival of Britain. Aimed at the popular market in that every site marked had to be visible and even significant, but not later than 1066. 51/1. With letterpresses: 4000 10.64; 11,650 9.67; (1973), JJ04/1. 51/2. With letterpresses: 8000 10.64; 25,600 8.67; (c1973), no code. Map reprint with place of publication changed from Chessington to Southampton. 52. With unacknowledged cover notes. North and South sheets issued back to back. N.B. All maps prepared by the Archaeology Division.
- 53 Southern Britain in the Iron Age  
note 1:625,000 A NG [1:625,000 phys.] 4 ALFR
- 54 As 53 1962 1:625,000 - NG [1:625,000 phys.] 4 ALFR BHT
- 54a do 1967 do A/ do do 4 do do
- 54b do 1975 do A// do do 4 do do
53. Unpublished: a copy dated 1960 is in R.C.H.M.E. So'ton. It is unlike the 1962 map in having graticuled borders, a layer bar, and the title on the right. There are colour and other differences in the overprint. 54. With letterpresses: 6,000 7.62; 14M 2.67 (54a); 4M 5.75 (54b). Written by Albert L. F. Rivet and Derek F. Allen, with eight distribution maps. The map has decorative borders. 54b. The green plate removed from the base map. N.B. Conceived as Britain in the Iron Age (O.S. Report 1956-57). A model for a north sheet Iron Age Monuments in Northern Britain at scale 1:1m with N.G. is in R.C.H.M.E. So'ton. It has symbols for Roman walls(!), forts, brochs, duns and vitrified structures. See also map 79.



- 55 Hadrian's Wall 1964 1:31,680 A NG [1:25,000 1st ser.] 2 note ATC  
 56 Second Edition 1972 1:31,680 B NG As 55, A/ 2 note ATC  
 56a do 1975 do B/ do As 55, A/ 2 do ATC

55. Planned as a 1:25,000 map (O.S. Report 1959-60). Map reprint with place of publication changed from Chessington to Southampton. 55,56,56a. With cover notes, prepared by the Archaeology Division. Hill shading and a green plate for woodland have been added to the base map. Tom Chester produced four pre-photograph cover designs for these maps! N.B. Crawford (with St Joseph) was preparing a strip-map of Hadrian's Wall in 1938, another scheme terminated by the war. Then it was one of the earliest projects to be considered by Phillips, but was delayed in 1950 because he had not overcome the problems of scale and format. He even considered publishing in atlas form (Crawford Mss 80, 85). See also map 93.

- 57 The Antonine Wall 1969 1:25,000 A NG [1:25,000 1st ser.] 2 note ATC  
 57. With cover notes, prepared by the Archaeology Division. Map reprint with print code "A" removed - perhaps the "second edition" listed in the letterpress of Map of Roman Britain - Fourth Edition, 1978, 9.

- 58 Britain before the Norman Conquest note  
 1 North Sheet 1973 1:625,000 A NG [1:625,000 phys.] 3 CWP  
 2 South Sheet 1973 1:625,000 A NG [1:625,000 phys.] 3 CWP

58. With letterpress dated 1973 written by Phillips with Professor W. F. H. Nicolaisen and Dr Ian B. Cowan. An outline map The Welsh Cantrefis is included. In 1948 Phillips discussed the project with W. F. Wainwright (Crawford Mss 80). In April 1952 he wrote that "the period 800-1066 is being actively worked on and a map completed" (P.R.O. OS 1/825). He viewed the map in 1956 as Anglo-Danish Britain and, on its adoption in 1968, as Anglo-Scandinavian Britain, 871-1066. Phillips ultimately prepared it after retiring. He looked first to a Viking ship as the emblem for the cover design, but by 1971 this had changed to a design incorporating King Alfred's Jewel. The cover was designed by the Central Office of Information.

- 59 Londinium. A descriptive map and guide to Roman London 1981 1:2,500 - NG [1:2,500] 4  
 60 Second Edition 1983 1:2,500 - NG [1:2,500] 4

59,60. With marginal notes and commentary, and illustrations on the face of the maps. 60. With updated and corrected information, and including contours at 3' intervals based on a survey of 1841.

Appendix 1 - Maps prepared and published by the O.S. for the English Place-Name Society volumes, edited by A. Mawer and F. M. Stenton and published by C.U.P..

- 61 Map of Buckinghamshire shewing Hundreds (Ancient) & Civil Parishes 1925 1:253,440 - - [¼" outline] - -  
 62 Map of Buckinghamshire (maps 61 and 62 are both in Vol. II) 1925 1:126,720 - - [½" outline] 1 -  
 63 Worcestershire - Domesday Hundreds (in Vol. IV) 1927 1:126,720 - - [½" outline] 3 note -  
 63. The map prepared by J. G. Withycombe and O. G. S. Crawford.  
 64 Yorkshire (North Riding) - Domesday Wapentakes (in Vol. V) 1928 1:126,720 - - [½" outline] 1 -  
 65 Sussex - Rapes and Hundreds (in Vol. VI) 1929 1:126,720 1500/29 - [½" outline] 1 -  
 66 Devonshire - Hundreds and Parishes (accompanying Vol. VIII)  
 1 (North) 1931 1:126,720 - - [½" outline] 1 -  
 2 (South) do do 1500/31 - do 1 -

## Appendix 2 - Programme of Archaeological Work Projected in 1936.

- 67 Brochs (Scotland) 1:1m JHC  
 67. C.R.10427. From a model prepared by J. H. Craw.  
 68 Megalithic Britain 1:1m OGSC  
 68. The model prepared from Crawford's ¼" series. A scheme revived by Phillips (see map 76), Neolithic Britain still had third priority in 1969.  
 69 Britain in the Late Bronze Age 1:1m OGSC  
 69. C.R.9411. The card index based upon published lists.  
 70 Camps of Wessex 1:253,440 ¼" 4th ed. 11 OGSC  
 70. C.R.3469. Originally designed to cover the whole of England.  
 71 Anglo-Saxon Worcestershire 1:63,360 FTSH  
 71. C.R.9412. The model by F. T. S. Houghton on a set of 6" maps.  
 72 Anglo-Saxon Berkshire 1:63,360 OGSC  
 73 Windsor Forest area in the 17th Century 1:63,360 OGSC?  
 73. To be drawn from old estate maps, overprinted on the 1" map.  
 74 The Oxford District 1:63,360? 2?  
 74. The two colours to represent prehistoric and mediaeval elements. Mediaeval Oxford was noted in the O.S. Report 1930-31 as a large scale map, and Elizabethan Oxford in Crawford's report of 19 November 1930.

N.B. Other items mentioned in this list are maps 13, 14, 16, 17, 34/1-5, 38, 43/1,2 (as Roman Scotland), 44 (north and south sheets at 1:1m), and P.P.17. Crawford was also working on a Diagram of "Place-names in -ingham, to be added to Dark Ages Map, South Sheet, p.13 of text." (P.R.O. OS 1/272 f29/13,14)

Crawford's 12 July 1944 report (P.R.O. OS 1/272) mentions work in progress on:  
 75 Fenland Celtic Fields based on air-photos

## Appendix 3 - A proposed new policy for the production of Period Maps to be published by the Ordnance Survey. [by C. W. Phillips, 1952 - P.R.O. OS 1/825]

- 76 Map 1 Neolithic Britain 2000 B.C. - 1850 B.C. 1:253,440  
 77 Map 2 The Early Bronze Age 1850 B.C. - 1300 B.C. 1:253,440  
 78 Map 3 The Later Bronze Age 1300 B.C. - 500 B.C. 1:253,440  
 79 Map 4 The Iron Age 500 B.C. - A.D. 43 1:253,440  
 80 Map 5 Roman Britain A.D. 43 - A.D. 420 1:1m  
 81 Map 6 The Dark Ages A.D. 420 - A.D. 800 1:1m  
 82 Map 7 The Later Saxon Period A.D. 800 - A.D. 1066 1:1m  
 83 Map 8 Norman and Angevin Britain A.D. 1066 - A.D. 1215 1:1m  
 84 Map 9 Britain under the Plantagenets A.D. 1215 - A.D. 1377 1:1m  
 85 Map 10 15th. Century Britain A.D. 1377 - A.D. 1485 1:1m  
 86 Map 11 16th. Century Britain A.D. 1485 - A.D. 1603 1:1m  
 87 Map 12 17th. Century Britain A.D. 1603 - A.D. 1714 1:1m

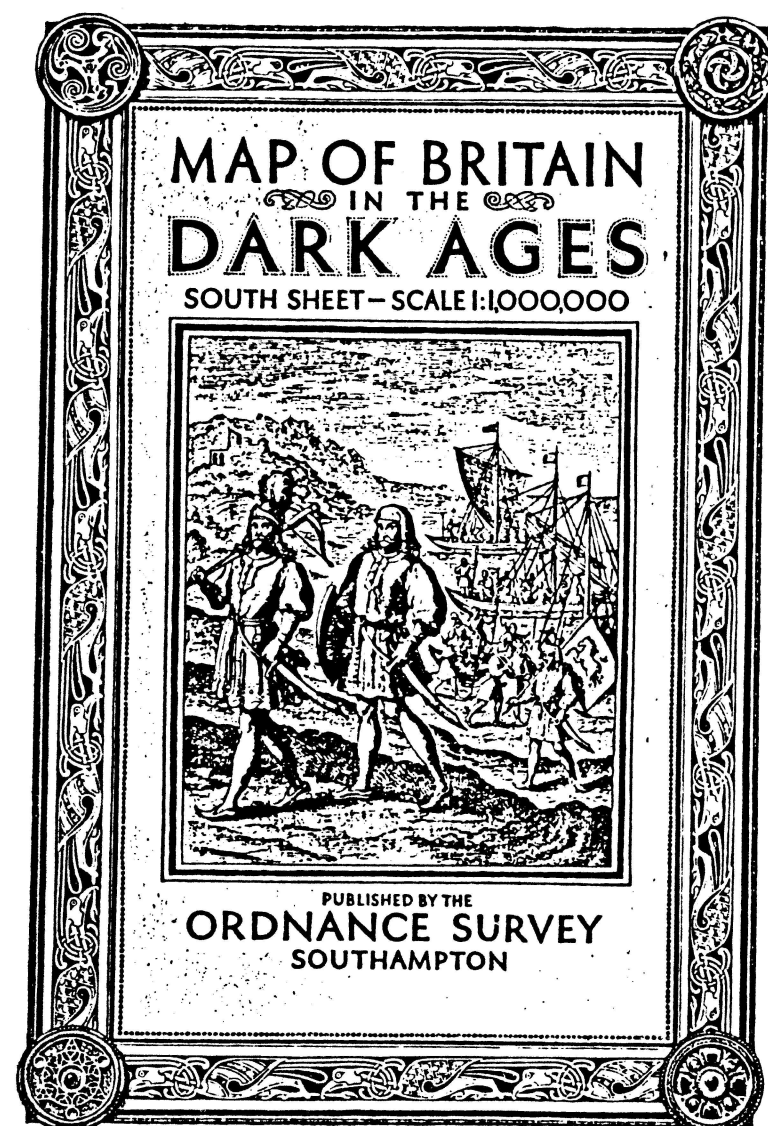
76-79. At ¼" scale because knowledge of prehistory was deemed insufficient for summary maps at 1:1m. 80,81,82. These became maps 28, 39 and 58.

## Appendix 4 - Maps forthcoming and under consideration.

- 88 MPD 58/1/11 Camulodunum - a Descriptive Map and guide to Roman Colchester  
 89 MPD 58/1/12 Map of Roman Bath  
 90 MPD 58/1/13 Offa's Dyke  
 91 MPD 58/1/14 Roman and Anglian York 1:2,500 ) Published  
 92 MPD 58/1/14 Viking and Medieval York 1:2,500 ) March 1988, Ed.  
 93 MPD 58/1/15 Hadrian's Wall 1:50,000 & 1:25,000  
 94 MPD 58/1/16 Medieval London 1:2,500?  
 95 Roman Britain [Fourth Edition revised] 1:625,000

## Appendix 5 - Period maps published by the Ordnance Survey Office, Dublin.

- 96 Monastic Ireland 1960 1:625,000 - IG 2 RNH  
 97 Second Edition 1965 1:625,000 5.65 7,000 IG 2 RNH  
 96. With letterpress dated 1959. 97. With letterpresses: 7,000 9.64; 10m. 1/79. Map reprint: 8.79.



The original (rejected) Ellis Martin cover design for "Britain in the Dark Ages" displaying "The Arryval of the First Anceters of Englishmen out of Germanie into Britaine". Proof in PRO OS 1/9331/1. See note on Maps 37 to 39

#### Addenda and Corrigenda to List of maps.

Map 4 - the base map should read 6" Hants. A copy in the collection of Rod Monnington has a cover price of 3/-.

Map 10 - An early proof dated 27 April 1932 with woodland overprinted in black is in the School of Geography, University of Manchester. It has no overprint title and has base map print codes 15750/31, 1100/31. Included are instructions that the woodland colour be changed to green, as is found on the proofs in the P.R.O.

Map 32 - Ian O'Brien has summarised the known information about the first appearance of Ellis Martin's cover design in Sheetlines 21, 23. I rather overstated the completeness of map 32/1a - at best it is no more than a model. As to map 32/3, my theory that this map was in preparation by the O.S. is not true, and I have now discovered why there are two models headed "Sofiya" in R.C.H.M.E. Southampton. It seems that Ellis Martin created as companion to his cover design a map border design which first appeared on a dummy sheet published by the O.S. in 1936 (print code 336), which, besides demonstrating the border itself, also depicted the various types and sizes of alphabets available for T.I.R. maps. Reference panels and the scale bar are also included. Sheet K 34 Sofiya (with no map) was the chosen exemplar, and the two models used in its creation survive in R.C.H.M.E. Southampton. There is a copy of the printed sheet in the British Library. The only map to be published using its style precisely was L 31, though M 32 conformed fairly closely.

Map 33 - The arabesqued cover design is by Ellis Martin.

Map 34/4 - At the CCS meeting on 18 June 1988 at Birkbeck College reference was made to the likelihood that this map was in fact printed, though not published. It seems that the maps were cut up and used for internal memoranda. If this is so, it is possible that such segments could turn up in literally any C.R. file of the time, and researchers in the P.R.O. are earnestly requested by the writer to inform him should they come across a document written on the back of a piece of this map.

Map 37 - David Archer reports a letterpress coded 1000 3.58.

Maps 37, 38 - the eagle-eyed will have noticed that there are two versions of both reprints with unique codes 3263 and 3366: they may be distinguished by whether or not the unique code number is followed by a full stop. Cover evidence suggests the correct sequence as that given.

Maps 37 - 39, See also illustration.

Map 44 - Reg Jerrard's drawings survived the war, but have since disappeared.

Map 48/2 - two versions with unique code 3927 exist. The first has the code on the overprint plate, the second on the base map plate. There are also two distinct versions of the letterpress, without print code.

Maps 49/2, 52/2 - the base map date should be 1975.

Maps 50/1, 50/2 - two reprints of the first issue have been noted, both with the sheet price increased to 3/6 flat, 7/- folded in covers. The first repeats the unique codes 3624 and 3625, the second has unique codes 4224 and 4225. The only copies I have seen are flat, the first pair in the Map Library of the London School of Economics, the second in the Map Libraries of Nottingham and Newcastle upon Tyne Universities.

Map 58 - there are 4 overprint colours.

Appendix 4 - for more up-to-date information on these, see Sheetlines 22, 11.



ONE-INCH MILITARY MAPS OF GREAT BRITAIN, 1919-1950: SOME NOTES ON GSGS 3907 and 3908 (INCLUDING 'WAR REVISION 1940' AND 'SECOND WAR REVISION 1940')

by Richard Oliver

Preliminary

Until the relevant War Office and Geographical Section, General Staff files are made available at the Public Record Office, any account of the development of the military editions of the one-inch must be 'provisional' in nature. On the other hand, with the exception of passing references to the two 'War Revisions', very little has appeared in print, and thus I offer this paper both to fill a gap in the one-inch story, and in the hope that it will stimulate further investigation, both of the maps themselves and of their background.

Why a Separate Military One-inch?

It is axiomatic that the OS one-inch originated as a 'military map', but from 1919 until its demise in the 1970s separate civil and military versions of the one-inch were prepared. The reason for this was that the military maps carried a co-ordinate reference system, or 'grid', which the corresponding civil maps either did not, or else carried it in a form which differed from the military system. This paper is concerned only with the maps carrying the War Office Cassini Grid, which was abandoned in 1950.

Following the use of various systems of artillery squaring during World War I, in 1919 the British army adopted a grid system known as the 'British System'. It enabled grid references correct to 100 metres, or 100 yards, to be given, using a letter and four figures, which repeated every 50 kilometres, or every 50,000 yards. Such a British System grid was superimposed, in purple and in place of the 2-inch squaring used on the civil version, on military printings of the 1-inch English and Scottish Popular Editions until c.1931, when it was superseded. The English and Scottish Popular Editions were constructed on the Cassini projection, on the meridian of Delamere; this projection had the merit of easy construction, but the drawback that it introduced angular distortions, which were unacceptable for artillery firing at 'invisible' targets. The British System grid, based on the metre, also used a Cassini projection, but on the Dunnose meridian; in 1924 Col H.S.L. Winterbotham (then head of GSGS) explained that 'It has been necessary to introduce the second (Dunnose) grid because we work at present on a projection which is not orthomorphic.' 1. The grid apart, the military versions of the English and Scottish Popular Editions had the same colour-scheme as their civil counterparts, (Scottish sheets and English sheets with a separate water tint plate needed eight printings, English sheets without a water tint plate needed seven), except that sheets printed around 1931 omitted the green (woods) plate. They had no GSGS series number, and the purple overprint included an index to the corresponding 1:20,000 sheets of GSGS 2748, although very few of these 1:20,000 sheets were printed.

1931: A Radical Change

The British System had the disadvantage that references repeated every 50 km, and therefore, as the War Office remarked in 1929, it was 'of little assistance in describing the movements of mechanised troops or in framing orders concerning a large area'. 2. In 1927 the 'Modified British System' was devised, which by use of one letter and six figures enabled a reference correct to 100 metres to be given that only repeated every 500 km. The introduction of this to the British military 1-inch coincided with a general restyling which

had the effect of producing a much plainer-looking map: not only was green for woods omitted, but a single colour - yellow or 'sienna' - was used in place of the red and yellow hitherto used on both military and civil printings, so that there were five or six printings according to whether a water tint plate was used. In this form, GSGS 3907, covering England and Wales, was issued in 1931-2; GSGS 3908, covering Scotland, appeared in 1933. (At about the same time GSGS 2748, the 1:20,000 map was abandoned in favour of GSGS 3906, at 1:25,000.) The omission of green was evidently soon felt to be a mistake, as it had been restored by 1934. With this modification, GSGS 3907 and 3908 continued to be reprinted without further change of style until the outbreak of war in 1939. In addition to regular numbered sheets, there were a number of special sheets, (some first issued in the 1920s with the British System grid), including Aldershot Command, Salisbury Plain, New Forest, (all based on, or available in, civil editions as well), Catterick, Colchester, Blandford and Dartmoor. The last (issued in 1937) was based on a non-relief version of the Fifth Edition tourist sheet. Several one-inch manoeuvre maps were also published as part of GSGS 3907. In 1934 the Aldershot sheet was republished using 5th edition material. In 1939 GSGS 3907 sheet 107 was given a Fifth Edition base.

The Fifth Edition Challenge

I have recently described elsewhere the development of the Fifth and New Popular Editions of the one-inch,<sup>3</sup> and here it is only necessary to point out that both were produced (like the Scottish Popular) using photographic negatives as the base document, rather than copper plates and litho stones (as was the English Popular), that both were on the Transverse Mercator projection, (which did not distort angles, and hence was suited to artillery use), and that the New Popular carried a metric grid of Modified British System type. Because of the different projections and meridians used, grid references given on the WO Cassini Grid could not be converted to the Transverse Mercator 'Ordnance Survey Grid'; any changeover from the former to the latter would have to be carefully planned. Initiative for the change came from Brig M.N. Macleod, Director-General of the Ordnance Survey, who opened negotiations with the WO in May 1939.<sup>4</sup> The War Office appear to have been distinctly less keen than Macleod. The essence of the OS case was that the Popular's lithographic stones were worn out, and that, rather than refurbish them, it would be much more cost effective to replace them with a military version of the New Popular, based on glass negatives, which would, in addition, be up to date. The essence of the WO case was that it could not tolerate adjacent Command areas using different grid systems. This would be unavoidable were the changeover to be piecemeal, rather than if it were to be delayed until the New Popular covered all England and Wales. The out-of-dateness of the Popular was actually an advantage in training, in that it discouraged over-reliance on the map.

War Revision 1940

The issue was still unresolved by the time of the Dunkirk evacuation at the end of May 1940; suddenly GSGS 3907 and 3908 changed from 'training' to 'operational' maps, and out-of-dateness appeared much less of an advantage. A hasty updating was put in hand, drawing on, in particular, the 'A.R.P.' 6-inch revision of 1938-9. The result was 'War Revision 1940'. It was particularly characterised by new built-up areas being shown by large areas of unrelieved black hatching, although many areas had been untouched by the 'A.R.P.' revision, and the addition of 'war revision' seems to have been more of a formality. So far as there was any standardisation in 1940, most sheets were six-colour with screened water in place of the tint plate, though the latter was retained on a

few sheets (e.g. printing of GSGS 3907 sheet 100) and omitted without a replacement on others (e.g. a printing of GSGS 3908 sheets 30 and 31). From the end of 1940 onwards the colour-scheme was modified: contours henceforth were printed in orange and roads in red.

Although the common title 'War Revision 1940' used throughout GSGS 3907 and 3908 suggests a fairly uniform map, in practice there were three groups. The first comprised most of the sheets covering England and Wales, which were (except for sheet 107, referred to above) based on the Popular Edition, received 'war revision', and were subsequently replaced by 'Second War Revision 1940', (see below). The second group comprised GSGS 3908, which received 'war revision', and (with two exceptions, sheets 45 and 92) were not converted to 'Second War Revision', although from October 1941 onwards they received the new-style margins applied to Second War Revision sheets of GSGS 3907. The third group comprised GSGS 3907 sheets 118-9, 127-8, 136-8 and 143-6, which retained Fifth Edition sheetlines, and had three main stages of development. In the first, characterised by the omission of the designation 'War Revision 1940', the Fifth was adapted to the minimum necessary: yard-grid values were removed from the margins, but the grid lines were sometimes left on the map itself, and the W.O. Cassini grid was superimposed in purple. In the second stage, the remnants of the yard grid were removed, and the designation 'War Revision 1940' was added. In the third, the marginal information was restyled as for GSGS 3908 and the Second War Revision sheets in GSGS 3907.

#### Second War Revision 1940

In England at least, 'War Revision 1940' was very much an improvisation, and on 16 August 1940 instructions were issued for the preparation of 'Second War Revision 1940', which was much less of a makeshift.<sup>5</sup> It represented a compromise between OS and War Office views: sheetlines and grid were unchanged, but as far as possible the topography was that of the Fifth or New Popular: it was intended in August 1940 to use such material for all sheets from 68 upwards, but on 1 December 1940 the unfinished drawings for the southern half of Wales, the West Midlands and East Anglia were destroyed and in the event only 46 Second War Revision sheets (73-5, 83-7, 93-8, 103-8, 110-17, 120-6, 129-35, 139-42) were given a Fifth/New Popular base. The remainder were based on the Popular. All were in four colours: black, blue, orange and green. Orange (the official designation, though it could vary from nearly chocolate to almost yellow) was used for both contours and roads; black for both outline and the grid. At first wide margins with conventional sign panels were provided, but from October 1941 much simpler margins were provided, enabling a smaller size of paper to be used; a large black arrow on the face of the map called attention to the north point information in the bottom margin. From May 1944 a reddish colour, officially known as 'Ink no 17 Air Force Brown' replaced orange,<sup>6</sup> though the latter was reverted to some time in the later 1940s.

Only two GSGS 3908 sheets (45 and 92) appear to have been issued in Second War Revision form. I have been unable to ascertain how extensive Second War Revision coverage was in GSGS 3907: it has been suggested that some sheets may have been prepared but not generally released. At any rate, I have found only an outline-and-water version (see below), of ten sheets (29, 41-2, 52, 61-2, 81-2, 92, 109) and I have found no Second War Revision version at all of seven more (24, 44, 51, 78, 88-9, 100).

#### 'Sales Copies'

Having fought the War Office on replacing the WO Cassini by the OS Transverse Mercator grid, and lost, the OS went on to fight the WO's objection to placing the New Popular on sale, and lost again. The WO's objection was that the two grids could easily be confused, which was reasonable, and it still objected when the OS offered to black out the grid figures on the New Popular for the duration, which was less reasonable. The question was made more urgent by the destruction in air raids in December 1940 of most stocks of civil maps, for which there was still some demand in wartime. In the summer of 1942 a compromise was worked out, whereby copies of GSGS 3907 and 3908 could be placed on sale, with a 'Sales Copy' overprint or sticker to thwart military entrepreneurs. In order to discourage use of the WO Cassini grid by civilians, it was sometimes omitted from printings of War Revision 1940 for civil use. Also intended for civil rather than military consumption were outline and water printings of some sheets of GSGS 3907 and 3908, produced from the summer of 1943 onwards.

#### The Demise of GSGS 3907 and 3908

Although World War II delayed the military adoption of the Transverse Mercator metric grid (designated 'The National Grid' at some time during the war) and of the New Popular as a basis for the military one-inch, it did not prevent it; following some experiments, in 1950 GSGS 3907 was superseded by GSGS 4620, a military version of the New Popular, and GSGS 3908 by GSGS 4639, a military version of the Scottish Popular with National Grid. (Connected with the experimental phase are Cassini-gridded versions of New Populars 167 and 169, of c.1946-7.) However, pending this step, GSGS 3907 and 3908 had to be kept in print; though I have not found any post-war printings of GSGS 3908, in GSGS 3907 I have found a 15,000/4/47 printing of War Revision sheet 143, and a 10,000/10/48 printing of Second War Revision sheet 122.

#### Notes

- 1 Winterbotham, H.S.L., et al., 'The Choice of a Grid for British Maps', Geographical Journal, 63 (1924), 491-508. The quotation is on p/495.
- 2 War Office, Manual of Map Reading, Photo Reading and Field Sketching, (HMSO, 1929), 51 ff.
- 3 See Richard Oliver, A Guide to the Ordnance Survey one-inch Fifth Edition, and A Guide to the Ordnance Survey one-inch New Popular Edition ... (Charles Close Society, 1987).
- 4 For discussion of grids and of relations between OS and WO at this time, see PRO files OS 1/111, OS 1/169 and OS 1/219.
- 5 Copy of instructions in PRO OS 1/219.
- 6 I owe this description of the ink to Ian Mumford.

#### Acknowledgements

This paper started life in 1983, and since then it has been read and commented on by several people: I particularly wish to thank Peter Clark, Guy Messenger, Ian Mumford and Ian O'Brien, though of course I alone am responsible for the end result.



LETTERS TO THE EDITOR

Dear Mr O'Brien,

In Sheetlines no 19, you ask about the 1901 edition of 'Notes on the minor trigonometrical work of the OS', the OS library holds a copy of this, however there is no indication on the publication of Close's authorship. In the 1933 edition Winterbotham's foreward gives a background to Close's authorship of the work.

Should anyone take you up on the idea of a comprehensive bibliography of Close's works, they might be interested to know that the OS Library contains two boxes of Close's papers, including extracted articles and some correspondence with Hicks, Steers, etc.

Yours sincerely

Ordnance Survey  
24 October 1987

Pat Poppy  
Librarian

Dear Mr O'Brien,

You ask for views on the future direction of 'Sheetlines'.

First, on the format, if money were available I should prefer to see more pages rather than better illustrations, especially if the standard of reproduction generally can be kept as high as that of issue 19. A coloured cover would be of little value.

Secondly, on the matter of content, I would regard the maps produced by 'pre-merger' and 'post-divorce' organisations as of greater interest than OS ephemera and even than those OS maps for Royal Commissions which consisted of a standard map in outline form overprinted with coloured symbols.

In searching around for 'core' aspects yet unconsidered you have neglected a whole range of topics related to map content, that is to say the relationship between what appeared on the map and the physical reality the map depicts. For example, what were the instructions to surveyors on how to classify roads, especially during the period of the elevenfold Popular 1" classification? Again, for that same series, I know what items can change as a result of "minor corrections", eg coastguard stations. But can I assume that coastguard station information, to stay with that example, is fully incorporated to the minor corrections date or did changes reach the OS in a haphazard or incomplete way? There is a whole range of questions here, of direct relevance to the map user, which has been largely neglected up to now.

I wish you a successful term as editor.

Princes Risborough  
15 November

Yours sincerely,

Rob Wheeler

Dear Ian,

Congratulations on your first issue of SHEETLINES and for opening up the debate on its form and content. I am particularly concerned by the question of publishing lengthy pieces. Far from countenancing enlarging the newsletter I feel we are in need of exercising more constraint in publishing journalistic speculation more suited to the glossy magazines, and lengthy, substantially researched, articles which merit publication in the several scholarly journals now available. I think our newsletter should concentrate on news, reviews and a more disciplined 'notes & queries' approach. The difficulty with the latter is getting the two together rather than scattered over several issues, but I think the effort should be made. Under the present system half truths and guesses are published which are very difficult to correct months later without appearing aggressively nit-picking!

Yours sincerely,

Chessington  
7 December 1987

Ian Mumford

THE SEVENTH EDINBURGH 3-DAY EVENT: 5,6 and 7th November 1987

by Yolande Hodson

This year's event started with a bang (it was, after all, Guy Fawkes night). There we were, about fifty of us, settled comfortably in our seats in the brand new Map Room of the National Library of Scotland, looking forward to the 'presentation with a difference' which had been promised by the Map Librarian, Margaret Wilkes. Suddenly, an explosion interrupted the expectant atmosphere. It was actually a party popper, or something like it, aimed at us by Sandie Wilkie by way of introducing the evening's novelties. After the welcoming glasses of wine, supped to the strains of Handel's Royal Firework music, it certainly made us sit up and take notice!

It transpired that we were to be treated to a feast of 'desert island maps', and the 'buried treasure' which featured in the title of the evening's entertainment turned out to be a selection by each member of the Map Room Staff of the maps in the NLS collection which were special to them. Among those chosen by Sandie were the imaginary map in the recent OS competition - really a reversed image of the Bodmin area (see 'Puzzle Corner'), a 1580 bird's eye view of St Andrew's, showing the hustle and bustle of the harbour, and a modern OS map of the new NLS site compared with an edition of 1877 showing the original biscuit factory building. Thus in the space of five minutes we saw a considerable variety of cartographic styles and techniques.

We were then given a hilarious presentation by Janine Hunter, who, having come to the Map Room fresh from school only two months before, had found herself set down in a bewilderingly varied map environment. To illustrate her travels through the Map Room she had drawn a pictorial map entitled 'Maplantis' which, suffice to say, included a 'Plain of Chaos' and an 'OS Swamp'. Next Liz, on a Manpower Services Commission Scheme, had been wading through the social and economic history of England by indexing about 15,000 of the 40 tons of nineteenth-century OS large scale plans of England (NLS is the second largest OS map file in the country after the BL). From these she had selected 3 sheets covering Runcorn, Leeds - showing factory workers' homes in 1893 and Blackpool, the centre of entertainment for the masses.

Peter Milne's great love of the outdoors was reflected in his topic of 'maps and expeditions'. He presented a most interesting and well thought out theme of beauty v. functionality in maps, demonstrating how simple maps of complex areas like the Himalayas, incorporating information brought back from expeditions, were more useful than beautifully hill-shaded works of art which more resembled works of fiction. He was followed by Sue Brunton, who in her spare time was a corporal in the Royal Military Police Volunteers, and was also a practitioner of the martial arts. When she started speaking there was no doubting who was in charge! We were shown operational mapping from the Falklands, night target maps and escape maps, all without breaking the Official Secrets Act.

Philip Woodall, who is reputed to retrieve maps of central Europe faster than Carto-net, is also a Sci-Fi addict but has more close encounters with the map-seeking public than with aliens. He explained the problems of tracing older refugee homelands whose placenames had changed, and showed some of the maps used. He ended up with an amusing comparison of the first and second editions of OS 5 foot sheet Plymouth 66 (Devonport) showing, on the first, that every other house along the street from the dockyard was a pub, while on the second only three pubs remained, the rest having changed into mission halls. This was an interesting emphasis of the point made earlier that the OS plans are a mirror of social change.

Penultimately, Margaret Wilkes had made a selection of material of interest for 'honoured' guests in the audience. She began by paying tribute to the memory of Peter Bartholomew, who had died only two weeks before, by showing a volume from the Bartholomew archive (mostly in the NLS) in which was a map engraved by his grandfather, John George Bartholomew. Among those for whom Margaret chose material were our Chairman, Peter Clark and Alan Godfrey, one of our former Treasurers, who she so aptly described as being responsible for the renaissance of the OS large scale plans.

The ultimate entertainment of the evening was an extraordinary performance of the 'Causewayside Calypso' by its author, Tim Lawrence (is he in the habit of playing his guitar in the Map Room?). Dedicated to the new NLS building, it revealed architectural details not otherwise immediately apparent to the casual observer.

That evening will be a hard act to follow next year.

On Friday morning we were welcomed, in the Geography Department of Edinburgh University, by Barbara Morris, the instigator of the Carto-net project. This was the official launching of the Carto-net Report: a description of the project which, within six years, has become a fully-functioning, automated map cataloguing and retrieval system. It gives, for the first time, complete bibliographical control for all maps, including those in series. An essential feature of Carto-net is its interactive graphic searching ability, and it is able to produce graphic indices to illustrate map coverage for any particular area searched for in the system. Carto-net is also part of a co-operative cataloguing network, and data sets other than maps, such as air photographs, satellite imagery, census and gazetteer information is input using Oracle, and then linked up to the map catalogue. It can take six minutes to catalogue a map (presumably a modern, straightforward one) but series sheets can be entered in seconds if there is little detail to update or change. The point was made that queries must be highly selective otherwise the system makes a very thorough search which takes forever to refile. Carto-net never fails to interest, there is always some new sophistication being developed, and we look forward to seeing the differentiation by colour of various series shown simultaneously in the graphic displays.

In the afternoon we were formally welcomed to the new NLS building by Dr Alan Marchbank, Keeper of Readers' Services. We were shown a sequence of slides illustrating the need for a new NLS building, the reasons for the choice of site, and the building works themselves, quite an engineering masterpiece. We were then given carte blanche to wander, unsupervised, through the new building - a confection of slanting plate glass, sandstone outcrops and mile upon mile of movable shelving combined with spectacular views from the top floor. We keenly anticipate seeing it all in action next year.

Our generous hosts for the evening, the Directors of John Bartholomew, showed us a fascinating video illustrating the copper-engraver's art. It was the first time that many of us had seen demonstrated the many techniques involved in the production of an engraved map from fair drawing to printed sheet. Afterwards, we were able to practise our own skills at scribing; speaking personally, I can say that it is not as easy as it looks. Good wine and delicious food made this most pleasant social occasion a memorable end to an information-packed day.

Our venue on Saturday morning was the Royal Commission on the Ancient and Historical Monuments of Scotland where, at the National Monument Record, Diana Murray, Curator in the Recording Section of the NMRS, had prepared a curious (used in the eighteenth century sense) display to accompany her talk on the

work of the RCAHMS, which falls into four categories. The topographic survey involves the identification and recording of sites and monuments of all periods, and the specification of those worth preservation. The results are published in Inventories, of which twenty-eight volumes, covering about half of Scotland, have been published since 1908. A programme of aerial photography is carried out annually, aimed at recording crop marks; winter and spring sorties record those sites of low relief which show most clearly in low sunlight or when covered with a sprinkling of snow. An average of 700 sites are photographed each year, 40% of which are new discoveries. The photographs are later made available to the public.

The Threatened Buildings Survey undertakes about 200 investigations annually under the provision of the Town and Country Planning Acts (Scotland). The Commission has the responsibility for recording historic buildings for which Listed Building Consent for demolition has been granted; very little of this is published, but the survey material is available for study in the National Monuments Record of Scotland.

The fourth aspect of the work of the RCAHMS is publishing, and apart from the inventories and catalogues, a most valuable recent publication is a series of eight guide books, Exploring Scotland's Heritage. Another recent book, Monuments of Industry, incorporates much material and information amassed by the NMRS.

The National Monument Record for Scotland contains records of structures of all periods from the palaeolithic to the present day. It provides an information service based on a central archive of pictorial and documentary material relating to archaeological sites, ancient monuments and historic buildings throughout Scotland. It is also the central depository for the archival records from excavations in Scotland funded by the Scottish Development Department. The collections contain about a quarter of a million drawings, 400,000 photographs and 10,000 printed books and periodicals in the library. About 10,000 items are added to the collections annually.

In 1983, the archaeology branch of the Ordnance Survey came under the control of the Commissions in England and Scotland. The details of ancient monuments carried by the standard OS series has been an important influence in promoting the study of archaeology in Britain. A regional OS archaeology branch was set up in Edinburgh in 1958, and thereafter a valuable card index of site information was established as a result of research and fieldwork carried out for map-making purposes. This remains the most comprehensive survey of monuments in the British Isles and provides an unsurpassed source of information. In Scotland the records of the OS and NMRS have been amalgamated to produce the most complete record yet available for the archaeological and architectural monuments of Scotland.

The record is kept up to date in much the same way that was demonstrated at Southampton two years ago: bibliographical references are taken from new publications, and information is added from field and site surveys, excavations, antiquarian documents, aerial surveys and drawing collections. Information is also provided by local sources such as museums, archaeological and historical groups, local Sites and Monuments Records and individuals. At present the Record is held in card index form, together with annotated 1:10,000 map sheets. A computerised information and retrieval system is being implemented which will speed up the cataloguing and indexing process.

Jim Davidson, formerly of the OS archaeology branch, then gave us a brief resume of the methods used for providing OS with archaeological information.



Antiquities were supplied for maps of all scales, and the NMRS was supplied with the OS revision programme to which they worked, in addition to providing supplementary material. In the nineteenth century the antiquities were recorded in the object name books which, unlike those for the same period in England, were not destroyed during the war, and are now preserved in the Scottish Record Office. The transfer of the OS (archaeologically speaking) to the NMRS had been easy because there had always been close co-operation between the two. The main task was to prepare the antiquity models for the 1250, 2500, 10,000 and derived scales. Those for the derived mapping were done in the office and differed from the large scales in that they were copied from existing material and were not made from new surveys. The work also included the revision of the thematic period maps which was done in collaboration with the other Commissions. Almost as an aside, an interesting environmental point was made. Afforestation in Scotland now presented a real threat to recording monuments, and the change in scenery was now being anticipated by surveying in advance of planting because much archaeology is in the shallow peat areas where the foresters are most active.

The exhibition which Diana had prepared included rare photographs, documents, surveying instruments, and the highly idiosyncratic journal of Dr Alexander Curle, the first secretary to the Commission. In 1908 he wrote: 'And so ends my first experience as the wandering antiquary of the Ancient Monuments Commission. I have inspected over 200 objects in Berwickshire ... my bicycle has carried me almost 300 miles ... the number of miles I have tramped by moorland and meadow I have no reckoning of but they are many. It has never been anything but the most intense pleasure to me even when I stood on Raecleughhead struggling to make my notes behind an umbrella which every moment the wind threatened to blow to pieces'.

It is becoming increasingly difficult to express adequately our thanks to all those in Scotland who put so much effort and hard work into these three days. Every year seems better than the last until one wonders how the standard can be maintained and these events are now a major feature of the UK cartographic calendar. It is encouraging to watch them flourish in the face of the unfortunately dwindling attendances at evening lectures, perhaps it is easier to go away for three days than it is to go out at night after a day's work. We give our heartfelt thanks to Alan Marchbank, Margaret Wilkes and all the NLS Map Room staff, Barbara Morris, Ann Sutherland, John Bartholomew, Robin Orr, Diana Murray and Jim Davidson.

#### PUZZLE CORNER

Peter Ennor provides the following solution to the mystery of the source of Ordnance Survey's treasure map of the country around "Darnton" and "Emovrey" mentioned in Sheetlines 19. He writes:

"On first examination I merely worked out the clues, but then I picked it up again and decided it looked vaguely familiar. It did not take me long to realise that it is a mirror image of part of East Cornwall, centred on Caradon Hill just North of Liskeard (Sheet 201, Plymouth and Launceston) and the bottom right corner is at grid ref 247655. I used to live about 20 miles away, so I had an advantage over most members."

Which Ellis Martin cover design appeared on what maps published in which foreign city?

#### REVIEW

The Old Series Ordnance Survey maps of England and Wales.

Scale 1 inch to 1 mile. A reproduction of the 110 sheets of the Survey in early state in 10 volumes. With introductory essays, cartobibliographies and illustrations. Published by Harry Margary, Lympne Castle, Kent. Vols. I to V, 1975 to 1987. Price £22 per volume (Vol. I now only available as part of a set).

Although some of the volumes in this series have been noticed in Sheetlines, the Editor thought that the halfway point in publication of this magnificent exercise in sustained scholarly production should be marked by a retrospective view.

Twenty years ago Peter Clark and I felt we had gained enough insight into the evolution of the One Inch map - as reflected in our articles in the Cartographic Journal - to be confident that we might achieve a youthful ambition to own comprehensive sets of the Old Series. Slight middle-aged affluence and access to the market augured well, until the day when we stood in Hodgson's Rooms in Chancery Lane, paralysed by the prices realised for the somewhat indifferent sets from the Oxford and Cambridge Club and elsewhere.

To me, the David and Charles reprints appeared a poor second best for anyone other than the railway buffs seeking the demonstration of the high point of railway development on the late, and often worn, plates that existed in the 1860s and 1870s. Harry Margary's entry on this scene opened up the prospect of possessing a very good collection of the earliest states, even though lacking the sensual pleasures, to the eye and fingertips, of a tactile, yet black, impression from copper. He has reproduced many early maps, but these lithographic reproductions represent the highest standards achieved to date.

The reproductions are full scale, but not in their original sheet size. The sheets are segmented to a manageable atlas size and grouped in regional blocks to form substantial volumes with integral text. Each volume has a relevant introductory essay of considerable interest, aiming overall to build up a historical narrative of the development of the One Inch map. This is the main thread running through the history of the Ordnance Survey in its period of military control, which lasted up to 1870.

At this point it is interesting to reflect on the mere existence of the Charles Close Society and the fact that we have become accustomed, over the past six years, to an increasing torrent of organised data about the maps of the Ordnance Survey, particularly the One Inch series. There are now a number of assiduous recorders of the cartographic minutiae in the hitherto largely unsifted or unknown map and document collections in public and private ownership. This changed view of the relevance and interest of the mass of detailed changes to be found in the sometimes incoherent story of Ordnance Survey publications can be seen in the way in which the volumes' introductory matter has changed.

In the first three volumes Brian Harley and Yo Hodson (O'Donoghue) had the problem of initially establishing a database of observed change, in as many examples of the sheets as possible, to flesh out the bare bones of the history of their preparation and publication, as scantily revealed in the Public Records and elsewhere. The bibliographic notes on the maps in those first three volumes are more abridged than in the later ones, but this reflects a declared intention of aiming not at definitiveness but at establishing diagnostic criteria for wider use on available examples.

Equally the later volumes reflect a growing appreciation of the value of recording as complete a cartobibliography as possible and providing a more appealingly detailed, though still not definitive, 'catalogue' for the increasingly wide range of collectors of the Old Series maps such as are found in the CCS and in map societies in the United States and elsewhere. But this detailed work should not be confused with the totally different objectives of records of commercial trivia, such as are found in stamp dealers' catalogues.

The diagnostic criteria which John and Barbara Manterfield used in Vols. IV and V are so complex that they can scan isolated copies with considerable insight. The thrill is still there of new revelations and the deduction of patterns of change which can be woven into the fuller historical narrative by Brian Harley. I doubt, however, that he has felt as excited as Yo, Peter and I did, in the early days of the search, at the sight of more copies of Mudge's Kent and Devon lying side by side than anyone may have seen together since they were first printed, in mere handfuls, nearly 180 years ago!

Neither must one forget that not only have increasing numbers of maps been collated, but more and more textual material has been identified, particularly in the mountainous bundles of broken-up letter-books which constitute several War Office classes in the Public Record Office. Since the delvings of Skelton and Harley and others which are summarised in 'The Ordnance Survey - A History', much more has come to light; for example, Richard Oliver has excavated rich seams of references in the Board of Ordnance papers from which Harley has benefited in Vols. IV and V.

One problem of writing a serial history over many years is that of maintaining a reasonably firm theoretical line of development without taking a blinkered view of emerging facts, or forgetting that sooner or later the parts must be brought into a consistent whole. There are still imperfectly answered questions on the early history of the One Inch map which deserve attention before these introductory essays are - one hopes - knocked into a whole at the end of the project. However, even with the recently increased momentum of publication, one feels for Harry Margary in having reached only the halfway mark! Encourage him by buying these volumes which, for collector or student, are an extremely economical way of acquiring a magnificent record in facsimile and textual comment of the Ordnance Survey's most famous map, the One Inch.

Ian Mumford.



## NOTES AND QUERIES

### A HALF INCH PRECURSOR

In Sheetlines no. 16, Richard Oliver noted the need for a study of the Ordnance Survey's half inch maps. Since it seems to have been little chronicled, an account of the Survey's immediate precursor of the 1903 standard sectional series would be a useful inclusion. A sight of a few of the maps concerned suggests that something very like a standardised, basic, one-sheet county 'family' evolved before 1900, being a lithographic reduction by one process or another from the New Series One Inch. Most of those seen share a reference panel identifying four sorts of vegetation, or land use. Beyond that, the map appears infinitely adaptable to specialist uses. Most serve as indexes to large scale maps; and most are also administrative maps identifying parishes, Poor Law Unions, urban and rural districts, boroughs, county boroughs, sanitary districts and the like - the mix of bodies old and new that existed after the 1888 Local Government Act. These are differentiated by colour, which may be hand-applied. Unlike the 1903 sectional series, minor roads are omitted altogether, and place names are not typeset. At least one map - for the County of Middlesex, 1898 - shows parishes only, and is not an index.

Tim Nicholson.

### COMPLETION OF THE OS 1:10,000/1:10,560 REGULAR SERIES

With the printing of the final sheet in October 1987 OS could celebrate the completion of this series. A short article by John Bigg in 'OS News' No. 88 reviews its progress from the 1938 Davidson Committee recommendation that a new national six inch map be produced on sheets 5 km square. Lack of suitable blocks of resurveyed large-scale mapping delayed publication of the first regular 'derived' sheet until 1953. Initially detail was generalised at 1:2500 scale before the component sections were reduced photographically to the final scale of 1:10560. Sheets were then fairdrawn. Until scribing was introduced contours were drawn freehand with a ruling pen 'a skill which needed a steady hand and a degree of courage'. To cut down on duplication of effort it was then decided to improve the quality of the generalised image produced at 1:2500 scale so that once reduced to 1:10,560 it could be reproduced without further redrawing. Subsequently the large scale plans were reduced to 1:5000 and a fairdrawn generalisation produced at that scale.

Following several years of experimentation (Tayler and Wiggins 1960) it was decided in 1961 to produce the 1:10,560 and 1:25,000 (Second Series) so far as possible from a common set of fair drawings. This necessitated the separation of water features from other planimetric detail. The draughtsman was required to draw detail in red and water features in blue to permit subsequent photographic colour separation. Another consequence, unwelcome to some 'Six Inch' users, was the greater degree of generalisation of minor features, e.g. building outlines, necessary to ensure legibility at 1:25,000 scale. 1969 saw the appearance of the first sheet published at 1:10,000 scale as part of OS's programme for the phasing out of 'Imperial' units. As the complete 'metrication' of the series required the re-survey of all contours to metric vertical intervals, many sheets inevitably carried 25 foot contours re-labelled with equivalent values in metres.

Today the 1:10,000 scale predominates but there are still significant blocks of 'Six Inch' mapping current, notably in the Scottish Highlands, the Southern Uplands and in the West Country. Until these are converted from 1:10,560 to 1:10,000, 1:50,000 will remain the largest single scale at which



there is published current map coverage of the whole of Great Britain.

#### Reference:

J.W. Tayler and W.D.C. Wiggins. The Production Of Six Inches to One Mile And 1:25,000 Mapping From One Fair Drawing. Paper No. 20 C, Colonial Office, Conference of Commonwealth Surveyors 1959. Report of Proceedings, London HMSO 1960.

#### ORDNANCE SURVEY RECORDS RELOCATED

##### OS Seventh Series One-Inch Sheet History Files

These were not required by Public Records Office which intends to hold only the general policy file for the series. The files were therefore due for destruction; happily, the Lord Chancellor has approved the application by The Charles Close Society for their transfer from OS to CCS custody. The archive is incomplete: files are held for sheets 65-190 except 109 (Chester) and 133 (Northampton).

The material is being stored at 16 Hertford Road, Tewin, Herts AL6 0JY. All are welcome to consult the files by prior arrangement with the Hon. Secretary. Transport details will be supplied on request.

##### Records Transferred from Southampton to PRO

Some books and other documents have been transferred from OS Library to PRO Kew and placed in Class OS 3. These include the following:

OS 3/260 Ordnance Survey Letter Book, 1817-22 (with some earlier correspondence), OS 3/263 Abstract of levelling observations, 1853-65, OS 3/264 Correspondence re OS Library 1848-1923, OS 3/265 Angle book, Wigton and Kircudbright shires, 1843-4, OS 3/270 Standards of length: Letter book, 1856-63, OS 3/271 Station descriptions, etc 1848, OS 3/273 Draft circulars and Divisional Orders, OSO Edinburgh, 1876-9, OS 3/279 Day Book, 1827-54, OS 3/340 Correspondence concerning Directors-General 1866-1916.

Files in PRO OS 1/1 to 19 have been sub-divided and renumbered so that some references in (eg) W.A. Seymour ed. A History of the Ordnance Survey (1980) are now incorrect.

#### ORDNANCE SURVEY CONFERENCE MAPS

In his article in Sheetlines No. 18 Tim Nicholson invited details of other Conference maps known to members. Rob Monnington reports that he has one in his collection, "Conference of National Park Planning Authorities 1969". The base map is 1/4 inch Fifth Series Sheet No. 5, coloured, flat, with title and conference information overprinted in red. A marginal note states that the overprint information was supplied by the Countryside Commission and published by the Ordnance Survey.

#### PUBLICATIONS

A Guide to the Ordnance Survey one-inch Fifth Edition, A Guide to the Ordnance Survey one-inch New Popular Edition and Scottish Popular Edition with National Grid, both by Richard Oliver and published by The Charles Close Society 1987.

These two guides present two phases of what their author sees as a single story. Each comprises an extended essay describing the conception, evolution and demise of its subject series followed by a detailed catalogue of all known states of sheets published, including in the case of the "Fifth" derived or related Tourist sheets. The description of the evolution of the Fifth is supported by illustrations of the changing sheetlines and marginal information. The "Fifth" essay includes a stimulating, if speculative, discussion of the motivation of the changes leading to the adoption of an orthomorphic projection and a national reference grid system. Oliver emphasises military considerations and possibly underplays the degree to which the technical convenience of particular practices for the map maker not infrequently persuades him that these must also be in the interests of map users! It is perhaps a pity that these essays could not have been written while some of those who made these decisions were still around.

It is evident that author considers the production of the New Popular, and the post-war gridded re-issue of the Scottish Popular, to be an under rated OS achievement. Certainly the speed with which the post-war need for these maps was met was remarkable. Perhaps the indifferent quality of the northern sheets, with detail still derived from the aged copper plates of the "Small Sheet" series, is to blame. A contemporary description in "Notes for Candidates for Technical Examination", (1947) implies that a major hindrance to achieving better quality was the imperfect dimensional stability of the only cartographic film ("Kodaline") then available. However, the same source made it clear that OS only regarded these sheets as a provisional product due for early replacement.

Provocative and informative though these essays are, the core of each guide is its catalogue of sheets and states with its thorough record of all changes and its tabulation of the collections in which copies were found. Comparison of the listing appearing in the "Fifth" guide with that published in Sheetlines 4 (1982) reveals the remarkable progress achieved in this area of cartobibliography over the last few years. If these guides provide one cause for regret it is that it has not yet been possible to give the Scottish Popular one-inch map its full due. In retrospect it can be seen as possibly the happiest of all OS productions of the inter-war period which surely deserves a guide of its own.

It is inevitable that a few errors will slip through when issuing catalogues of this nature. Readers may like to note the following on their copies of the New Popular guide:

- p.16 Amend title of Sheet 50 to "Glen Clova & Lochnagar".
- P.24 Sheet 144 - the 5th coloured printing is 1272, not 1270.
- p.27 Sheet 168 - the 2nd coloured printing is 2500/6/46 Wa.
- p.30 Unique number 1001: "m 12:73r" should be deleted.

Orders for either guide should be sent, with remittance of £1.95 to Guy Messenger, 5 Wheatley Avenue, Uppingham, Rutland, Leics LE15 9TU.

### A Ghost Map?

Most readers will be familiar with the Ordnance Survey/AA Leisure Guides. Generally these are illustrated by extracts from appropriate published OS maps. However, in one of the latest additions to the series "Channel Islands" the general maps provided of the island are extracts from a 1:50,000 map which does not appear to exist as a separate publication. The specification was evidently derived from the "Second Series" 1:50,000 of Great Britain but contours are lacking and roads are uncased while the map carries what is evidently a UTM (European Datum 1950) grid in blue. Selected areas of the islands are also depicted at larger scales with extracts from the 1:25,000 OS tourist of Jersey or the military maps of the other islands that make up Series M.824. If this "ghost map" were to be separately published would it become O.S. 1:50,000 Sheet 205?

The Village London Atlas: The Growth of London 1822-1903  
(The Alderman Press £15:00: ISBN 0 946619 26 3)

Richard Oliver draws our attention to a recent addition to the expanding volume of facsimile publication. It consists of an introductory essay followed by half-tone reproductions of three generations of the Ordnance Survey one-inch map; the Old Series and the first and third editions of New Series, displaying the capital at the beginning of the 19th century, in the 1860 and 70s and in 1901-02. The maps have been enlarged to a scale of 2 inches to 1 mile and cover an area extending from Windsor to Dartford and from Hatfield to Reigate.

### For The Young

Many CCS members will have had their interest in the work of the Ordnance Survey first roused by Winterbotham's A Key To Maps. However, some present day publishers are seeking to reach an even younger generation of potential map enthusiasts, for example through the Collins Longman "Mapstart" series. A recent addition to this genre is How it is made: Maps Text John Baynes, Design Robert Wheeler (Faber and Faber £5:95 ISBN 0 571 14732 1). As the author is Manager Carto 1 Conventional, at Southampton, it is not surprising that he makes considerable use of Ordnance Survey examples and illustrations. The book is strongly recommended for setting out a clear, comprehensive and well illustrated explanation of map making processes in remarkably few pages.

### SOCIETY NEWS

#### The Hon. Treasurer

Our Honorary Treasurer, Julian Williams, has followed Brian Garvan's example, and has been posted abroad, this time to Hong Kong. He has **therefore had** to relinquish his financial tasks on behalf of the CCS. We are most grateful to him for ensuring our solvency over the past few years, and for the hard work he has put in to the running of this society. We wish him well, and welcome, in his place, Nick Krebs, who has agreed to be co-opted until the next A.G.M.

## SHEETLINES

### The Newsletter of THE CHARLES CLOSE SOCIETY



No. 21 - April 1988

### EDITORIAL

For most readers, "there's money in old maps" is likely to conjure up visions of some recent booksellers' catalogues. On a recent visit to Southampton your editor had cause to walk through the Ordnance Survey's exhibition room where he was impressed by the way the historical roots of present day OS activities are now presented. His criticism would be the omission of adequate descriptive captions for many of the relics displayed, whether a copper plate, a lithographic stone or an early example of scribing. This may reflect a need for such historic items to be authoratively catalogued, for which task we hope resources will soon be found. Among the handouts awaiting the parties of visitors was one headed "Old Maps" which points out that while the OS Record Map Library does not hold copies of every OS map ever produced, it contains an extensive archive going back to the early nineteenth century. Copies of its maps may be obtained on paper or film for such purposes, it suggests, as "Historical Research, Legal Interest, Gifts....."

Charles Close Society members should welcome recognition that the creation, conservation and cataloguing of cartographic archives does not merely serve the interests of a relatively small group of map enthusiasts but can also contribute to a range of economic activities. It may even make some small contribution towards meeting the Survey's financial targets (it is to be hoped through happier joint publishing ventures than the one reviewed in this issue). One current use of "old maps", however, does not feature on the OS handout. The annual report of The Chiltern Society for 1987 reported:

"Footpath maps were selling well, but the Ordnance Survey had now withdrawn permission for their maps to be used as a basis for any more of the Society's maps. The Group was therefore trying to complete the coverage using old maps whose copyright had expired". (Further details of these activities appear in Chiltern News No. 107 Winter 1987/88).

This is not unique. Those who attended the British Cartographic Society's annual meeting in Glasgow last September will be aware that at least one major British private sector map producer has made extensive use of out-of-copyright OS maps in developing its own digital cartographic database. Another British publisher has used out-of-copyright material when producing a walker's guide to part of a foreign country which refuses to sell current maps to the general public.

Yes, there is money in old maps beyond the sums which they may fetch on the antiquarian market and perhaps there will in future be money in old aerial photo-



graphs, old remotely sensed imagery and old digital cartographic data, as essential materials for the provision of a time dimension in our understanding of our living space. However it would be a pity if they were seen to be the equivalent of duty-free shops, offshore banks and nudist beaches, devices which enable you to do things which are otherwise forbidden.

Readers will wish me to offer their congratulations to the authors of two "happy events" which took place in March. The first of these was the publication of Guy Messenger's map study monograph on the one inch map of England and Wales, Third Edition (Large Sheet Series). The second event was the latest fruit of the partnership between John and Barbara Manterfield, a baby boy, Luke. Our warmest regards go to parents and progeny.

### SOME MORE SPECIAL-PURPOSE MAPS

by Tim Nicholson

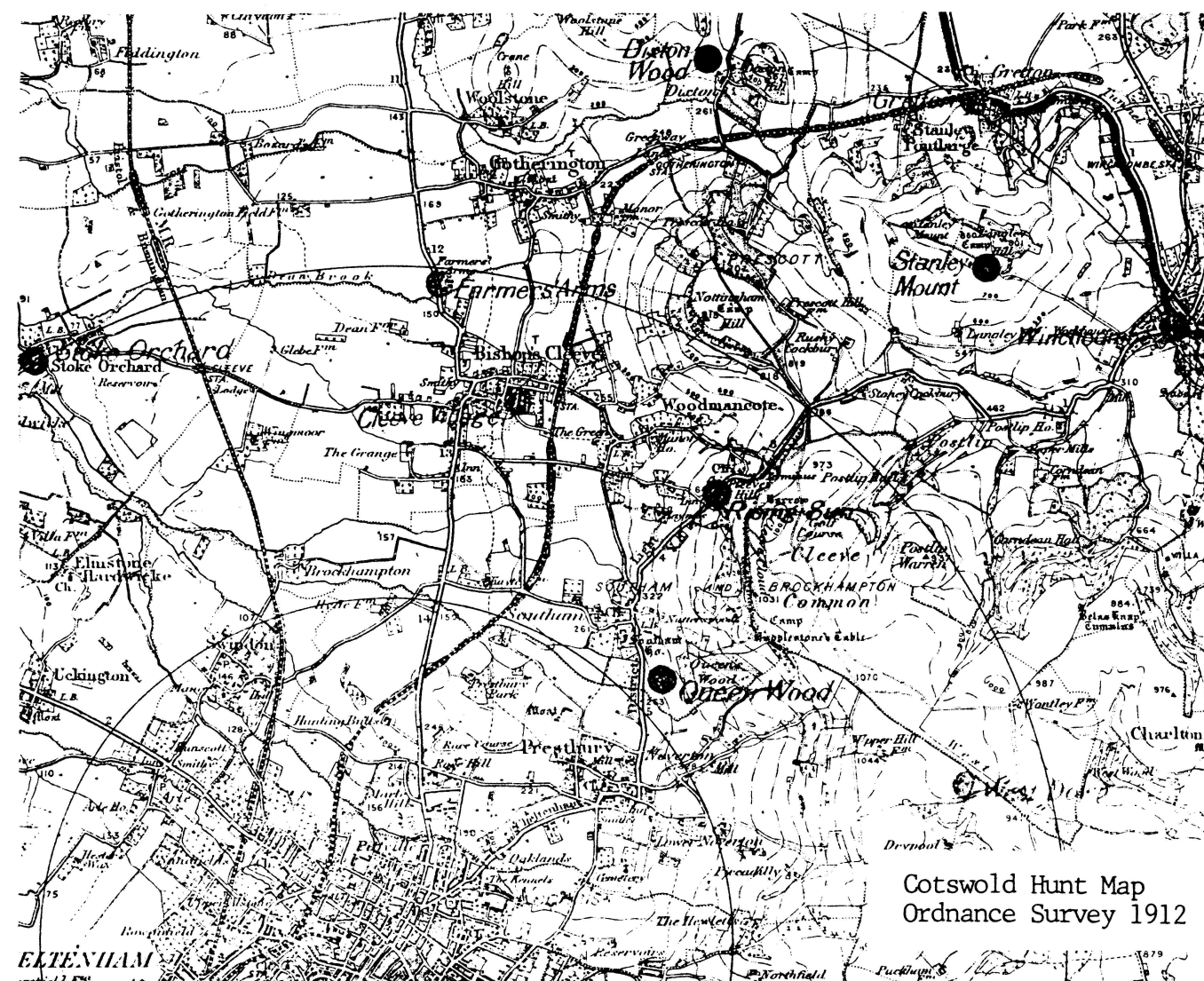
To the writer, a standard map in the condition in which it left the printer is, in a sense, incomplete. A map that is composed or used for a particular purpose, or is modified for it to any degree, takes on its own character, and stands out from the crowd. This "fulfilled" map acquires its special character in one of two ways. It can be put together or altered by its publisher or his agent at the behest of a customer, or by the customer's own printer; or it can be a standard map that is distinctively marked-up by the customer in some way after purchase. In the first category come the OS conference maps surveyed in Sheetlines No. 18, and the other kinds of tailor-made map mentioned there. One of them, OS military maps, is the subject of a separate study, for it is a huge topic.

Among the rest is the OS-based hunt map. In 1903 the Survey produced a map of the area of the Cotswold Hunt. It was a composite sheet, like a district map, consisting of parts of sheets 216, 217, 234 and 235 of the New Series, first revision, One Inch map; resembling district maps, too, in having sienna-coloured roads. The hunt boundary and the locations of the meets within it were shown in green, and concentric circles were printed at two-mile intervals from Cheltenham for distance-judging purposes. The map was reprinted in a run of 400 copies in 1904, when the price was 1s folded in OS covers. A map based on the second revision (Third Edition), with the same sheetlines, was published in 1912 with the hunt boundary and meets in red, but otherwise identical. Unlike the earlier map, it bore the legend "Printed specially for Cotswold Hunt".

The writer has not come across any other hunt maps produced by the OS; but there are instances of OS maps made up specially by OS agents or other map publishers, to the order of a hunt, with hunt information hand-coloured, rather than printed as it was on the OS maps. For example, for the Warwickshire Hunt Sifton Praed put together a map from Popular Edition One Inch sheets mounted back-to-back, with the hunt area outlined in red. More elaborate was Verderer's map of the Beaufort Hunt, a composite of One Inch Popular Edition Outline sheets printed and published by W. Bennett of Bristol. ("Verderer" was the pen name of Miss Phillips, the hunt secretary and designer of the map.) The hunt boundary and meets were again in red; and this time a table of meets was printed on the map, with their distances from the main towns in the hunt area. A map ordered for a different sporting purpose was the composite OS Six Inch sheet of the Cuillin Hills of Skye, produced in 1907 by Edward Stanford for the Scottish Mountaineering Club. Routes were added by hand in red.

Educational maps were numerous. In 1931 a version of the Popular Edition sheet 112 (Marlborough) with added hachures was brought out by the Ordnance Survey for the Geography Department of Marlborough College, in a 3000 run (see Sheetlines no. 9). OS "specials" for teaching purposes also included extracts of maps used in examination papers. They were published in considerable numbers, as might be

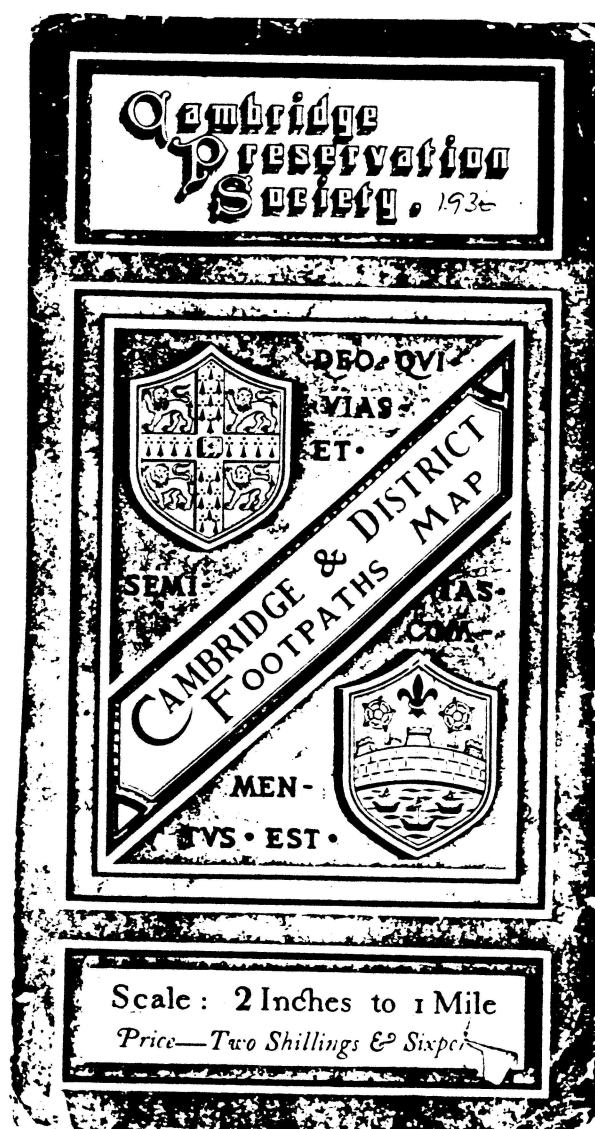
expected: for instance, 12500 for the Half Inch extract illustrating a question in an Oxford School Certificate Geography paper in 1938.



OS agents and retailers who wanted to tailor maps to their local markets usually satisfied themselves by amending the covers along, by means of a stick-on label over the original title altering it from (say) Cheltenham to Gloucester if the trade there justified it. Southampton provided labels in OS lettering style, but Barnicott & Pearce of Taunton went much further. For them, the OS provided a composite map consisting of sheets 120 and 129 of the Popular Edition, priced at 5s on cloth, in a cover with a design shared with other OS "specials" such as Marlborough.

Rural preservation societies produced OS-based maps of the footpaths in their districts. In 1901 and 1903 respectively, the Wirral Footpaths and Open Spaces Preservation Society published two composite sheets covering the Central and North Wirral, reduced from the Six Inch map to a scale of two inches to the mile. Public footpaths were added in red, and public open spaces in green. The maps retained all the detail from the Six Inch originals, including field boundaries, but where it was dense, it was hard to read. They were produced for the Society by George Philip. The Oxford and District Footpaths, Bridle Paths and Commons Preservation Society map was also a "straight" reduction from the Six Inch scale to two inches, and carried the same penalty of eyestrain. Public footpaths were in red, green lanes and public open spaces in green, water in blue, and roads in yellow. First published in 1933 in a run of 2000, this quite common map was

reprinted in 1936 (1000) and in 1945 (2000). Its cover depicted an idealised Oxford skyline, drawn in the style of the OS artist E.J. Hoy.



In 1936 the Cambridge Preservation Society published their Cambridge and District Footpaths Map, on the same scale of two inches to the mile. It was better-looking and more elaborate, and boasted a truly handsome grey cover, but was oddly conceived. It was an enlargement of adjoining Popular Edition One Inch sheets, with updating detail and a little information from the Six Inch OS map, mainly field boundaries. It is strange that in a footpath map, on which field boundaries impinging on paths are such useful landmarks, so many of these should be omitted. The colouring and conventional signs were simplified from the One Inch map, which is surprising in an enlarged map.

A national organisation, the Commons and Footpaths Preservation Society, was organised into local chapters, and at least one of these - the Kent and Surrey Committee - issued standard Six Inch quarter sheets in the Society's labelled covers. They were supplied to members, who were expected to mark them up in great detail and return them as footpath reports. Stiles, footbridges, signposts, gates and obstacles were to get key letters, public paths were to be marked in red, and public open spaces in green. The maps the writer has seen, which are 100-copy reprints of two OS sheets dated 1898 and 1902, have had water coloured in blue as well.

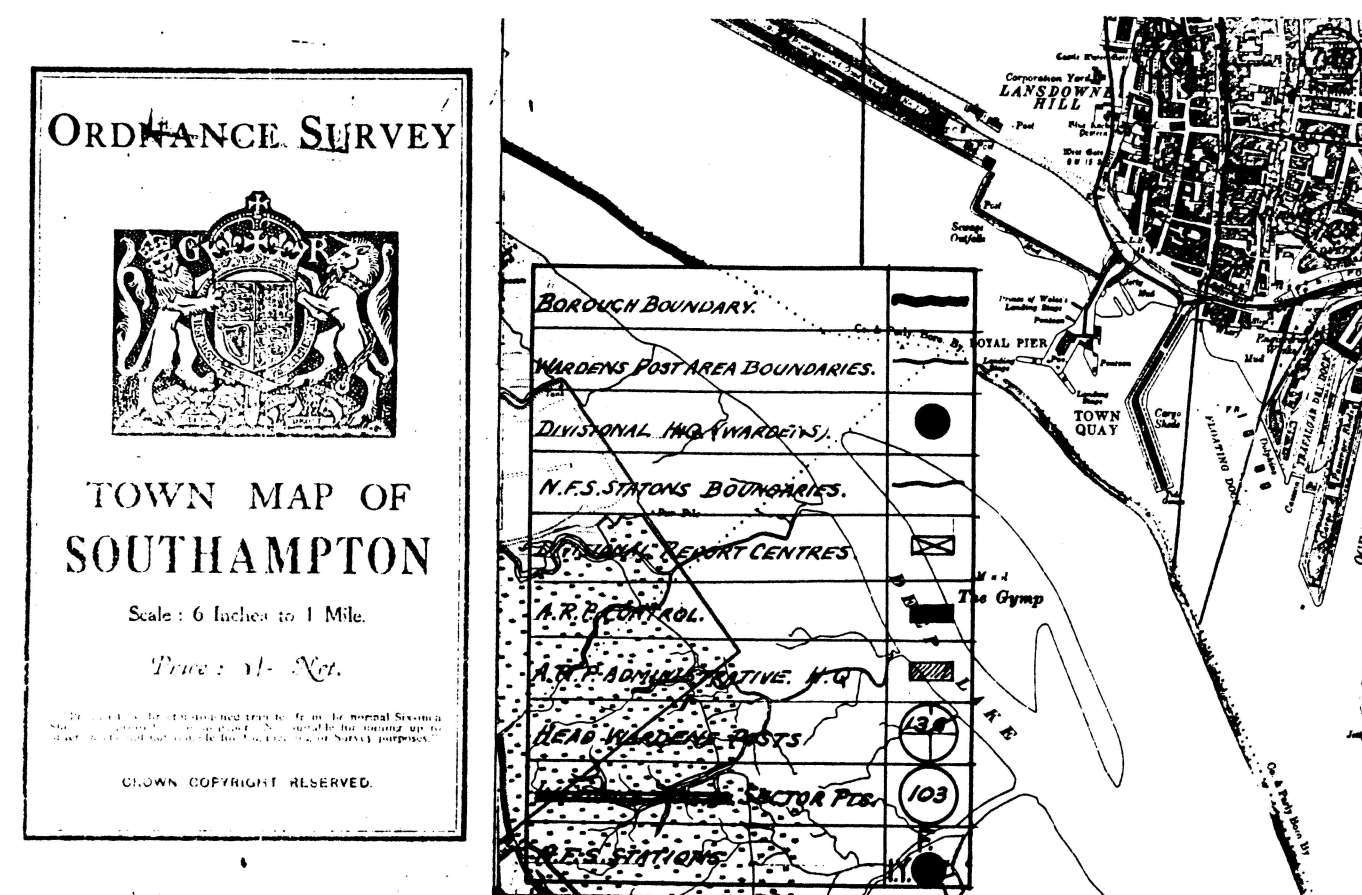
These maps bring us to the second category of altered map - the "home-made" variety - but before leaving those professionally produced, a sub-category of the latter should be noticed. All those so far mentioned were printed in runs of identical copies; but there were maps that may have been "one-off", a single copy being produced for the customer. A map in this class was prepared by Edward Stanford in 1905 for the West

Dean estate in West Sussex. It was a big (37½ in. x 48 in) composite of several Six Inch sheets, elaborately hand coloured in no fewer than 25 combinations, one for each property on the estate. The slipcase carried a printed label.

The "do it yourself" modification, or rather annotation, of a standard map should possess at least two out of three qualities - it should be old, interesting, or tidy. A map does not become interesting just because it has been marked-up. A century-old sheet inscribed meticulously in faded green ink with the route of a tour by penny-farthing bicycle, with dated marginal notes on the trip, is a collectors' piece in the 1980s. A 1:50,000 sheet vandalised with ballpoint, mud and spilt coffee during an obscure provincial motor rally during the 1970s is not. True, the definition is subjective; but only up to a point.

The Commons and Footpaths Preservation Society maps surely qualify; and there are others still more individual. At some time in the late 1940s or 1950s, a private pilot, Donald Carnegie, flew with a set of Quarter Inch Second War Revision Air maps, reprinted in 1944 and stamped "Obsolete". Some sheets were

marked-up with Carnegie's navigational notes. Some were in Stanford covers, and others were specially bound for Carnegie. All carried the identification letters of his aircraft, Miles Messenger G-AGPX, which is known to have flown between 1945 and 1962.



Such maps are legion. Part of their attraction is that collecting them is so open-ended. Finding them all can be safely described as impossible; and anyway, one would never know when that state had been reached. There is no way of knowing what will turn up next. Furthermore, these marked-up standard maps may each be unique, which adds to their fascination. A few more instances prove the point. A 1935 Six Inch Town Map of much bombed Southampton, in the 1941 reprint of 1000 copies, has the town's ARP areas, stations and posts added in red and green. A One Inch Fifth Edition sheet was marked up with a series of plots as a counter-intelligence agent tried - unsuccessfully - to pinpoint a spy making radio transmissions as he moved about Hertfordshire. A copy of sheet 75 of the One Inch Third Edition Large Sheet series, in A. W. Gamage covers, had all its parishes beautifully hand-coloured, for reasons unknown. Such a task needed careful planning, for no two adjoining parishes could be the same colour. Do readers have any "mystery" maps of their own?



## RECENT MEETING

### The First Land Use Survey and The National Atlas Project

Twenty two members attended a study meeting held in the Palestine Exploration Fund's rooms in London on 12 March. They were welcomed on behalf of the P.E.F. by Yo Hodson. She mentioned its early links with Ordnance Survey (see Hart 1965) and pointed out that Sir Charles Close had been its Chairman from 1930 to 1945.

Dr E. Christie Willatts OBE, Organizing Secretary of the First Land Use Survey, from 1931 until its completion, described how the use and misuse of the land of Britain was mapped by volunteers (see *Sheetlines* 19/12) on some 22,000 six inch sheets and subsequently published on 234 one inch sheets and in 92 separate county reports. This was achieved despite its very slender funding in peace and more than its share of the hazards of war. Christie's talk was supplemented by some lively anecdotes from Mrs E. "Bickie" Wilson who started her distinguished cartographic career with the LUS in 1934. A fuller account is promised for our next issue.

Professor Eila M.J. Campbell traced the origins of the National Atlas Project to a series of thematic maps of England & Wales prepared under the direction of Professor Eva G.R. Taylor to support the Royal Geographical Society's submission to the Barlow Commission on the location of industry (see Taylor et al 1938). These inspired an elaborate (but unrealistic?) scheme for the production of four volumes, to cover both Britain and Ireland, which would have been submitted to the British Association in 1939 had war not intervened. War, particularly the "Blitz", focussed attention on the need for postwar planning, which was to draw heavily on the experience of those who had worked with the LUS (including both Christie Willatts and Bickie Wilson). The most notable cartographic achievement of this collaboration was the series of "Ten Mile", actually 1:625,000, thematic maps initiated at the suggestion of the Advisory Maps Committee of the Ministry of Works and Planning in 1941 and subsequently published by OS. (An unanswered question was why, and when OS decided to change scale from 1:633600 to 1:625000 when the Davidson Committee had clearly advised against this.) The first ten of these two-sheet maps were published by 1944 and they came to constitute a "de facto" National Atlas, supplemented in some cases, by separate explanatory texts. They provided an invaluable research tool but the large sheet size made them rather unhandy for the chair-bound "mandarin" for whom the smaller format, loose-leaf, desk atlas was subsequently created. Mrs Dorothy Castle, who worked on the original "Ten Mile" sheets discussed some of the difficulties experienced in assembling data, for example to ensure consistent accuracy in the depiction of statutory areas. With few aids available, the cartographers had to rely on developing a keen visual judgement.

There was a very lively discussion during which it was noted that there was still considerable research interest in the original field records of both First and Second Land Use Surveys. It was important that these be conserved and their locations adequately recorded.

## References

Hart, I.D. Surveys of Palestine, in World of the Bible, Centenary Exhibition of the Palestine Exploration Fund in Co-operation with the British School of Archaeology in Jerusalem, pp 13 - 16, London, Victoria and Albert Museum 1965.

Taylor, E.G.R. et al Discussion on The Geographical Distribution of Industry, Geographical Journal 92 (1938) 22 - 39.

## PUBLICATIONS

The Ordnance Survey One-Inch Map of England and Wales Third Edition (Large Sheet Series). A Map Study Monograph by Guy Messenger.  
Charles Close Society 1988 Price £9.95 ISBN 1 870598 03 2

This full-scale bibliographical study is the fruit of its author's dedicated and painstaking work over a period of six years. It is also the first comprehensive monograph on any map series to be published by the CCS. For each sheet in the series and for each of the unnumbered District Maps produced in parallel with it we are given the area it covers, in diagrammatic form and as defined by geographical and National Grid co-ordinates, a listing of all known states as well as general notes on its history. Changes in the map specification and in cover designs are also fully explored and illustrated. Copies may be bought direct from Mr. Messenger, 5 Wheatley Avenue, Uppingham, Rutland, Leics LE15 9TU, for the retail price of £9.95 plus 75 pence postage.

Landscapes In Paper: Cartographic Sources For Irish Archaeology  
by Terence J.C. Reeves Smith, in British Archaeological Reports, British Series, No. 116 (1983) pp 119-177 (Price £17) ISBN 0 86054 216 5

This succinct review of Irish mapping, past and present, which appeared as a chapter in "Landscape Archaeology in Ireland" does not seem to have previously caught the attention of *Sheetlines* nor, surprisingly, the eagle eye of Imago Mundi's bibliographer. In addition to reviewing the Irish work of all three Ordnance Surveys it summarises the progress of geological, soil and land use mapping. It contains several useful index maps as well as an extensive bibliography. (Your editor was lead to this source by the reference to it in "World Mapping Today" reviewed elsewhere in this issue).

## LETTERS TO THE EDITOR

Dear Mr O'Brien

I was concerned to read in the December issue of *Sheetlines*, page 21, that 'files in PRO OS 1/1 to 19 have been sub-divided and renumbered...'. This is not the case. Each reference OS 1/1 to 19 relates to a box of files: a box may contain between two and seven individual files. What has happened is that each file has been given a sub-number, so that the file rather than the box is the unit of production in the Search Rooms. Readers attempting to requisition, for example, OS 1/17 will be informed at the computer terminal that a sub-number is now required. The sub-number is readily obtainable from the OS 1 class list. No individual files have been sub-divided.

A number of references in W.A. Seymour (ed), A History of the Ordnance Survey (Folkestone, 1980) are to Ordnance Survey Central Registry and other departmental designations. See, for example, note 11 to chapter 18, notes 1 and 12 to chapter 19, and others. These have never been acceptable PRO references and should not have been cited in this manner. The Ordnance Survey's own file references are noted as part of the descriptions in the OS 1 class list, and readers should consult this list if a PRO reference obtained from Seymour does not constitute an acceptable requisition.

Readers of *Sheetlines* may be interested to know that the Ordnance Survey 19th-century boundary archive is in the process of being transferred in its entirety to the PRO. It is likely to be several years before the transfer is complete, but a number of classes of records are already here.

Public Records Office, Kew.  
27 January 1988

Yours sincerely  
Miss G L Beech  
Assistant Keeper  
Map Department

Dear Ian,

It's not often that I am prompted to write "dear Ian" letters but I really must take issue with Ian Mumford's view expressed in his letter (Sheetlines, No 20).

One of the main reasons I joined the CCS was a desire to plug a very large gap in my cartographic knowledge, namely to learn more of the history of our national mapping agency and its products. My continuing membership is rewarded with every edition of Sheetlines. I value the "lengthy pieces". They may well contain half truths and guesses, but such will never be corrected if not publicly aired. I am not amongst those equipped to correct them but IM does both himself and the Society a disservice if he feels that such corrections would be regarded as "nit-picking". His personal knowledge and informed comment, together with that of many others associated with CCS, can serve only to put the historical record right. Readers and authors alike would benefit from that.

I do agree that the word "Newsletter" is a misnomer. IM appears to argue to retain the title and constrain the content accordingly. I would argue to retain, even expand, the content and alter the descriptive part of the title. Am I alone?

Milverton, Somerset  
19 February 1988

Yours sincerely,  
Barbara Bond

Dear Ian,

As the founder and first editor of Sheetlines, I should like to add a few comments to those made on p.13 of issue no. 20. Seven years ago, it was considered essential not to burden the Society with the financial responsibility which would inevitably be incurred in the production of a more ambitious publication. Substantial articles and papers were to be submitted, as Ian Mumford remarked, to the several scholarly journals now available, from which offprints could be acquired for circulation among CCS members. One of the most important aims was to achieve a balance in content between the 'heavy-going' and meaty articles and the more relaxed, even light-hearted approach. I received, in those first two years, many letters which strongly indicated that for every one of us for whom the print code on a map was a magnetic eye-catcher, there was another, who found such a philatelic approach rather tedious, and incredibly boring.

I agree with Ian that news, reviews, and notes and queries should form the heart of the matter. There is enormous scope for enlarging the reviews section; it is an anachronism that one must turn to other publications for reviews of OS material which should first appear in Sheetlines. This is easily said, of course. It is quite another matter to persuade people to put pen to paper; but here is an area where many more members may be prepared to contribute than would contemplate writing a research-based article. I also believe that there should be an increased emphasis on the modern OS. We, who spend so much time trying to puzzle out why and when specification changes, for example, happened, would surely have welcomed a running contemporary commentary such as this small, but invaluable, Newsletter, is well-placed to provide.

Let none of these comments be construed as criticism; the editor's task is one few would be willing to take on. Above all, he needs feed-back from the readers, who should make the effort to let their views be known to him. Members should not keep to themselves exciting discoveries, in the mistaken impression that what is new to them is probably old-hat to the rest of us: one never gets bored looking at OS maps, no matter how many times one sees the same sheet.

This brings me to Rob Wheeler's letter (p.13, issue no. 20). I must, by now, have looked at about 2000 copies of the sheets of the Popular Edition One-inch

maps of England and Wales, and assumed that it was common knowledge that I was making a comprehensive study (now nearing completion) of this series and its relations. Far from being neglected, aspects such as road classification and revision policy, together with many peripheral topics, such as methods of folding (29 varieties so far!), are receiving exhaustive attention. Rob Wheeler's letter highlights the need to know who is doing what, and perhaps now is the appropriate time to revive the idea, first suggested when this Society was formed, of compiling a directory of members' OS research/interests. This would provide useful information for the Editor when searching for replies to queries and on which to base ideas for meetings and suggestions for research. Such suggestions of potential subjects for investigation have been mooted, on an ad hoc basis, in the pages of this Newsletter. They were all made at least eight years ago and it is time a listing was drawn up to include projects on the large-scales which Alan Godfrey so rightly promoted in the past.

Much more remains to be discussed, but in the meantime, I congratulate you, Ian, on two excellent numbers of Sheetlines; and to Richard Dean, I express my admiration for his having maintained the pace for 12 issues.

Tewin, 21 March 1988

Yours sincerely,  
Yo Hodson

#### REVIEWS

R.B. Parry and C.R. Perkins. World Mapping Today  
London: Butterworth, 1987. ISBN 0 - 408 - 02850 - 5 Price £125.00.

This work comprises two main sections. Seven introductory chapters first review the state of world mapping, considering its acquisition and evaluation, and then proceed to survey briefly the contribution of remote sensing, the present state of digital mapping and anticipated future developments. The remaining four fifths of the book is devoted to a continent by continent, ocean by ocean, country by country review of current topographic and thematic mapping of the world, so far as such information can be tracked down. For each country, or territory, considered there is a concise review, which identifies the main mapping organizations, which is followed by details of significant map series. For many of the latter sheet indexes, of commendable clarity, have been drawn for this book by Portsmouth Polytechnic's cartography department.

Current mapping activities of the Ordnance Surveys of Great Britain, Northern Ireland and the Republic of Ireland are described in their respective country sections while references to the former's Overseas Surveys Directorate (and its predecessor DOS) are to be found in many other country reviews. For OSGB graphic indexes are provided for Landranger and Pathfinder series although the latter unfortunately lacks the new, arbitrary, sheet numbers. Some minor errors are probably inevitable in such an ambitious work, for example incorrect dating of the decision to adopt the present British National Grid. More seriously we read "The Channel Islands are not mapped by the Ordnance Survey"(!), ignoring current official maps of Jersey prepared, or revised by OSGB. Furthermore, there is no reference to the current topographic cover of Guernsey, Alderney, Sark and Herm provided by Military Survey's (readily available) Series M.824 (See also Sheetlines 20/23!). This reviewer felt that with their unique status the Channel Islands had every bit as good a case for separate treatment as, say, St Pierre et Miquelon or Tristan da Cunha.

Librarians considering purchase will ask how this compendium compares with K.L. Winch International Maps and Atlases in Print or GeoCenter's GeoKatalog. It clearly supersedes Winch but the authors concede that they have probably



mentioned fewer maps than GeoKatalog. They have however been more discriminating and have attempted an overall appreciation of each country's mapping situation. This takes account of series which are known to exist though not currently marketed but which can sometimes be tracked down by a diligent researcher, or aid worker, in the country concerned. The authors are to be congratulated on their monumental achievement. It is regrettable that its monumental price is likely to put it out of reach of all but a few institutional purchasers.

Ordnance Survey historical guides, Kent. By Felix Hull, London, Southampton: George Philip and Ordnance Survey, 1988. pp 136, 47 maps plates, gazetteer (no index). 25.5 cm. Hdbk. ISBN 0 540 01134 7. Price £9.95

There is no doubt that many OS joint publications set high standards and are a pleasure to look at, and to read. This is not one of them. It is astonishing that OS is prepared to put its name to this poor, uninformed and unprofessionally produced work, which sets out to capture Kent's nineteenth-century past in a hotch potch of photographs, text, and maps.

The bulk of the book is contained in the 'Map Section'. Here, the Old Series one inch map of Kent has been divided into 47 sections, each occupying a full page, and garnished with a decorative border which vaguely resembles the original 'piano-key' design. No attempt has been made to give the source of the copies used, and equally, there is no bibliographical statement of when the copies were printed - such information is clearly thought not relevant to a historical guide. A spurious comment in the introduction tells us that the issues used are from 'the later editions' of the 1801 map, 'published at different dates between 1814 and 1844'. Most of them appear to be taken from the 'Index to Tithe Survey' which was produced in the 1870s on an 1850s base.

The standard of reproduction is disgraceful. It would be no excuse to say that the originals were poor, because it would not have been difficult to have found better copies. If the originals used are those preserved at OS, they constitute bad publicity for the advertisement on p.131 that OS can supply 'monochrome copies of a selection of early OS maps held in its Record Map Library'. The abysmal bibliography lists only ten sources, not one of which is cartographic - surely the Harry Margary facsimile volume for Kent should rate a mention - is Felix Hull, who was Kent County Archivist when it was published, really ignorant of it? Or is its exclusion a tacit acknowledgement of superior competition? The five extracts from the coloured 1:50,000 sheets (reduced to the one-inch scale to facilitate comparison) fail to compensate for the inadequacies of the monochrome reproductions. There is not even a diagram showing the relationship between the 47 sections and the original sheet-lines.

Finally, the gazetteer refers, not to the facsimile map-page, but to the Landranger Sheet and National Grid reference. There is a diagram showing the incidence of 1:50,000 sheets and facsimile pages, but this is singularly unhelpful as far as the gazetteer is concerned. This seems to have been deliberate policy to promote the sales of the modern mapping, for readers are advised that place names can be pinpointed 'by purchasing the relevant Landranger map'.

The historical photographs are perhaps the only saving grace of this book; the text does not strike one as original, there are better guides available. This publication is best forgotten, a view endorsed by the fact that the owner of this copy (not the reviewer) acquired it at half price on a second-hand bookstall only a couple of weeks after it was published.

Yolande Hodson

## NOTES AND QUERIES

### The earliest OS 1:1250 mapping (Sheetlines 19)

The March 1863 OS Catalogue of England & Wales states that the first 25 Inch Parish Plans of Essex were Shoeburyness in 4 sheets with an additional Area Sheet, and Little Ilford in 3 sheets and an Area Book. Shoeburyness does not appear in the 1877 Catalogue, and is not listed in the BM 1964 printed map catalogue as are other parish plans, including Little Ilford (1862). This caused me to wonder about the scale of the map in the PRO, since the dimensions given for W078-502 (PRO MR 1315) are what one might expect from four partially-filled sheets of 25 Inch joined up. However, a crude scaling test confirms the scale of 1:1250 which is printed on the map.

In his Reports around 1860 Henry James extolled the merits of the military surveys he was carrying out in several areas which he envisaged as important contributions to the national large scale plans whenever authorised. The small acreage of the Shoeburyness survey probably did not justify specific mention in the Annual Reports even though it was made up in the form of a Parish Plan. More likely, the entry in the sales catalogue was an error both of scale and security. In 1861 the Topo Dept reported printing a one sheet plan of War Dept property at Shoeburyness scale 1:2400, in the Barrack Plan series. In an old War Office Map Library catalogue a plan of that title was stated to have a scale 1:2520. Another entry in the same catalogue records an Ordnance Plan of Part of Shoeburyness in 4 sheets, scale 1:1200, pub. 1859. Both these items were disposed of in 1928.

The map in the PRO describes itself as being "Surveyed and Lithographed by Capt A de C Scott, RE at the Ordnance Map Office, Southampton" and published by James in 1859. By 1859 Scott was reported as being in charge of the drawing and printing of plans by lithography at Southampton. As a Lieutenant he had been noted as working in Scotland. There is no mention of him carrying out field surveys in Essex.

The 1:1250 enlargements from the 25 Inch were first put on sale by the OS in October 1911, and their receipt as issued is recorded in a set of Monthly Supplements to the OS Catalogue in the BLML. These enlargements are stated in the Supplements as being 'specially prepared for the Land Valuation Department of the Inland Revenue'. For some reason there is no entry for them in the BLML catalogue (now being rectified), although there is a very substantial number of bound volumes of them arranged by County with spine titles including '50 Inch' and 'Land Valuation'. Despite the lack of catalogue entry they appear to have been produced on request some years ago.

The PRO is currently awaiting the arrival of the departmental work set of these plans on transfer from the Inland Revenue Dept.

Ian Mumford  
7 December 1987

### A Half Way House?

What is the story behind an OS One Inch New Series, first revision, composite sheet of South East Kent, published in 1897, in black outline, but with the marginal squaring system characteristic of the standard coloured version that began to appear the same year, though without its magnetic deviation diagram? The sheetlines are unlike those of any standard combined coloured sheets, in that they embrace the whole of sheets 289, 290, 305 and 306. The nearest combined coloured sheet took in the whole of 306 (not difficult, since almost all was sea), but only parts of the other three. Was this hybrid experimental, and were there any others?

Tim Nicolson

### War Game Maps in The British Library

While showing a visitor around the Map Library's stacks my eyes were attracted to a large volume that had on the spine "War Game Maps 6" scale". At the base of the spine it said "Southampton 1900-01". OS I thought, quickly making a note of the pressmark for later viewing! Calling up the volume a few days later, the maps turned out to be a set of sixteen Ordnance Survey six inch sheets (plus an index sheet) of the Reading, Chipping Wycombe (High Wycombe) area but quite unlike the regular six inch County Series maps. The index sheet, an extract from the one inch series is headed "Index to war game maps". It bears the statement "Printed at the Ordnance Survey Office, Southampton, 1901", "Price 1/-". It shows the sheet lines of the sixteen six inch maps but is equally notable for the contours which are printed in red at 100 ft. intervals. Contour heights are given in the margin where the contours touch the neat line.

The six inch maps are most remarkable for the colouring and contours. All 1st and 2nd class roads are shown in sienna with 3rd class roads in outline. Woods are coloured in both full green and stipple-green. According to the key the former represents "woody" trees and the latter "fir" trees. Both also have black tree symbols. Areas with both mixed "woody" and "fir" trees as shown by the black tree symbols are coloured the same stippled green as the "fir" trees. The contours are printed in red and are at 10 ft. intervals with a thicker contour at every 100 ft. Each map bears the following note: "Note. This map is for tactical purposes and the intermediate contours are only approximate 10 ft intervals". Intermediate contours are readily distinguished from surveyed contours by their smoothness. Each sheet has "Printed at the Ordnance Survey Office, Southampton" followed by the date.

Altogether, they are a colourful and particularly interesting set of maps and well worth a glance during your next visit to the Map Library. (The catalogue entry is under 'Reading-environs.' The pressmark is BL Maps 145.e.5.)

The sheet numbers of the sixteen 6" War Game maps.

Oxon 49 Berks 16	Bucks 45 Oxon 50	Bucks 46	Bucks 47
Oxon 52 Berks 22	Bucks 50 Oxon 53	Bucks 51 Berks 23 Oxon 54	Bucks 52 Berks 24
Oxon 55 Berks 28	Oxon 56 Berks 29	Berks 30 Oxon 57	Bucks 55 Berks 31
Berks 36	Berks 37 Oxon 58	Berks 38	Berks 39

Bob McIntosh

### Roy's Pillar Restored

"Soldier" for 7 March 1988 reported that the OS triangulation pillar at Miltonhead, near Carlisle, Strathclyde, had been re-dedicated to the memory of Major General William Roy. The pillar, standing on the site of his birthplace, had been vandalised. The commemorative plaque was found in a scrapyard and refurbished by 71 (Scottish) Engineer Regiment (V).

### Old Series Ordnance Survey Adjoining Sheet Numbers

The use of changes in the style of the border of Old Series One Inch Sheets to establish approximate printing dates, was demonstrated by PDA Harvey and Harry Thorpe in The Printed Maps of Warwickshire (1959) where they state that the numbers of adjoining full sheets appear within the border from about 1840. Richard Oliver now reports finding such numbers on a set of the Old Series in Public Record Office class IR 105 which appears to include the sheets which the Board of Ordnance ordered on 12 October 1836 to be presented to the Tithe Commissioners. All legible watermarks on these sheets are dated 1836 while all bear prices which were not applicable after 1 July 1837. Richard suggests, therefore, that the absence or presence of such adjoining sheet numbers can be used as an indicator of publication before, or after, 1 January 1837.

### Fictitious Maps from Maybush

Richard Porter points out that the Ordnance Survey's "Treasure Map", mentioned in Sheetlines 19 and 20, was not its only recent fictitious product. The Overseas Surveys Directorate recently issued the "Nagolnai" sheet of the 1:250,000 map of "Hosoland" (OSD 2952 Edition 1 1987) to illustrate various styles in which development mapping may be produced. The topography of Hosoland suggests a Himalayan location but toponymists with access to an OS staff directory may favour somewhere antipodal to Southampton.

### PUZZLE CORNER

The Ellis Martin cover design mentioned in Sheetlines No 20 was that prepared for the Tabula Imperii Romani (Map of the Roman Empire) which portrays a statue of an emperor with right hand raised. The first sheet to use this cover was M.32 Mogotiacum published in Frankfurt am Main in 1940. Subsequently it appeared with Sheets H I.33 Lepcis Magna and H I.34 Cyrene (both published London 1954) G.36 Coptos (Edition 2 London 1957), L.33 Tergeste (Rome 1961), L.32 Mediolanum (Rome 1966), L.34 Aquinum - Sarmizetvsa - Sirmium (Budapest 1968) and L.35 Romula - Durostorum - Tomis (Bucarest 1969). The Royal Geographical Society's Map Room also holds a dummy cover for sheet K.33 Roma enclosing four pages of an incomplete gazetteer ("Abellinum" to "Buxus") for that sheet. This was received by the Map Room on 25 September 1935, the day following that on which OGS Crawford proposed to the 1935 T.I.R. Congress (held at RGS) that all future sheets should be accompanied by an explanatory booklet incorporating a gazetteer. The dummy displays no evidence of its origins apart from the EM initials in the cover design but must have been prepared to support Crawford's proposal.

### O.S. PROCEDURE MANUALS HELD AT BRITISH LIBRARY

The following photocopies are among those recently added to the Map Library's collections of O.S. internal procedure manuals:

Instructions to One Inch Field Revisers/Colonel Duncan A. Johnson R.E. 1901.  
Contains two sections:

- I. Instructions for the 2nd Revision of the 1-Inch Map in the Field.
- II. Special Instructions for Ireland.  
BL Maps 207.d.14. and Maps 207.b.34.



Instructions to Draftsmen & Plan Examiners /Col.S.C.N. Grant C.M.G. 1903.

Contains the "Instructions for Drawing a MS. Plan on a Blue Impression on 1/2500 Scale" and "Notes for Plan Examiners". The latter lays down the responsibilities of the Plan Examiner and gives detailed guidance notes on what and how features should be inserted on 1:2500 plan. BL Maps 207.d.11. and Maps 207.b.34.

Instructions for Levellers and Contourers. 1926

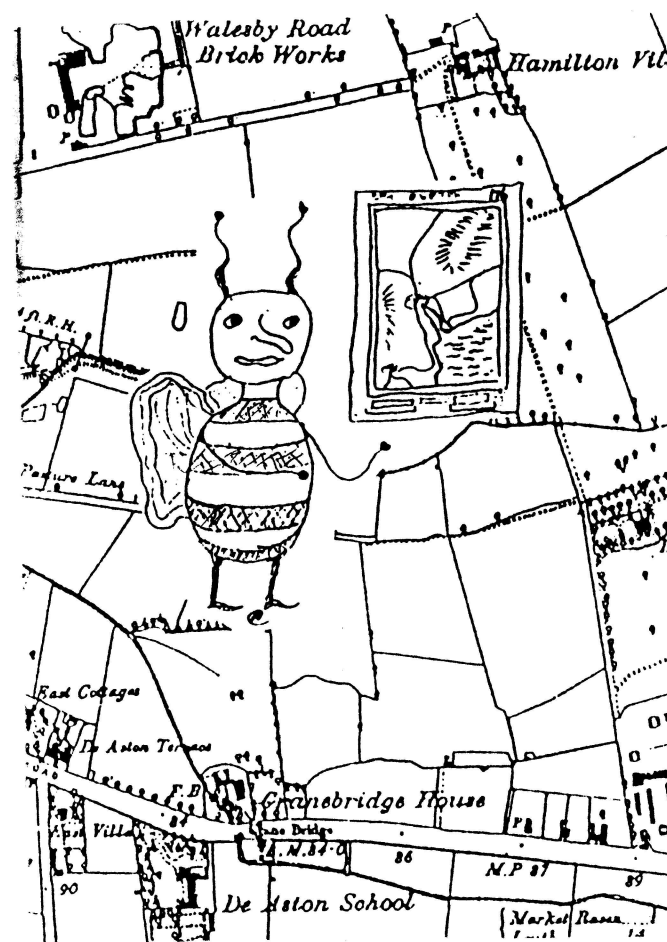
Includes instructions on tertiary levelling, instruments, taking and recording observations, instrument and stave testing together with instructions for Staff Holders, Secondary Levellers and Contourers. BL Maps 207.d.9. and Maps 207.b.32.

Methods and Processes used by the Ordnance Survey for Map Reproduction by Photo-lithography. 1928 OSO-500-1-10-28.

Covers lithography, vandyke and helio processes and lithographic printing. BL Maps 207.d.13. and Maps 207.b.36.

Notes on County, Borough, Parish and other boundaries. Great Britain 4th ed. 1934.

Marked "For official use only". In two parts: Part I, is a concise outline of the history of administrative areas whose boundaries are delineated on Ordnance Maps. Part II, contains details of the methods employed by the OS in ascertaining and delineating these boundaries. Inserted in the back is OS Leaflet No. 20/40. High and Low Water Marks as shown on Ordnance Survey Plans. BL Maps 207.d.10. and Maps 207.b.33.



(Continued from inside front cover)

Sheetlines no. 21 (April 1988)		
Editorial	(21,1)	55
Tim Nicholson: Some more special-purpose maps	(21,2)	56
Recent meeting: The First Land Use Survey and the National Atlas project	(21,16)	60
Reviews: Guy Messenger: <i>The Third Edition (Large Sheet Series)</i>	(21,17)	61
Terence J.C. Reeves-Smith: <i>Landscapes in Paper</i>	(21,17)	61
Letters to the Editor	(21,17)	61
Reviews: Parry and Perkins, <i>World Mapping Today</i>	(21,19)	63
Ordnance Survey <i>hysterical guides, Kent</i>	(21,20)	64
Notes and queries, (including the earliest OS 1:1250 mapping; War Game maps in the British Library)	(21,21)	65
Puzzle corner	(21,23)	67



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