



SHEETLINES

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THE CHARLES CLOSE SOCIETY

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THE QUARTER-INCH MAP - By C.Board

(Based on a talk at the Society's Edinburgh meeting on 26 November 1983)

It may be thought that the Quarter-Inch Map has received more than enough attention of late and that other scales and less fashionable editions deserve attention. Those of us who have studied the Quarter-Inch are to some extent the victims of our success in our early efforts to understand what was happening. Brian Garvan last year concentrated on the origins and early development of the 3rd edition between 1919 and 1925/26 relying mainly on the surviving maps and O.S. Publication Reports. For this group of maps full O.S. records in the Public Record Office start only in 1932 but cover the period of transition from the 3rd to the 4th edition and even foreshadow the 5th. As a consequence the story of the "A series" is known only from surviving maps, publication reports and comments made by contemporaries who were involved in producing the series.

It would appear that once the Scottish sheets had been published in 1923 that attention was turned to the production of special district sheets which ultimately became the A series. South Central appeared in 1924, North Central in 1926 and North Wales and Manchester in 1927. Despite the labels, 3rd or New Series, A series and 4th edition given to each apparently different group of maps, there is in fact more continuity and less change than might at first be supposed. Indeed there is a case for considering the 4th edition to be merely a revised edition of the 3rd's A series. The real break came only in the late 1950's with the appearance of the redesigned prototype of the Fifth Series in 1957. I submit that it is more helpful and more correct to consider everything between 1919 and 1957 as one continually developing series. Some support for this comes from the change in nomenclature adopted in 1955 when edition was redefined to mean "a version of a published map" and series was to mean "a number of sheets having a common design or specification" (Seymour p.295 fn). The term series can thus be applied more appropriately to the whole of the 3rd and 4th editions.

Returning now to the modifications made to the original third edition, Brian Garvan has noted the earlier ones¹. The next crop came in with the District and A sheets, where the lowest layer was changed to a much more yellow green. Sheetlines were modified to extend the coverage of each sheet and reintroduce overlaps. In general the titles of sheets appear in the new Ellis Martin alphabet designed for the 5th edition of the One Inch map. Ministry of Transport road numbers were added and finally town diagrams were tipped into the folded editions from about 1932 onwards. Apart from the earliest of the A series the folded editions adopted a hinged cover with a larger format $4\frac{7}{16}" \times 7\frac{7}{8}"$ incorporating a wider margin around the unchanged Ellis Martin motor cyclist design. Scottish A sheets followed the original sheet layout.

From 1931, it appears that an insert of a glossary of the most common Gaelic words used on O.S. maps was included with folded Scottish sheets. It carries a printing note O.S.O.-10,000-7-31. Sheet 3 also includes a diagram of five main towns in red and black at 2" or $2\frac{3}{8}$ " to the mile. This 2-colour style was employed for only sheet 11 of the English A series, which has two sheets of diagrams inside each cover. All other maps with town diagrams in England and Wales are of a simpler black design showing more detail especially street names at a larger scale.

To date sheets 7A and 12A have not been recorded with these town plans but the existence of plans of towns appearing only on those sheets in the booklet "Routes through Towns" which appeared finally at the beginning of 1935 suggests that copies may exist.

Contrary to what was first thought, and as evidenced by a copy held by the author, the special sheet "South Central" was revised in 1928 and reprinted with minor corrections (paper flat: print code 4000/29 2500/29 500/30 200/32 900/32 1900/34 2000/35). This indeed was a popular sheet but its life may well have been extended by the fire loss of the negative for the new 4th edition sheet 12 of the South East. The destruction in May 1934 of the West Block at Southampton containing some quarter-inch reproduction material could also account indirectly for the exceptionally late reprinting of the original style Sheet 11 that year - sheets 7 and 11 of the 4th Edition were not recorded as being ready to be colour proved until August, with publication of 11 announced for October/December, and the peak summer demand may have necessitated a make-shift re-issue of the old version if no other suitable material had survived.

Thus we can see already that the genesis of the 4th edition is intertwined with the last printings of the 3rd's A series.

In the OS's Annual Report for 1932-33 a new series on Transverse Mercator projection with new sheet lines was announced as in course of preparation. Sheets would cover slightly more ground. Only 11 instead of 12 would be necessary to cover England and Wales, sheet 5 having become redundant "under the new arrangement" (p.12) involving sheets 4, 6 and 8. The comparison is with the original 1919 sheetlines not those of the A series which now look like a dry-run for the 4th edition. An earlier casualty was dropped in 1932: "hardly anyone bought sheet 2"² It was effectively replaced by 2A.

We must go back to July 1932 to see how unsatisfactory the situation had become.³ All the original 3rd edition sheets were on negatives (presumably glass) and "all items of intermediate revision and correction are still embodied on these twelve original negatives". Of the A sheets 2A and 4 were on negatives, the other five (6A, 7A, 8A, 9A, 12A) were on stone on which correct-

tions and revisions were carried out. 1, 2, 3, 10 and 12 of the originals were still published. This implies that 4, 5, 6, 7, 8, 9 and 11 were not. There was also a special RAF series on negatives which also required keeping up to date. To avoid wasteful duplication, it would be necessary either to scrap the A sheets and return to original negatives, or adopt a new standard series and put it onto negatives from which helio plates for printing could be obtained as required. The latter course was approved, involving sheets 1, 2, 2A, 3, 4A, 6A, 7A, 8A, 9A, 10, 11, 12A and a few weeks later it was urged that now that the Quarter-Inch was being put onto new negatives the opportunity should not be lost of accommodating the new (yard) grid with margins widened following the example of the Cotswold Half-Inch map. It is clear that the new sheets would conform to the grid but would follow the former sheetlines as nearly as possible. It would thus appear that the 4th edition was effectively emerging from the A series with only some minor adjustments at the sheet margins. During 1933 and early 1934 there was considerable discussion on the specification of the "new" edition. To the suggestion that contours could be left off because the motorist could not easily follow minor roads which were confused by them the DG replied that it would be safer not to alter the specification to meet the requirements of specialised users. The long format, sometimes called the Michelin fold was also advocated ⁴ because the quarter-inch map being the motorist's was not required for the pocket "but rather for slipping into the cord rack on the roof of a car" and the long fold showed more country at a glance than did the pocket-size format. Other aspects of the specification ⁵ were settled by a conference where the DG gave final decisions on 25 July 1934. These included rendering woodland in green without tree symbols and altering the layers so that the lowest would be light buff rather than green and that one fully layered proof be submitted to DG as soon as possible. Evidently sheets 7, North Wales and 11, England, South were chosen as specimens for the new layer system ⁶. In November the DG went on record pledging that the 4th edition would be complete by June of 1935 ⁷. However in June 1935 the Director General's conference confirmed that work on the 4th edition would be held back to enable work on the One Inch 5th edition to be accelerated, and it was not until July 1936 that it was suggested work on the 4th edition should be pushed ahead now that work on the 5th edition of the One Inch was progressing well. The delay had affected the appearance of the Scottish sheets and it was not until this month that the suggestion to combine sheets 8 and 9 (Orkney and Shetland) in one was made and a model made up from 3rd edition material was submitted ⁸ which survives in the file. The author has discovered no record of Scottish A sheets 8 and 9 of the 3rd edition and wonders whether they were ever produced since demand for them must have been small. A sheets without A suffixes and even E & W 12A do not appear in the monthly publications lists of Ordnance Survey, so that

confirmation will have to come from surviving copies if they exist.

Another interesting sidelight on the compilation of the 4th edition was the DG's request to Divisional Officer, Edinburgh to undertake some road revision in part of Scotland mainly for the Quarter-Inch map. This was of course work for a motor car and that he would probably want to take an NCO with him "if possible one who has experience of or a good eye to small scale road classification". The work was to be completed by Christmas 1933⁹. Apparently the Ministry of Transport's road classification was not now thought adequate because narrow, poor roads in some parts of Scotland were being grouped in the same class as modern by-passes in Southern Britain. Intermediate revision sheets of Scottish 4, 5, 6 and 7 had been passed to Z.P. and Photo (Zincography ?) by October 1933 but these were of course the Scottish A sheets which were then reprinted in revised form. A little later O Maps (J.G. Withycombe) wrote to EO saying that sheets 1, 2, 3, 4, 5, 6 and 7 were required for the Ansell folded map of Scotland. Of these, 50 copies of sheets 1, 2 and 3 had been corrected by hand and that reprint for 4, 5, 6 and 7 had been requisitioned in September¹⁰. Have copies of this Ansell folded Quarter Inch of mainland Scotland and the Hebrides survived?

Having decided on the longer format there remained the selection of a design for the cover. Only sheet 9 necessitated an additional fold because its area extended further North-South than others. Having decided that a sketch of the area depicted was to appear on the front cover this in its turn had implications for the cover design. It had already been acknowledged that the motorcyclist on the 3rd edition cover needed to be brought up to date. In the event of course Ellis Martin's design portrays a motorist and the cover with its dull blue and black was approved by HSW on 22/9/1934 in preference to a bright cobalt blue alternative. Sheet 9, East Anglia's cover was to have blue blocks above the sheetname to lighten the cover, but that would have required a further printing. Otherwise the sky alone would appear in blue on all covers, which meant that only the black detail would vary from sheet to sheet.

In 1939 the use of the Bender fold for the New Popular Edition of the One Inch map raised the question of employing it for the Quarter Inch instead of the long or Michelin fold¹¹. On 13 March the DG was reported as prepared to consider a Bender fold of the Quarter Inch and "possibly a complete change over from the Michelin fold" and asked for specimens of the paper and mounted styles. These were made in three sizes without traffic diagrams because its pocket size would appeal to the cyclist for whom traffic diagrams were of less concern. On 17 March it was minuted that the DG had decided to retain the long fold with traffic diagrams but to try out a Bender fold on paper only with traffic diagrams. The artwork for the latter was approved by the DG on 1/7/1939.

During that fateful summer proofs were prepared finally to be approved in a border blue by McLoed on 27/11/1939. When the indexes were being considered for these Bender folds, it was decided to add the note to the Scottish index to indicate that sheets 8 and 9 were combined. The proof of this revised index was not submitted until 28/3/40. The War Revision 1940 editions of the Quarter Inch map (with red sky on cover) bear this note for the first time. Thereafter, with the end of the "phoney-war", Dunkirk and the invasion scare all such work apparently stopped and the files are silent until 1945 when a new long cover with the blue wavy-line border was forwarded for approval by the DG. The final proof of this with a sheet index on the reverse overprinted by the large blue squares of the National Grid received approval in August 1945.

The other important aspect of the history of the 4th edition of the Quarter Inch is the debate about replacing its yard grid by the metric grid in May and June 1939. No doubt the change of emphasis from civil to military use with the gathering crisis in Europe prompted in May 1939 an experimental sheet 7 of the Quarter Inch 4th edition on which a metric grid had been drawn. The DG (McLoed) commented in detail adding the following opinion: "Metric editions of the Quarter Inch map should not be published until the metric one inch sheets are ready. In other words the editions of the Quarter Inch map with the metric grid should synchronise as much as possible with the publication of the One Inch and 1/25,000 maps of the same areas. The question of substituting a 1/250,000 map for the Quarter Inch must still be kept in mind as a possibility. Mr. Morrison (? WS Min. of Ag.) was 'thinking this over' just before he left the Ministry but did not give a decision though he seemed inclined to favour the suggestion. Probably it would now be better to defer consideration of this until the question of redrawing the Quarter-Inch map comes up"¹². However, the confusion likely to result from having a One Inch partly with yard grid and partly with metric grid used with a Quarter Inch with yard grid warranted a change to metric grid for the Quarter Inch at the next reprint of the latter, stocks of which varied from one month to 3 years¹³.

Although DG was persuaded to approve the proposal to change to a metric grid at next reprint, none appeared for civilian use until 1945.

The first fully metric redrawn "Quarter Inch Map" at 1/250,000 did not appear until 1957 and until then several revamped versions of the 4th edition appeared all with long folds. The first post-war printings contained no town plans. Then after 1948 a new version with town plans incorporating National Grid and some details of interest to road users such as traffic lights, one-way streets and police stations in red appeared. The towns depicted were the same as those found in the pre-war printings, but were redrawn with up-to-date detail.

Bender folds were finally introduced with the 5th edition of 1957, the design of which made a complete break with the 3rd and 4th editions in terms of projection, amount of detail, layers, prominence of roads and the employment of type set instead of the hand lettering whose style has not changed greatly since the beginning of the century.

1. Sheetlines 5, p.19
2. O Maps to E.O. 28/7/32 - PRO OS 1/54
3. OP to E.O 27/7/32
4. OP 1/6/34
5. See the long critical minute by OP to E.O 21/7/34
6. 29/8/34 PRO OS.1/54 Minute 136
7. ibid Minute 148
8. ibid Minute 177 and 177A
9. PRO OS.1/54 Minute 75A
10. ibid Minute 51, 7/10/33
11. PRO OS.1/216 Minute 28 CKD to DDG 10/3/39
12. DG to DDG in PRO OS.1/382 Minute 2. 25/5/39
13. ibid Minute 7A. Stocks available 15/6/39

In the discussion which followed Dr.Board's Edinburgh talk Brian Garvan suggested that the 'A' series grew from the special sheets of the Third series produced because the sheetlines on the standard sheets were not convenient. The influence of the commercial firms such as Bartholomews and Michelin was noted. Composite maps produced for special events such as the Glasgow meeting of the British Association in 1928 were discussed. It was noted that special district maps usually had a brown Ellis Martin cover instead of the standard dark blue one. The 'red sky' Ellis Martin covered sheets raised the question were they sold to the general public or restricted to use by the military? No conclusive evidence had yet been uncovered. Attention was drawn to the fact that there are military editions of all the series covered by Dr.Board's paper. However the GSGS numbering system did not appear before 1933 on army maps. Alan Godfrey asked if anyone knew why the quarter inch atlas had not been more successful. Published as two separate volumes and a combined England Wales and Scotland volume it had not been popular and was remaindered pre-war: some copies had recently been found in their original wrappers.

Printing dates of the A series in chronological order.

Sheet No. <u>E & W</u>	Sheet Name	First Printed	Number Printed	Reprinted
2A	North Central	1926	?	5000/29 5200/29 500/35 (original has no sheet number)
4A	North Wales and Manchester	1928	5000	7000/30 2000/33 2000/34
7A	South Wales	1929	6200	200/33
8A	Midlands	1929	8000	6500/32
10	England, South West	1929	5000	6000/31 2000/33 2000/34
11	England, South	1929	10200	15,500/31 & or 15,750/31
12A	England, South East & London	1929	8200	9000/31 450/33 2000/35
3	England, North East	1929	6000	2500/31 2000/33
1	The Border	1930	5800	950/31 2000/33
6A	North Midlands and Lincolnshire	1930	7500	1000/34 2000/34 (there exists a state of this with all three print codes, presumably indicat- ing a total of 10,500).
9A	East Anglia	1930	7500	6000/32 (N.B. this state also carries 6500/30 in the print code).
<u>Scotland</u>				
3	The Forth & Tay	1931	2000	
2	Scotland, South West	1932	2000	
4	Glasgow, Oban and the Southern Islands	1932	1000	2500/33 (change of title)
6	The Western Highlands (with Skye & the Southern Hebrides)	1932	1000	
7	Scotland, North	1932	1000	
10	The Shetland Islands	1932	500	
8		?	?	
9		?	?	
5	The Eastern Highlands	1934	2450	

<u>England & Wales</u>	<u>Stocks available in months' supply 15/6/59</u>
Sheet 1	30
2	36 (reprint just received)
3	6
4	12
6	6
7	6
8	1 (on demand for 3 years' supply)
9	24
10	24
11	24
12	24

Scotland

Sheet 2	12
3	1 (on demand for 1500 copies from existing plate)
4	(paper folded only available: on demand for 3 years' supply)
5	30
6	18
7	18
8 & 9	36

RECENT PUBLICATIONS

J.B. Harley and J.B. Manterfield 'The Ordnance Survey 1:500 plans of Exeter 1874-1877' Reprint from Devon and Cornwall Notes and Queries XXXIV (no date, (1982 ?)). Pages not numbered, illus. Cartobibliography.

This account of the origins and development of the OS plans of Exeter includes a brief resume of the background to the 1:500 Town Plans. The town surveys of Devon and Cornwall are interpreted as a microcosm of the national pattern, reflecting, in general, the four main raison d'etres for large-scale urban surveys: 1) military necessity, 2) requirements of the Health of Towns Act (1848), 3) precedence given to the mapping of mining districts in the 1870s and 4) the demand for large-scales for Land Registration purposes. That the Exeter plans should fall into none of these categories, illustrating instead an example of how local administrative pressure combined with financial inducement could deflect the national mapping programme, has provided the basis for this short but elegant case study. Full use is made of the Exeter City Streets Committee Minutes to supplement the sparse official OS records, and the deliberations of the Town Council in this matter open an interesting window on the workings of the Victorian municipal mind.

Birdwatchers' Britain: The unique pocket guide to birdwatching walks

Southampton, London: Ordnance Survey and Pan Books 1983 pp 256, illus; maps. 20 cm. ISBN 0 330 280287 (paperback) also available in hardback. OS ISBN 0.319 00020 6. Price £4.95.

Following the pattern set by 'Walker's Britain', published in 1982 (see Sheetlines No.4 p.14) this compendium of nearly 200 routes is arranged by regions: the South-West; South-East England; Wales; Middle England; East Anglia and Region; Northern England, and Scotland. The walks vary in length from $\frac{1}{4}$ mile to about 7 miles and are illustrated accordingly with extracts from the 1:25,000 or 1:50,000 outline map. These are printed in green and grey with the routes and contours picked out in darker green. Black silhouette symbols of birds likely to be spotted in the recommended season are positioned along the walk. Line drawings, photographs and indexes of birds and organisations together with a checklist of birds and concise text (edited by John Parsloe) provide the would be watcher/walker with excellent basic information. OS has two pages devoted to an index and list of Landranger Sheets, and a short note on the Pathfinder maps with the conventional signs for each in monochrome.

Nicholson/The Ordnance Survey guide to the waterways (vol) 1. South

London, Southampton: Robert Nicholson Publications and Ordnance Survey, 1983 pp.208, illus; maps 23 cm. ISBN 0 905522 73 7 (paperback) Price £4.95.

This is one of three volumes, now available, which cover the South, Centre and North of England. The series is in the same format as the original Nicholson guides to the waterways, but the information has been 're-organised, expanded and fully up-dated'. The original two-inch maps have been revised by OS and new maps added. The map extracts, from which the grid-lines have been imperfectly erased, are in black and white with the canals superimposed in blue. The accompanying text - printed in blue for the canal descriptions, and black for terra-firma locations - is enlivened by photographs of local scenes.

AA/Ordnance Survey Leisure guide. New Forest. Basingstoke, Southampton: AA and Ordnance Survey, 1983 pp.57; illus. 14 maps. 30 cm. ISBN 0 861 45 1740 (hardback) Price £6.95 Also available in softback ISBN 0 86145 150 3.

The usual AA guide-formula of beautiful illustrations combined with readable and interesting text is here well-complemented by an 'Atlas' which comprises 14 sections from the central part of the OS Outdoor Leisure Map of the New Forest, on which short walking routes have been superimposed in red. Each map extract is accompanied by a short description of the route. The three sections of this publication, a general description of the Forest, 'Where to go, what to see, where to stay, what to do' and the maps combine to make one of the most attractive joint publications OS has yet undertaken.

EDITORIAL

Alan Godfrey's article in the last issue has brought some interesting responses: thanks are due to Messrs. Archer, Egan, Hausaman, Messenger, Monnington, Nicholson, Oliver and Williams for their constructive comments and/or valuable offers of assistance, which are all under consideration by the Committee. Lack of space prevents reproduction in full but the main points are summarised here.

There was a general consensus that, for a youngster, the Society is in good health and coping well with normal growing pains. The membership are "a very happy and enthusiastic bunch" and with 10-20% of them at meetings (50% for the last AGM - some from 400 miles away) we compared very favourably with similar specialist groups. The early impetus given by the professional element has been welcomed, although the long term aim must be a blend with the amateurs, using enthusiasm as the binding agent: "Any young society must draw heavily on the more experienced members in the early years. The active founding members have done a lot and done it well. I feel they must continue to contribute and concentrate on educating the newer, less experienced members, in the absence of an easily accessible literature covering the subject".

As wide as possible an approach to our subject is desired, to cater for those with a less involved interest as well as the detailed cartobibliographers, but without losing the need for development of a clear and distinct identity to ensure a respected place alongside (but without) the BCS and RGS with whom there is felt to be little overlap. Specific suggestions included the following (some of which are already actively in hand).

- 1) Firm steps to sponsor and co-ordinate research, particularly so that the ordinary members can make their vital contribution to the overall programme at whatever level they choose - "It is not a society which you join solely for what you can get out of it but for what you can feed into it" "involvement is the seeding ground for enthusiasm".
- 2) Publication facilities for research work worthy of a more permanent and accessible format than provided by Sheetlines "If a publication series were to be launched I'd buy everything". Particularly wanted is a general guide to the various OS series to aid identification and cataloguing of individual collections "...it was said that he had a near complete classification of all OS maps which ran to about fourteen pages. Oh, to get that near a photocopier! "
- 3) "What we need at meetings is a panel like Gardeners' Question Time".

- 4) We should build up a central 'data bank' of photocopies containing everything that has ever been written about the OS and its maps to which all members should have access through the Society.

One immediate and welcome result of the correspondence has been the appointment of Mrs. N. Hausaman as honorary Sheetlines typist, and my attention will now be directed at improving the printing quality which has suffered recently through hasty reproduction.

I look forward to seeing many of you at the 1984 AGM, for which a notice is enclosed, and new members will be particularly welcome at what has proved to be a thoroughly enjoyable annual event. The Society's final draft constitution will be tabled, and it is hoped that the written comments of the Charity Commission (they have been in touch by 'phone) will be available by then.

RECENT MEETINGS

Visit to the Public Record Office, 28th October 1983 - Notes by Y.Hodson

Nineteen members converged from all quarters (one member even came from Morecambe) to discover the workings of the Public Record Office. The morning was taken up with a short introduction to the organisation and history of the PRO by Dr.Higgs. The PRO is the State Archive and holds materials relating to central departments of state and the courts of law. Records of private individuals and companies are held only where these come into contact with the state. The first Public Record is the Domesday Book of 1085; the whole of the records were nearly destroyed in the Civil War and even by the eighteenth century some records were kept in a well near St.Paul's, and elsewhere, above a powder magazine ! The building in Chancery Lane was begun in 1850, and now, by Acts of 1958 and 1967, records come to the PRO when they are thirty years old. These records remain the property of the originating department, and an Instrument of the Chancellor is needed to extend the closure of records beyond 30 years. Departments of state produce a staggering 100 miles of records every year, for which the PRO would need a new building every six months - only a mere 1% of the output is therefore preserved.

The records are arranged archivally, not by subject headings, and Kew holds those relating to bodies set up after 1780 (earlier documents are still at Chancery Lane). Those who suffer from sea sickness as a result of studying the now ubiquitous microfilm will be relieved to know that at the PRO it is cheaper to produce the original document for study than to microfilm the entire collection. This distortion of the real thing is resorted to only when it is in danger of destruction. Academic readers are on the decline and the majority of readers' tickets are now held by genealogists. The records themselves are kept on three floors above the reading room level, so they are protected from

the five-foot inundation which would result from the Thames flooding. Documents are ordered by computer which distributes a request ticket to the appropriate floor.

Not all Public Records are held at the PRO. Where considered more appropriate they may be kept in a Designated Place of Deposit, and registered by the PRO and housed in suitable conditions. The public does not necessarily have the right to consult them. Examples of such documents are Health Records, which embrace all those held by hospitals.

We were then conducted round the building and shown endless, windowless, storage areas; watched machines delivering documents and listened to the 'musak' which was provided to relieve what was certainly a claustrophobic atmosphere - a sharp contrast to the luxurious readers' accommodation. The whole environment was far removed from the days when one sat, shivering, (even in summer) in the North Room at Chancery Lane, wrapped in overcoat, hands cased in mittens, with only the excitement engendered by gems of OS history gleaming out of the dusty boxes to keep one warm.

The afternoon session was led by Miss Geraldine Beech who is in charge of The Map Room, and who gave us a succinct account of how the maps are handled and referenced in the PRO. For example, when a map is discovered in a volume, if it is foxed or in poor condition, it is removed and repaired and given a separate reference and a dummy is left in the originating volume. The map would then be stored flat, or, if very large, on a roll. The PRO map references were begun in 1926, thus MR stood for Map Rolls, MP was the generic reference to flat maps - Maps and Plans or Map Portfolio, usually accompanied by an arbitrary letter to designate the department of origin; MF = Map Folder and Q, obviously, Kew.

Two map catalogues have already been published; the first covering the British Isles between 1410 and 1860 in two volumes, and the second on the Americas. A catalogue of the European material is to follow in about five years, and also in preparation is a handbook to the Tithe records which account for about 40% of the map-users. Our ears pricked up on being told that the PRO has a 'cache of OS material in Limbo' - some members looked as if they need to be physically restrained from demanding to be taken to examine it! Attempts have been made to build up a complete collection of the six-inch map and sets of the first and second edition are held, for reference only at Chancery Lane. In the repository at Hayes is a set of Index to Tithe Survey which has been coloured-up to show Tithe apportionments.

Miss Beech detailed four groups of material relevant to the study of OS:

- 1) The records of the OS themselves, which are patchy in coverage, and overlap to some extent with information elsewhere. Some documents are still held at OS.
- 2) Records of related departments in the past, such as the War Office. Working through the In-Letters of the WO up to 1850 had already produced several maps.
- 3) Records of other government departments, for example the Treasury, Ministry of Works, Home Office, etc., would all supply information concerning the general policy of the OS.
- 4) The maps themselves were 'scattered all over the place', especially where they had been used as base maps. There were few plain, unannotated OS maps to be found in the PRO, but it was suggested that the marked-up sheets would provide excellent material for the study of the OS map in its social context.

An instructive display of original items had been laid out for us and we were able to peruse these at leisure - Robert Dawson's 1803 course of instruction on surveying; the MS of the Report on the Ordnance Survey and Topographical Depot for 1870, and correspondence between the OSO and FO about the supply of maps of the NW boundary between Canada and the USA in 1871 and a host of other OS treasures.

The day's visit certainly whetted the appetite for work, although some members must have wondered where, with such a wealth of disparate material to search, they would begin !

The "Half-inch" at Tewin 18th February 1984 - Notes by "D141414"

Eleven members gathered at Yolande Hodson's house in Hertfordshire on February 18th, for a study-discussion on the half-inch map, led by Peter Clark. The session was an extremely intense and animated one, and the best that can be done for those of you who weren't there, is to give a description of the development of the half-inch as it emerged during the proceedings, the backbone of which was provided by Mr. Clark's researches. Not for the first time, the clock was against us, and so there was no time to discuss the Scottish and Irish counterparts to the English $\frac{1}{2}$ ", or such things as the post-1945 Half-Inch Second Series, or an experimental (?) $\frac{1}{2}$ " map of Salisbury Plain of c.1921, with a 1 km. grid superimposed. Such things must wait for another session !

Proceedings began with a "run in", demonstrating aspects of the half-inch scale in the 19th century, starting with William Faden's $\frac{1}{2}$ " map of Kent of 1807,

(reduced from his Ordnance-Surveyed 1-inch of 1801) and proceeding to the indexes to the Irish 6", of 1833-46. These were published at scales varying from 1:95,040 to 1:190,080; slightly less than half the land area of Ireland was published at 1:126,720, the half-inch. The Kilkenny half-inch index was of particular interest, for as well as the standard (outline) format, it appeared also with contours; as a relief model; with geological information; and as a pilot sheet for triotint relief representation. At the behest of the Geological Survey, an Irish $\frac{1}{2}$ " in about 50 regular sheets, using existing $\frac{1}{2}$ " county indexes where possible, was briefly considered in 1850-1, but dropped in favour of a 1-inch map. (Ironically, in this century, the 1-inch has been superceded by the $\frac{1}{2}$ " as the standard topographical map in Ireland !) The half-inch scale was also used for the indexes to the 6-inch sheets of some counties in Great Britain; that of 1882 for Flintshire was displayed, as a specimen of something more than an index, (for example, some antiquities are shown), and something less than a proper topographical map, (there being no attempt to depict relief).

These early OS experiences of the $\frac{1}{2}$ " were probably of marginal significance for its 20th century mapping at that scale, as compared with the Bartholemew $\frac{1}{2}$ ". Bartholemew started their $\frac{1}{2}$ " in the 1870s in Scotland, as a family of district sheets coloured by parishes. In 1881 or '2 they produced a layered $\frac{1}{2}$ " of Sutherland, and over the next 15 years they gradually developed their layering technique, so that by 1896 it had reached a very high standard. By that time, Scotland was furnished with a layered Bartholemew $\frac{1}{2}$ " on regular sheetlines, and between 1896 and 1902, (following a few earlier district sheets), that firm published a layered $\frac{1}{2}$ " of England and Wales.

In 1900, partly from Boer War experience, and partly from general defence considerations, the War Office felt a strong need for a half-inch map in Britain, and satisfied that need by buying the Bartholemew $\frac{1}{2}$ ", mainly in the form of specially-made-up sheets of the London, Salisbury Plain, and Aldershot areas. This displeased the Treasury, and subsequent negotiations between that department, the W.O., the O.S. and the Board of Agriculture were complicated by the last-named being desirous of pursuing Barts for using the title "Reduced Ordnance Survey". The matter was eventually sorted out, and preparations for an OS $\frac{1}{2}$ " were authorised in May 1902. The first six sheets - 78, 79, 86, 87, 95, 97 - appeared in March 1903.

The basic sheet size was 18" x 12", and the series would later be commonly known as the small sheet series (SSS). In the next three years the SSS was subject to a number of detail changes, both of basic design, (such as a change

from a single line to double lines for minor roads), and of shades of colour; and a few sheets (e.g. 88/97, 88/98), were combined on reprint. A common feature of the series was that relief was shown by hill-shading. There were to have been 104 sheets - 1 to 103, plus 25A - but in the event, sheets 1 to 8 and 10 to 16 were not published, prior to the SSS's abandonment in 1906.

In 1905, the W.O. made representations to the O.S. as to the inadequacy of the $\frac{1}{2}$ " map; in particular they asked for layer-colouring and larger sheets. This somewhat irritated the O.S., who had settled the $\frac{1}{2}$ " specification with the W.O. in 1901-2; it is very possible that the issue was raised by Major Charles Close, who had lately joined the W.O. topographical section.

At any rate, between July 1906 and March 1908, the whole of England and Wales was published in a 40-sheet Large Sheet Series (LSS), on standard sheetlines, (Normally 27" x 18"), that were to remain in use until the Second World War. This phase in the $\frac{1}{2}$ "'s development is characterised by hill-shading and by woods in flat green. Between March 1908 and March 1909, all the sheets, (save sheet 4, covering the Isle of Man, which never appeared with layers, and henceforth drops out of the story), were published with layers and hill-shading combined; at least ten of them had flat green woods, and all of them appeared in a more commonly encountered form, with woodland shown by green tree symbols. Though undeniably both spectacular and innovative, these maps did not please everyone, (either in 1908 or in 1984), and reprints used somewhat less dramatic shades of colour.

The basic problem was that of showing woodland legibly, in association with layer-relief, and in 1910-11, a new $\frac{1}{2}$ " series was started with layers only, woods shown by black tree symbols, and a squaring system. A detail change was that the change from green to brown layer-shades now took place at 200 ft. rather than 100 ft. 17 such sheets were published in 1910-11, before the $\frac{1}{2}$ " was subject to yet another shake-up, following Close's appointment as O.S. director-general. Accordingly, all the 39 English $\frac{1}{2}$ " sheets were republished in 1912-15 in a layered version employing yet another modification of colours, and also in a hill-shaded version. During World War I, there appeared a "Training Map" format, of black outline, blue water, and brown contours only. From c.1920 onwards, most reprints abandoned orange-brown, (officially "burnt sienna"), road-fill in favour of red and yellow, (as for the contemporary 1" Popular Edition), and were sold in Ellis Martin covers.

Overall, it was a most stimulating day, and at least one dyed-in-the-wool one-inch guru was overwhelmed at the range of variety shown by the $\frac{1}{2}$ " during the short period 1902-15. Cordial thanks are due to Mrs. Hodson for discharging the duties of hospitality substantially in excess of the call of duty.

NOTES AND QUERIES

Corrections

The report of the Edinburgh meeting in the last issue was wrongly attributed: The notes were in fact kindly supplied by Michael Miller. J.P. Browne of the OS Cartographic Library also points out an error and some noteworthy omissions: The Routemaster Series is undergoing quite dramatic changes in 1984 with all type style being renewed and all names reconsidered. The 'new' one inch of Dartmoor is in fact a new version of the original, but there is a new 1:25,000 Outdoor Leisure Map scheduled. A new Falkirk District Map is being published and several new 1:10,000 Neighbourhood Maps are under consideration.

A Survey Document ?

Regarding the note in Sheetlines No.7, it has been confirmed that all the corners of the triangles coincide with trig. points on the First Edition Caernavonshire 6" maps, but the numbering, colouring and reasons for exclusion of Llandudno and parts of Anglesey still need further research.

Catalogues and "Descriptions"

Tim Nicholson enquires if anyone knows of a later OS catalogue than the 1924 edition. An OS leaflet of May 1932 offers a catalogue for sale, which suggests that a later one may have been published. And is there a later Small Scale "Description" booklet than the 9th edition of 1937? A 10th edition in 1938 or 1939 does not seem unlikely, particularly as a 6th edition of the less popular and prolific Large Scale version was thoughtworthwhile in 1939.

Prefix codes on Ordnance Survey leaflets From about 1930, O.S. practice was to include the number of the relevant file in the print-code for its non-cartographic products. Thus the file on the 1" 5th edition gazetteers was Central Registry file No.7708, and the code on the gazetteer for sheet 144 was "O.S.O.-7708-2000-2.33". All the 5th edition gazetteers, (published for sheets 114, 118, 144 and 145), were printed by the O.S. using their own letterpress equipment. Presumably the number 9215, which appears so often in Tim Nicholson's useful list of O.S. leaflets, (Sheetlines No.7), relates to a file on leaflets that is no longer extant. (It certainly does not seem to be at the P.R.O.)

Royal Parks

From time to time the OS have been asked to prepare maps and plans of Royal Parks, a fairly typical example being a colour-litho 12 inches to one mile issue of 1906 of Hyde Park and Kensington Gardens. This is on thin paper folding into blue card covers, and sold for sixpence each. Later series are known, and there may have been earlier ones. Dr. Egan has four Parks in a series dating from 1850-1 showing the limits of Crown property, but apart from the lithographers (Standidge & Company of 36 Old Jewry) they have no indication of origin, and the scale of four chains to the inch is not one

usually associated with OS. Could there be a Southampton connection?

World War I and subsequent Wars - From Col.R.F.Arden-Close

From August 1914 onwards the Ordnance Survey was, of course, chiefly engaged upon the work of drawing and printing the great number of maps required by the Services in the War, especially large scale trench-maps, which were often wanted at very short notice. Towards the end of the War, an O.S.Branch was established in France to expedite the production of maps for the Armies of the Western Front, and my father used to visit the Western Front to advise on questions of map supplies, etc.

The Ordnance Survey printed and issued more than thirty-two million War maps. I seem to remember my father telling me that he thought the War might spread to Palestine and he arranged for T.E.Lawrence to go there to map the country under the guise of archaeology, but I cannot substantiate this.

I think the South African War must have provided a lesson because our soldiers out there were struggling, as best they could, with the problem of carrying out a war ranging over some 8000,000 square miles of, to them, completely unknown country, with virtually no maps at all.

From my own experience in World War II, the maps of N.W.Europe were first class, but I don't know about Burma. It would be interesting to sketch the provision of maps for subsequent mini-wars and campaigns, e.g.Korea, Mau Mau, Aden, Cyprus and now the Falklands.

(The next issue will contain an article on the development of artillery training maps - ed.)

Research Query - From Richard Oliver, "Elmwood", Lunghurst Road, Woldingham, Caterham, Surrey CR3 7EG

As many of you know, I am working on a thesis on the O.S. in the mid-19th century. I would be very glad to hear from anyone who can either lend me a copy of the 1875 (not the 1902!) edition of O.S. Methods and Processes, or else can arrange to have the whole work photocopied at not more than about ten pence per page. It would also be helpful if anyone possessing copies of the outline format of the Old Series sheets north of the Preston-Hull line were to contact me. (These sheets, as a rule, are not found in copyright and similar collections).

The '1941' style of coded imprint Since Peter Clark and Ian Mumford's piece was published in Sheetlines No.5, the following points have emerged. First, the practice of including the month began no later than July 1940, so far as private firms were concerned, but the Ordnance Survey do not appear to have started including the month until early in 1941. Secondly, a file in the PRO (OS 1/197), indicated that the following firms were certainly used around 1943-4:

<u>Firm</u>	<u>Code</u>
British Colour Printing	?
Brown and Bibby	?
Charles and Read	C & R
Fosh & Cross	?
Chromoworks	?
Fields	?
Hubners	HU or Hu
Haycock Press	HAY
J. Weiner	?
H.Hildesley	?

A number of other firms were considered but there is no definite evidence of their having been used for O.S. printing. However, it would be useful if someone could explain "B.R." which appears on a 1945 printing of Yorkshire 253 NW.

The practice of using "coded imprints" appears to have been abandoned in about July 1946, by which time only "Cr" (OSO Crabwood), "Ch", (OSO Chessington), and "Wa" (OSO Waddon) would appear still to have been in use. The practice of identifying printings of civil maps by means of the print-run was dropped at the beginning of 1947 in favour of a "general unique number" for small-scale and miscellaneous maps, and a letter for new editions of 1:25,000 and larger maps.

However, for military maps the practice of quoting quantity/month/year was continued, and in the mid-1950s a four-figure batch number was added. (Some of these later printings carry the code "SPC RE", which stands for Survey Production Centre, Royal Engineers).

One Inch Popular "Special Edition with Hills"

Chris Board has found further information on the 1931 issue of Sheet 112 which it now seems certain was specially printed for Marlborough College. Through the kindness of Mr.C.A.Joseph, the present Head of Geography, contact was made with Mr.F.H.P.Barber who formerly taught geography there, who was sure that the map was specially printed to be used with Landforms and Life by C.C.Carter (Christopher) and The Marlborough Country by C.C.Carter and H.C.Brentnall (O.U.P.) Both these authors together with E.C.Marchant had run the Department in the 1930s and it must have been they who persuaded the College to invest in this special map which remedied two of the principal deficiencies for geographical analysis: the hatchures and parish boundaries."When I arrived in

- 56 1937" said Mr.Barber "all the boys were issued with (i.e. bought) a copy of this special sheet 112 Marlborough map. This went on until the supply of maps was exhausted - I think they were still being issued when I got back in 1945. We tried to obtain more after the war, but the OS factory in Southampton had been bombed and the plate destroyed. The Ordnance Survey were too busy producing a new edition of their 1" maps to bother about a limited edition of a special map". Dr.Board wonders if anything has been found in the OS records at the PRO or Southampton, and whether other sheets were produced for similar institutions such as Oxford or Cambridge Universities. Can anyone help ?

PUZZLE CORNER

What is the earliest printed map of any part of Great Britain produced by the OS on a scale of 1: 250,000 with a metric grid? (Courtesy of Guy Messenger, who will show it at the AGM.) Answer also in the next issue.

MAP EXCHANGE

L.W.Gore, , has available a copy in fair condition of Sir Charles Close's "Early Years of the Ordnance Survey".

R.Dean, needs good cloth copies of the earliest printings of 1" Popular Sheets 35,129, and 137 to complete his set. Many other sheets of this series available in exchange.

MEMBERSHIP

The Society is open to all at an annual subscription of £3 (UK) or £5 for family, corporate or overseas (payable in Sterling, please) members. The membership year commences on 1st March, but those joining after 1st January will be considered as paid up for the forthcoming year. Cheques payable to 'The Charles Close Society' should be sent to the Membership Secretary: Brian Garvan, 66 Chalklands, Bourne End, Bucks SL8 5TJ.

'SHEETLINES'

Contributions should be sent to the Editor: Richard Dean, 49 Grange Road, Biddulph, Stoke on Trent, ST8 7RY, to reach him by the first of March, July, or November for the following month's issue.

FUTURE MEETINGS

Saturday 12th May 1984. 1030-1630 hrs. Society Annual General Meeting in Room 214 of Geography Dept. Birkbeck College, University of London,

7-15 Gresse Street, London W1P 1PA. See notice enclosed with this issue.

Saturday 30th June 1984. 1030-1630 hrs. Geography Department, University of Leicester. Brian Garvan will give an illustrated talk "Introduction to OS methods of map production prior to 1914" It may also be possible to arrange an afternoon visit to the nearby Leicestershire Record Office. If you wish to attend, please advise Guy Messenger,

by 7th June, and full details will be available. The University have agreed to provide lunch and coffee etc at not more than £5.00 per head; please state if you wish to take advantage of this.