



SHEETLINES

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The Newsletter of
THE CHARLES CLOSE SOCIETY

No. 14 - December 1985

**ORDNANCE MAPS
ON PLACE'S
WATERPROOF
PAPER**

WASHABLE · TOUGH · DURABLE

Showcard advertising
Place's waterproof maps

(see page 10)

- a fitting end to
one of the wettest
years on record.
Best wishes to all
for 1986.

THE FOUR MILE MAP BEFORE THE FIRST WAR

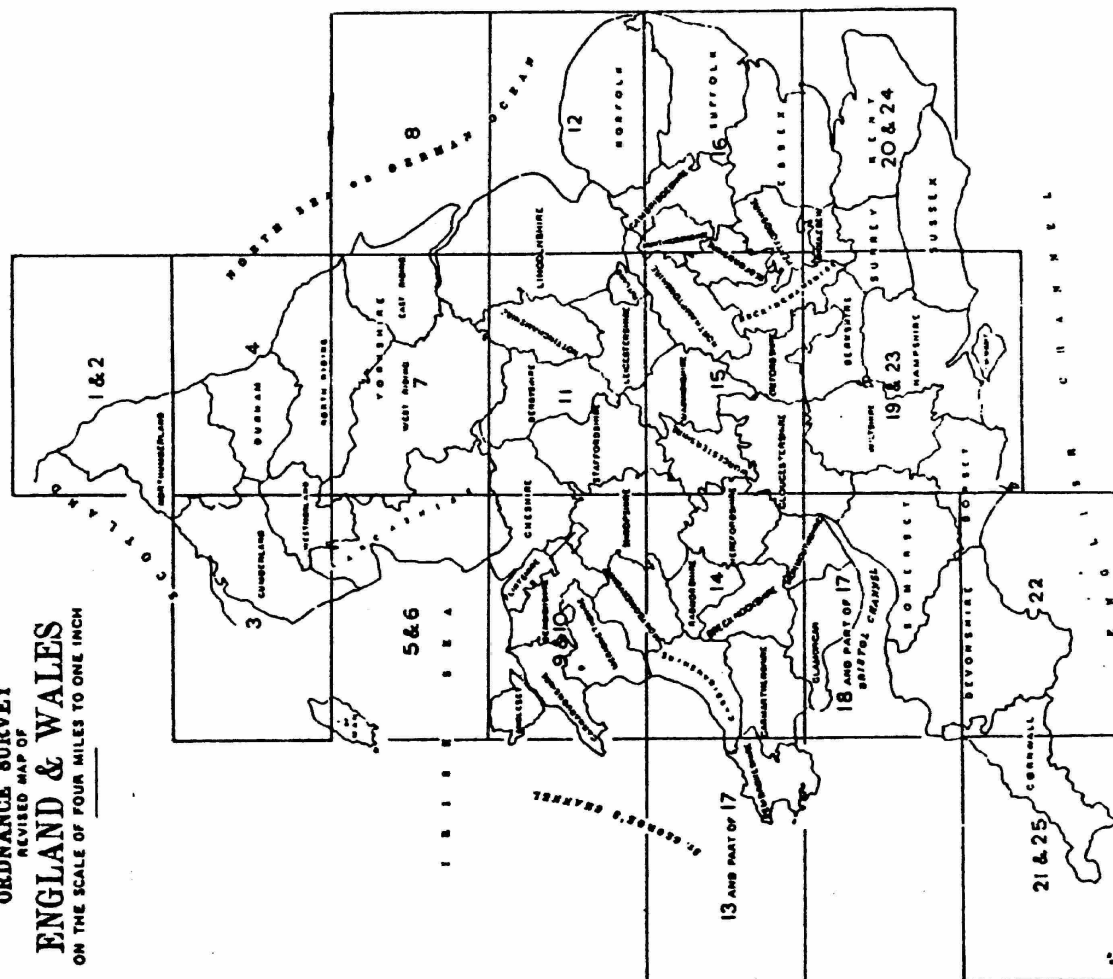
by John Cruickshank

Existing published references (1,2,3,4) to the early 1/4" map series of the Ordnance Survey are confusing and rather unhelpful for identifying sheets encountered. Winterbotham (1) states that "The original 25 sheets of England and Wales soon gave place to 18 and then to 10, the 17 of Scotland fell to 9". He describes outline and five colour forms. He then describes the preparation from 1912 of a new 1/4" which was interrupted by the outbreak of the war by which time only the Kent sheet "the first to appear" had been engraved. When work restarted in 1918 the remainder of the country was drawn for the camera and published as the Third Edition. Harley (2) confuses the issue considerably probably by misinterpreting Winterbotham. Garvan (3) mentions these series in passing, stating that the second edition Large Sheet Series originated as a 25 sheet map in 1902 recast to 10 sheets in 1912. Seymour (4) describes a hill edition in colours 1900-1903 based on the older outline revised and a second similar edition "in larger sheets". A characteristic sheet was reproduced in Sheetlines 5 p 17. None of these sources gives a wholly accurate description of the various series.

Old Series Four Mile Maps The history of these maps is entirely separate for each of the three kingdoms. The history of the four mile map of England and Wales is described at length in the minutes of the Dorrington Committee and their appendices. Preparation was commenced using the Old Series 1" mapping in 1854 despite much of this being grossly out of date then. Engraving was begun on sheets 120 miles by 90 miles but not completed and the project was allowed to lapse. Pressure from the Geological Survey for a four mile base map on which to show geology led to the resurrection of the project and the plates were completed in outline at the expense of the Geological Survey. Relief was shown by spot heights in some but not all parts of the country. The only attempt to revise the topography was the insertion of railway lines up to 1890, since much geology was based on sections exposed in railway cuttings. The original intention had not been to publish the base map "with its known imperfections" but Stanfords obtained transfers as bases for an archaeological map and the O.S. felt compelled to publish an official edition. Fifteen sheets were published including sheet 1 (the Title) and a blank sheet 3. The maps were printed from the copper and bore the imprint 1891 (although in evidence to the Dorrington Committee Henry Crook stated that sheet 5 of Lancashire and Yorkshire did not reach Stanfords until early 1892). In small writing in the left lower margin the sheets stated that they were reduced from the old series one inch map. The Dorrington Committee felt that this was inadequate warning of the shortcomings of the map and later printings also have "TEMPORARY EDITION" at either the centre or the right of the upper margin. The geological sheets published from 1889 to 1896 provide interesting examples of multi-colour printing by Wyman and Sons on a lithographed Ordnance base map (see index map). The contrast with the contemporary O.S. colour work is startling! Although the intention seems to have been to prepare a 'hills' edition of the engraved map in due course, the vitriolic criticism of 1892 led to this being shelved and although successive annual reports confess to the existence of the map from 1891 little detail is given and no index map to the series was offered.

The Irish map's history is covered in detail by Andrews (5). Designed to replace the six sheet Railway Commissioners Map of 1836 (which however remained in the catalogue in 1918!) it was authorised in 1864 as a four sheet map to be drawn and engraved at Mountjoy. Progress was intermittent and it eventually bore the imprint "New Edition" when it finally appeared in 1887. Unlike the English map this was a finished production and although out of date (less obvious in Ireland) showed spot heights, water by waterlining, parks and woods, roads and railways all consistently. A hills edition was authorised (using

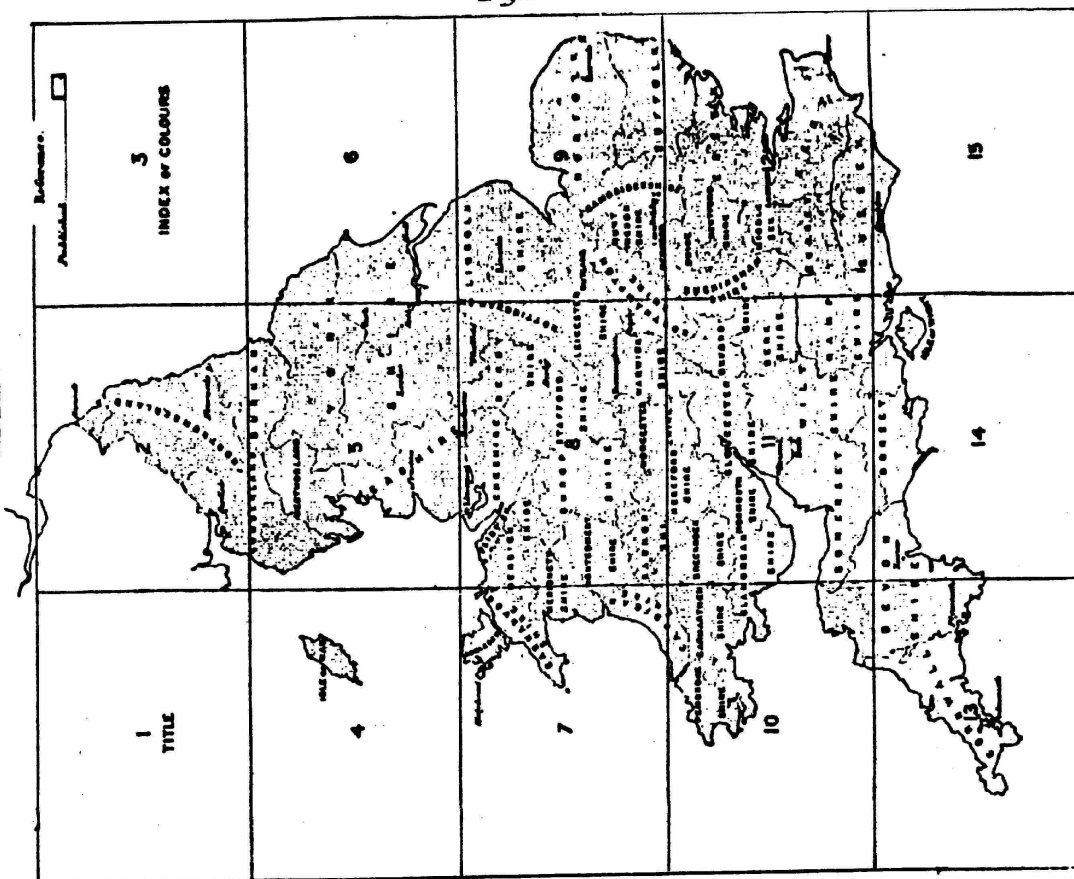
INDEX
TO THE
ORDNANCE SURVEY
REVISED MAP OF
ENGLAND & WALES
ON THE SCALE OF FOUR MILES TO ONE INCH



3" ONLY

1 1 1 1 1

GEOLOGICAL MAP OF ENGLAND AND WALES
Published on the Scale of Four Miles to One Inch.



the Triotint process) and a pilot sheet was shown to the Dorrington Committee, but when the work was completed in 1898 the base was deemed too out of date to republish. Although a few sets were issued the series never appeared in the catalogue and the 1899 annual report deletes a previous note about the preparation of this series. Presumably because the large sheet size was convenient the outline maps remained as the base maps for several administrative series (revised in 1899) until 1918 and after.

The Scottish map (in 11 sheets plus a title sheet and a sheet of four extensions to allow the map to be mounted as a whole) unlike the others never appeared as an engraved map, but only as an "advance edition" produced by photozincography in 1891. It was published with the outline in black and inland water overprinted in blue. The R.G.S. library holds a trial proof in this style accessioned in 1890 of the area around Blair Athole (sic).

Geological versions are not issued of the Irish and Scots sheets. The Dorrington Committee concluded that these maps should be revised and republished after the completion of the first national revision of the one inch map and further work at the four inch scale was halted to await this. Despite all the criticism the maps apparently became some of the most popular till then produced by the Survey (Farquharson (6)).

The Revised Four Mile Map The early work on this series was described by Farquharson (6) after his retirement. The series were recast on the small sheet plans required for the colour printing technique of the 1890s giving 25 sheets of England and Wales, 17 for Scotland, and 16 for Ireland. The rigid grid of sheetlines, particularly of the England and Wales series, gave numerous coastal sheets with tiny scraps of land; sheet 25 was to cover the southern half of the Scilly Isles!

For England and Wales the old plates were extensively revised from 1898 and third class roads were added. Work on the plates was completed in 1901. For Scotland there were no copper plates to revise and drawing was carried out during 1899 and 1900. Engraving of the outline commenced with the northern isles and progressed southwards until completion in 1902. For Ireland the original plates were set aside. Drawing commenced in 1901 (when the index diagram was first published) and engraving was completed during 1903..

After consultation with the War Office it was decided that relief should be shown by hill shading not contours, but only after publication of the outline map. Farquharson (6) made a public plea for engraved hachures that was eventually ignored by his successor.

Publication of the Revised Map Three main forms were produced: an outline edition from the copper plates; a series of counties and groups of counties, lithographed on thin paper in outline with roads infilled in burnt sienna; and a fully coloured edition with hill shading. In addition 52 petty sessions maps of England and Wales were issued in 1902 and county indexes to the large scale maps were issued from 1907.

By the time of publication the impracticality of the 25 sheet plan for England and Wales had become obvious and each of the forms modified it to some extent, despite retaining the numbering system. The annual report to 1900 noted that "sheets 1 & 2, 5 & 6, 9 & 10, 13 and part 17, 20 & 24, 21 & 25 will be published as combined sheets and separately if necessary". The necessity seems never to have arisen. The England and Wales engraved outline edition was issued in 1900-1901 in 20 sheets (see Appendix 1). Later

states with railway revision dates from 1901 to 1906 are known of most sheets.

Publication of the Scottish outline sheets adhered to the seventeen sheet plan and followed in 1901 and 1902. Unlike the English sheets these were published with a blue infill for coast and inland water, as according to the annual report to 1902 "It is considered that this shows up the water features better than water lining". (The R.G.S. copy of sheet 15 shows only coastal water in blue).

The Irish outline map appeared similarly with blue infilling in 1903-1904 adhering to the sixteen sheet plan.

"Sheets of Counties and Groups of Counties" lithographed on thin paper, in outline with roads infilled in burnt sienna, appeared shortly after the outline sheets. A pilot sheet of Kent was produced first. Dated 1899 this was simply a litho print of the series sheet 20 & 24 with a title added and the roads infilled. During 1901-1902 the whole of the remainder of England and Wales was published in this style in 24 sheets (Appendix 2). Each carries its title and the imprint that it is parts of sheets from the parent series. The original printings were priced at 6d flat and 9d folded in cover. On reprinting these prices were raised to 1s (from about 1904), however as late as 1915 'Cumberland & Westmorland' and 'The Isle of Man' were still catalogued at the old price and flat copies of most sheets were still available at the old price. One infers that sales were sluggish!

In addition some district sheets were produced in a similar style including Salisbury Plain, Bath and Bristol, Birmingham, Leicester, London, Manchester and Liverpool, Northampton, and Sheffield. Outline Manoeuvre Maps of the South of England (? 1903) and the East of England (1904) with coloured boundaries, and a fully coloured map of Salisbury Plain (part of sheet 19) issued in 1902 are catalogued. A fully coloured quarter inch map of East Anglia was produced for distribution to members at the 1904 meeting in Cambridge of the British Association and a similar map of much of Yorkshire (parts of sheets 4, 7 and 8) was produced for distribution at the 1906 meeting in York.

County and district maps were also produced of Scotland although annual reports imply that coverage was not complete. Water and main roads were coloured. Eight county maps were catalogued (Aberdeen Banff and Elgin; Caithness and Sutherland; Dumfries Kirkcubrightshire and Wigtownshire; Forfar and Kincardine; Orkney; Perth; Selkirk Roxburgh Berwick Peebles and Haddington; Zetland) together with eight district maps (Argyll and the Isles North; Argyll and the Isles South; Edinburgh; Glasgow; Inverness; Isle of Lewis; Skye and the Western Isles; Skye and Inverness). In addition three fully coloured district maps are listed (The Cairngorm Mountains the Upper Dee and the Upper Spey Valleys; Orkney Islands; The Trossachs).

No district or county maps are known of Ireland.

The Hill Shaded Coloured Map Despite Farquharson's advocacy of engraved hachures, under Johnston's Director-Generalship once the outline was complete the hill shading was produced by brush drawing photoetched onto copper, giving a screened effect (Seymour (7)). Black was used for the outline, blue for the water, brown for the hill shading, green for large woods only, and burnt sienna for roads. (As with other maps of this era "burnt sienna" changes from yellow in the early printings to red in later ones). Publication started in the north of England in 1902 and proceeded southwards. Scottish sheets were issued at the same time and the series of Great Britain was

completed during 1903. The original issue of England and Wales adhered to the sheetlines of the outline edition (except that a separate sheet 17 was not produced). On reprinting in 1905 sheets 19 and 23 were issued as a combined sheet and the separate sheets discontinued (see index diagram). Sheet 13 in later printings bears the publication date of 1905 for no obvious reason. Areas of England on Scottish sheets 15 and 17 were filled in from the English sheets, with in some states separate dates of railway revision. The border was shown as just another county boundary. English sheets were not filled in.

Initially these sheets were not included in the list of series issued folded in covers. Stanfords sold sheets mounted and folded within their own covers, unfortunately all such examples known had their margins completely removed by the mounter and the only clue to their early state is the yellow road infill. Copies were not issued by the O.S. folded in covers until the middle of 1905, and dissected and mounted sheets seem later still. Early printings only show one price in the lower margin, later ones also show the price folded and frequently the price dissected in addition. Some copies folded in the 95 x 185 mm pattern of red cover exist but most appear in white covers without location maps. The fragile brown paper envelopes in which these maps were originally sold have very seldom survived.

Most sheets were reprinted at least once with railway revision. The Scots series remained current until the Scottish Third Edition appeared in the mid 1920s, and later printings bear the "Crown Copyright Reserved" statement that followed the 1911 Copyright Act (8). In the "Description of Small Scale Maps" 6th edition of 1927 they are listed as superseded with old stock being sold off.

For Ireland the hill drawing was done from 1902 to 1904 and the sheets were published in 1903 (Bantry), 1904 and 1905 (bearing the publication date of the outline version with the date of printing of the coloured map). Most sheets were not revised on reprinting, however railway revision was carried out on the Dublin (to June 1906) and Bantry (to April 1913) sheets. The Irish sheets often appear with green republican labels covering pre-war white O.S. covers. They were reprinted rather crudely as GSGS 4142 in 1940.

"The Second Edition" Despite the short time since the publication of the "Revised Four Mile Map", following the second national revision of the English one-inch map a further revision was undertaken. The outline series of England and Wales was republished between 1908 and 1917 using the same amalgamations as the small sheet hill shaded map (see appendix 3). One Second Edition coloured map was produced (sheet 19 and 23, issued in September 1911 with the imprint "Second Edition 1910 printed 1911"). At this stage Charles Close was appointed Director-General and the decision was made completely to recast the four mile coloured map of England and Wales on a ten sheet plan excluding the Isle of Man. How far work progressed on the second edition of Scotland is not clear. An outline with blue sea copy of sheet 14 printed in 1914 is in the R.G.S. library. Others may well exist.

The Second Edition Large Sheet Series Surprisingly Charles Close's annual reports give almost no mention of this new map series commenced at the outset of his Director-Generalship. An index diagram to the series was offered in the 1913 report without any comment in the text and in the report to March 1914 he states: "The publication of all the maps of the coloured large sheet series has now been completed as regards England and Wales."

Similar diagrams for a large sheet series of Scotland and Ireland have now been approved and the new edition for Scotland will be commenced at once and will probably be completed this year. The Irish maps will follow". This optimism was destroyed by the events of the summer.

Except for the second state of sheet 1 (see below) these maps do not carry the title "large sheet series" on their faces. (See Appendix 4.) Most commonly sheets are found with one of the military integral covers printed on their reverse, however two distinct groups of white civilian covers exist, one with and one without the imprint "Large Sheet Series". Which type came first is not at present clear. The military integral covers of sheets 1, 2 and 3 and some of 6 and 9 bear the imprint "Printed by Waterlow & Sons for the Ordnance Survey 1914". These versions of 1, 6 and 9 omit the date of printing on the face of the map but 2 and 3 are the same as the civilian editions.

The reprinted version of sheet 1 is quite distinct from the others. As well as bearing the title "Large Sheet Series" on the face, there is no date of first publication. The imprint reads: "Second Edition published... 1909. Published filled in with Scotland....1915" (the 1912 version leaves Scotland blank). The marginal diagram of adjoining sheets also shows a sheet 11 of the Isle of Man. No copies are known at present of sheet 11.

At the beginning of the first world war almost all the 20th century series remained available (together with the 19th century sheets of Ireland). The result was not only low sales of individual sheets due to their small size and excessive duplication but a low total sale due to difficulties in marketing the competing series. The eventual solution was to scrap all of them and to publish an entirely new series that became the Third Edition, however in the interim following the (secret) Olivier Departmental Committee Report of 1914 it was decided "gradually" to abolish the outline and small sheet coloured maps (Seymour (9) Although the April 1915 catalogue included all the pre-war series (omitting two of the sheets in outline with coloured roads), by 1918 all the county and district sheets had disappeared and only one coloured edition and one outline edition were available for each country. Nevertheless the administrative maps of Ireland based on both the 1836 and 1887 maps still survived!

Reference

- 1 Winterbotham H.St.J. A Key to Maps 2nd Ed.1939, p 81
- 2 Harley J.B. Ordnance Survey Maps - A Descriptive Manual 1975, p 131
- 3 Garvan B. Sheetlines 5 p 17-19
- 4 Seymour W.A. A History of the Ordnance Survey 1980, p 131
- 5 Andrews J.H. A Paper Landscape - The Ordnance Survey in Nineteenth Century Ireland 1975.
- 6 Farquharson Sir J. Twelve years work of the Ordnance Survey 1887-1899 Geographical Journal 15 (1900), pp 565-598.
- 7 Seymour W.A. Op.Cit. p 202
- 8 Seymour W.A. Op.Cit p 198
- 9 Seymour W.A. Op.Cit pp 225-227

In addition I have relied heavily on the annual reports of the O.S. particularly for the period to 1905. Thereafter these are less full and for this period I have depended on the maps themselves and on the R.G.S. published accession lists, together with a partial set of O.S. catalogues.

Acknowledgements

Richard Dean gave me enormous help by supplying lists of states of maps and copies of O.S. catalogues. The librarians of the City Library and the various University libraries of Leeds have been very tolerant and helpful to someone looking for maps they often hadn't heard of and didn't usually have, and the R.G.S. library and its staff are just marvellous!

Appendix 1Engraved Outline Map of England and Wales

<u>Sheet</u>	<u>Eng.and Pub.</u>	<u>Revised</u>
1 & 2	1899	1894-5
3	1899	1895-6
4	1900	1894-7
5 & 6	1900	1895-6 (inc. whole Isle of Man)
7	1901	1893-7
8	1900	1893-7
9 & 10	1901	1895-8
11	1901	1894-8
12	1901	1897-8
13	1899	1897 (inc. part of sheet 17)
14	1901	1893-8
15	1901	1893-8
16	1900	1893-7
17	1899	1894-7
18	1901	1893-8 (does not include any of 17)
19	1900	1893-7
20 & 24	1899	1887-94
21 & 25	1899	1893-6
22	1899	1894-7
23	1899	1893-6

Appendix 2Sheets of Counties and Groups of Counties (E & W)

Anglesey Caernarvon Denbigh Flint and Merioneth

Bedford Cambridge Huntingdon Northampton and Rutland

Brecknock Hereford Montgomery and Radnor

Cardigan Carmarthen and Pembroke

Cheshire Shropshire Stafford and Flint (det.)

Cornwall

Cumberland and Westmorland

Derby Nottingham Leicester
 Devon
 Essex
 Glamorgan and Monmouth
 Gloucester Warwick and Worcester
 Hampshire and Wiltshire
 Isle of Man
 Kent
 Lancashire
 Lincolnshire
 Norfolk and Suffolk
 Northumberland and Durham
 Oxford Buckingham Berkshire Hertford Middlesex and London
 Somerset and Dorset
 Surrey and Sussex
 Yorkshire (East)
 Yorkshire (West)

Appendix 3

Second Edition Engraved Outline Map England and Wales

<u>Sheet</u>	<u>Eng. and Pub.</u>	<u>2nd Ed.</u>	<u>Railways</u>	<u>Minor Corr.</u>
1 & 2	1899	1908	-	July 13
3	1900	1909	Apr 14	Apr 14
4	1909	1909	Sep 14	Sep 14
5 & 6	1900	1914	-	-
7	1901	1917	-	-
8	1900	1909	Nov 11	Aug 14
9 & 10	1901	1910	Dec 13	July 13
11	1901	1911	Feb 15	Oct 13
12	1901	1912	July 14	July 14
13	1899	1912	-	-
14	1901	1913	-	-
15	1901	1912	Mar 14	Mar 14
16	1900	1911	Dec 13	Dec 13
17	1899	1912	-	-
18	-	1911	Oct 13	Oct 13
19 & 23	1900	1910	Jan 13	May 12
20 & 24	1899	1909	Aug 14	Oct 13
21 & 25	1899	1911	Dec 13	Dec 13
22	1899	1913	-	-

Appendix 4Large Sheet Series

<u>No.</u>	<u>Area</u>	<u>Published</u>	<u>2nd Ed Pub</u>	<u>Printed</u>	<u>Codes</u>	<u>Revision</u>
1	Borders	1900	1909	1912	-	-
2	Lancashire	1900	1914	-	-	-
3	Yorkshire	1900-01	1914	-	-	-
4	N.Wales	1901	1912-13	1913	2.14	Nov.13
5	S.Wales	1901	1913	1913	-	-
6	Midlands	1901	1910-13	1913	-	-
7	E.Anglia	1900	1911-12	1913	8.14	-
8	Devon,Cornwall	1899	1911-1913	1913	-	-
9	Hampshire	1899	1910-12	1913	-	-
10	London S & E	1899	1909-10	1912	9.14	-
"	"	"	"	"	"	Sep.14

Sheet 1 was republished filled in with Scotland in 1915

A London Area sheet was also printed in 1916

ORDNANCE SURVEY MAPS ON PLACE'S WATERPROOF PAPER: SOME NOTES

by Tim Nicholson

Only fragments survive of the Ordnance Survey's most ambitious and best publicised attempt to market a waterproof map - the odd references in OS annual progress reports, scattered comments in OS files, a review here, a news item there, a few pieces of printed OS ephemera (leaflets and a show-card), and a very small proportion of the large number of waterproof maps published. Not even the 'recipe' has been found: it does not seem to have been patented. The account that follows is pieced together from this very patchy evidence, and awaits expansion or correction when more is known.

In the 1920s and 1930s, the OS tried out various ways of waterproofing their maps on a commercial scale. The original initiative seems to have been military, as was so often the case with OS innovations: a soldier devised the only method to be widely adopted by the Survey, and it was tested on military maps before its commercial introduction. A tourist, an engineer or a surveyor might find it maddening or embarrassing to find his map reduced by rain or mud to a soggy, dismembered, illegible mess; a soldier might find it fatal.

A map printed on ordinary paper could be sprayed with a waterproof coating, sometimes resulting in a high-gloss finish; then mounted on cloth to inhibit tearing. The main commercial application of this method in the OS was to its civil aviation maps after 1934. In the days when open cockpits were still common, they were obvious candidates for treatment. The OS, or the Liverpool stationer Philip Son & Nephew, issued sheet 51 of the Popular Edition - and no doubt others - with map sprayed (and covers both inside and out), in sections for 4s - sixpence more than the standard map in this form.

A REVOLUTION IN MAP MAKING



ORDNANCE SURVEY
SOUTHAMPTON

A REVOLUTION IN MAP MAKING.



THE uncertainty of the British climate is proverbial, and everyone who uses a map will welcome one which can be opened out and consulted in the rain without spoiling it in any way, and which is at the same time extraordinarily tough & durable.

The Ordnance Survey Maps printed on Place's Waterproof Paper answer all these requirements.

Place's paper is not merely ordinary paper coated with a waterproofing solution, but is specially manufactured and impregnated *after printing* by a process which renders it absolutely waterproof and washable and gives it a Parchment-like toughness and durability.

It has been used for Military Maps and the Staff Officers who have tested it have been loud in its praises.

Maps printed on it, after having been under the wheels of motor vehicles, have been washed with soap and water and ironed, and even after this treatment had been repeated several times, they were still in a serviceable condition.

The price of maps on Place's paper, folded in covers is as follows:—

Ordnance Survey 1" Popular Edition	...	3/6
1" Tourist District Maps	..	4/-
1" Series	...	4/-

The following Ordnance Survey Maps are now available on Place's paper:—

One Inch to One Mile, Tourist District Map: The Middle Thames.
One Inch to One Mile, Popular Edition: England and Wales, Sheets 26, 72, 83, 101, 114, 117; and Scotland, Sheets 55 and 56.

Quarter Inch to One Mile: England and Wales, Sheet 8.

Further particulars may be obtained from the Director-General, The Ordnance Survey, Southampton.

Alternatively, a special paper could be impregnated with a waterproofing solution that permeated it totally; a more complex and expensive technique. Such was the method invented by a Royal Engineers Officer, Col C O Place, CMG, DSO, and adopted by the Survey when it took the plunge. The characteristics of the special paper supplied to Southampton's printing presses caused difficulties.² Being soft and absorbent, it tended to be 'plucked' by machines; and when dampened during printing it stretched, resulting in poor register between adjoining colours. Wastage of paper was high.³ After printing, the paper was returned to its manufacturer for waterproofing. The manufacturer now found he was unable to waterproof layered maps satisfactorily. This was serious, because waterproofing was likely to be much in demand for Tourist maps. All Tourist maps used layering to some extent, and the latest ones used it to the exclusion of all kinds of relief but contouring.

By early 1930 this difficulty had clearly been overcome, for the first OS map on Place's waterproof paper had been published, and it was the Tourist map of the Middle Thames in a printing of 2000 copies. The new venture was launched with a special leaflet and a shop showcard, both featuring a logo or colophon specially designed by the OS staff artist Ellis Martin. As well as the Middle Thames map, the leaflet announced six Popular Edition sheets of England and Wales so treated, two of Scotland, and a Third Edition Quarter Inch sheet.

The Survey was full of confidence in its product. The Place process made it very strong, and dirt- as well as water-repellant. A notice stuck or printed inside the covers of most maps claimed that the map was not only "WATERPROOF and extremely TOUGH and DURABLE", but could be brought up like new after the most appalling treatment. It could be run over by a car, said the leaflet,⁴ covered in mud, then scrubbed with soap and water and ironed smooth. Customers were invited to do their worst, and report back. Copies were sent to independent bodies for "review". In 1931 Boy Scouts were reported to have screwed up a map into a ball, played hockey and football with it, then restored it to its pristine state in the recommended manner.⁵ Tests conducted (no doubt in a more dignified manner) by the Geographical Journal, organ of the Royal Geographical Society, bore out the Survey's claims.⁶

It seems likely that some of each new printing of most OS small scale maps were run off on the special paper and waterproofed. Certainly by 1935 there was the option of waterproof Popular, Fifth (Relief), Fifth Edition, Tourist, District, Quarter Inch, Birmingham and Cotswolds Half Inch, Guernsey and Jersey maps. In addition, there were extra runs on Place's paper of printings already published, as is clear from the existence of pre-1930 print codes.

Prices were higher than for any maps other than those mounted in sections: partly the consequence of the high rate of paper spoilage. There was a difference of sixpence or even a shilling in the case of the cloth-backed map, which would be the alternative for a user seeking a reasonably weather-resistant product. All Cloth Tourist maps cost 3s; water-proofed they were 3s 6d or 4s. The same went for the Quarter Inch map. A cloth Popular Edition map cost 2s 6d; on Place's paper, 3s 6d. An ordinary cloth Fifth (Relief) Edition map sold for 3s, or 3s 6d waterproofed.

High price seems to have been at the root of the failure of the enterprise. Maps mounted on cloth suffered less from the weather than ordinary paper maps, and it may have been that the customer preferred to pay less for a cloth map and make do with it. In January 1934 most waterproof map prices were cut by sixpence, at the same time as the prices of other poor-selling lines were being reduced.⁷ This brought the price down to that of the

cloth map in some cases. A year later other waterproof maps were reduced.

By June 1935 no more maps were being waterproofed, for the Survey announced in a leaflet that it was remaindering all existing stocks at the price of the cloth equivalent. By early 1936 the end had come. The entire remaining stock - 18,673 maps - had been 'cancelled' (OS terminology for 'scrapped'). The project that had been so proudly announced six years before as "A Revolution in Map Making" was now dismissed as "the Place experiment". For lack of surviving records, it is impossible to say how many maps were printed on Place's paper, but the sheer scale of destruction suggests a considerable total, as well as helping to account for their scarcity nowadays. An experiment it may have been in the beginning; but the subsequent investment, in money terms and enthusiasm showed that it did not remain so. The author has found no other OS product of the pre-Second World War period that was given so intensive a launching campaign.

Place's waterproof maps are identifiable in various ways, by eye and by touch. For example, some were given specially designed covers, among them the Popular Edition. These were black with black and red lettering on a brown ground. Some Third Edition Quarter Inch map covers featured the Place logo instead of the usual motor cyclist. Fifth (Relief) Edition covers carried the words "On Place's Waterproof Paper" inconspicuously in the space where the style and price were usually found. Tourist maps bore a legend across the top of the cover: "Printed on Place's Waterproof Paper", or "Printed on Waterproof Washable Paper". Some Third Edition Quarter Inch covers had no external identification at all; but inside the front cover was the notice already referred to, with red lettering on a white ground and featuring the Place logo. This notice was usually found in all waterproof maps, in addition to any external identification.

To the touch, paper waterproofed by the Place process was thick, fairly stiff, and with a smooth, slightly slippery feel on both sides; very different from both a normal, flimsy OS paper map of the period, and from a cloth-mounted map. The cloth backing of the latter may have a fine or a coarse weave, but it is always readily detectable. Unless it has a high gloss, ordinary paper that has been sprayed and mounted on cloth can be very difficult to distinguish from unsprayed.

1. Aviation maps sold as flat sheets were offered on Place's paper.
2. Reports of the progress of the Ordnance Survey, 1928, 1929.
3. Report of Proceedings, Empire Survey Conference of Survey Officers, 1928.
4. With soap, water and iron the author has attacked with fair success the settled, 50-year-old grime and creases of a well-used military map on Place's paper; but lost courage before finishing the job. It is probably not a good idea to take the instructions to extremes if a map is worn or precious.
5. The Scouter July 1931, p 306
6. Geographical Journal Vol 75, June 1930
7. Public Record Office, OS/1 349
8. Public Record Office, OS/1 256

PUZZLE CORNER Whose initials are these, and on which standard OS map cover can they be found? (Chris Board) The map referred to in the last newsletter is Series M523 Air/Sheet 18 'Northern Ireland' - copyright date 1963.

K & C

RECENT MEETINGSManchester, 28th September, 1985 - notes by D.141414

Some 18 or 20 members, (the number varied during the day), gathered in the Geography Department of the University of Manchester, and were treated to three excellent talks. There is not space here to do full justice to them: suffice to say that a new standard of excellence was set for the Charles Close Society's meetings. Cordial thanks are due to Chris Perkins and Anne Lowcock for organisation of the meeting.

Alan Godfrey: The Ordnance Survey large-scale plans: a vanishing heritage?

Alan framed his talk around three main points: why there was a "vanishing heritage"; his experiences of OS maps in local collections; and his reprinting project. (It may not be as well known as it ought to be some CCS members that "The Godfrey Edition" now comprises well over 100 titles; most of them are reduced-scale reprints of 1:2500 plans covering urban areas, but there are also a few 6-inch and 1:1056 sheets, and a 1-inch sheet). It was implicit that there was a strong connection between these three.

The number of Ordnance Survey large-scale plans that were produced was daunting: Alan produced some interesting calculations for County Durham. He reckoned that there were about 4840 O.S. plans at 6-inch, 1:2500 and 1:500 published for the county between c.1855 and 1950, and that sundry special revisions by the O.S. and by local authorities brought the total to nearer 6000. And yet County Durham represented perhaps only 1% of the area - and maps - of Great Britain as a whole. The 1:2500 plans are of primary importance to historians, yet few libraries have comprehensive local collections, (indeed, there is no comprehensive national collection of 1:2500s), and many of these collections are worn out with use. Durham Record Office has one of the best local collections, but even it has only about two-thirds of the full 1:2500 coverage of the county.

In the course of running his second-hand map business, Alan found a number of interesting things, not least that 80% of large-scales sales were made in Lancashire, Yorkshire, and the counties to the north, and that 80% of the small-scales sales were made south thereof. In other words, relative small-large-scales interest reflected the areas in which those scales first developed. It was apparent from his experience of local libraries that his second-hand business hardly touched large parts of the map-using public, notably women. His first reprint experiment was in booklet form, and was a flop. Then he received a Tyneside cinema leaflet, which was bender-folded like a map, and this gave him the idea of reducing 1:2500 plans to a scale of about 1:4340, thereby fitting each plan onto A2-size paper. The idea worked: it was "really quite touching" to see the wide range of purchasers. The maps were a particular success in such depressed towns as Hartlepool. An inspired feature was putting extracts from old street directories on the backs of the maps: these particularly appeal to family historians. The small-scale maps had been "saved" in the past 15 or 20 years by railway enthusiasts in particular; the large-scale plans might similarly be saved by family historians.

However, though it proved fairly easy to obtain 1:2500 plans which were suitable for reproduction for the north-east, London presented a problem. Alan wanted to reprint a substantial part of the London 1:2500 in the "Edition of 1894-96", but finding reproducible sheets was a big problem. The Grange Museum, Neasden, and Hackney Archives have proved particularly helpful, but so far Alan has located only about 30 of the 160 sheets. These have been augmented by reprintings of the 1st edition, (1869-80), and 3rd edition, c.1913-19), of the London 1:2500, and every sheet covering Hackney and Southwark will be reprinted in all three editions.

Alan ended his talk by making a plea for the establishment of a good cartographic library to serve the north of England. He suggested that it should be at York, as a historical centre: its object would be to offset the present inconvenient distribution of the copyright-type libraries. This suggestion is surely worth pursuing.

John Manterfield: The Old Series one-inch maps This was a sampler of the delights we may expect from Volume 4 (Central England) and 5 (Lincolnshire and East Anglia) of Harry Margary's 10-volume reprint project, and from Dr Brian Harley's introduction and from John and Barbara Manterfield's cartobibliographic work. Attention centred particularly on the Lincolnshire sheets in Volume 5; as John comes from Grantham, this was decidedly appropriate!

The eight sheets covering Lincolnshire were surveyed and published out of the normal course of things because of a request, made in the winter of 1817-18, by local gentry who wanted a good map, partly for laying out agricultural improvements, and partly for fox-hunting purposes. (They were rather coy about admitting the latter). An arrangement was come to with the Ordnance in 1818, whereby Lincolnshire would be taken out of its regular turn in consideration of a guarantee of 500 subscriptions of £4:14:6 per set. Early hopes of speedy publication soon faded: this was in considerable measure due to Thomas Colby's accession to the charge of the Survey in 1820, his discovery of numerous errors and cases of slipshod work in the Lincolnshire and other unpublished surveys, and his insistence that the bad work be rectified before the maps were published. As a result it was not until 30 March 1825 that the Lincolnshire sheets were ready for publication. (The 1824 publication date on the maps themselves is a nonsense). Some good came out of the mess: surveying and allied techniques were refined, notably in the sphere of place-name collection; that a lengthy correspondence on the etymology of "toft" resulted in an "answer" at odds with modern scholarship hardly detracts from the merit of the attempt.

Turning to the actual maps, John gave us an insight into the investigating of Old Series cartobibliography, where the main published guides remain the late 1960s articles of Ian Mumford & Peter Clark, and Robin Clarke. More recently, various snippets have come to light: for example, the introduction of the arabic sheet number was the outcome of a complaint, made by a map-agent in December 1845, about the awkwardness of having the sheet numbers in Roman numerals. Similarly, more precise information has come to hand regarding railway insertions and price changes. However, none of this can detract from the sheer hard slog involved in cartobibliographical work: 35 states of sheet 7 (Middlesex) had come to light so far, but it was impossible to have them all in the same place at the same time for detailed comparative work. All in all, the next two Margary volumes should be worth waiting for.

Chris Board: The Modern "Town Maps" of the Ordnance Survey Rarely can the Society have been treated to such a frank address concerned with current OS policy and practice! Though the OS's inter-war 6-inch town-maps - published first in full colour, and then in unadorned black - are well enough known by repute, if not by sight, (see Sheetlines Nos. 6 and 7), the contemporary family of 1:10,000 "Town Maps", publication of which began in 1979, seem to be much less well known to CCS members. Chris argued that they were not strictly a series at all: there were considerable design variations from map to map, and each "Town Map", "City Map", or "District Map" was tailored to suit its intended market. They represented the blatantly commercial aspect of modern O.S. activities: some were only produced when a sale of 9,500 copies could be guaranteed. Indeed, some of them - e.g. Horsham and Isle of Wight towns - can only be obtained locally; one searches in vain

for them in Stanford's. They were adapted at minimum cost from the 1:10,000 map and it showed. Chris was particularly critical of some of the traffic information on the current edition, (B, published 1982), of "London Central"; it was less accurate in some respects than was a map put out by the R.A.C. back in 1978. The OS "Town Map" just was not equal to the occasion.

As well as a comprehensive selection of the "Town Maps" there were also displayed examples of 1:10,000 mapping used, with questionable success, in telephone directories, and in various O.S. atlases. Chris also produced some experimental printings of OS 1:2500 sheets on orange, yellow and magenta paper, the object being to use the paper as a "colour" and thereby save a printing. The experiment just about worked using buff paper, but so far does not appear to have been followed up. Some of the colours chosen for the "Town Maps" and other modern O.S. productions were apparently intended to foil illicit photocopying. One member felt that the experimental colours adopted here might well foil attempts to sell the maps!

Report on Edinburgh Meeting, Saturday 9 November 1985 - Francis Herbert

Following the pattern of the previous four years, the CCS held a day meeting in Edinburgh as part of what has become known in CCS and BCS circles as the 'Three-day event' in November. The prior advertised programme had to be cancelled but nonetheless, our Secretary Yolande Hodson was able to step expertly into the breach with a very well illustrated talk on William Roy's life and work. As Yolande continues her work on maps in the Royal Library at Windsor Castle she has unearthed more facts and items associated with Roy: this made the ever-expanding corpus of knowledge about him all the more interesting. Naturally enough, as Roy was a Scot active in the Highlands in mid-eighteenth century military circles, mention was made of other surveyors and draughtsmen whom he would most likely have met and known at time in the Board of Ordnance Drawing Room in Edinburgh Castle. This sparked off the excellent idea of an exhibition of many of the Board of Ordnance manuscript plans of Scottish forts and such now held in the National Library of Scotland Map Room. In the afternoon, therefore, Yolande walked us around these items at the same time imparting information on military surveying, draughtsmanship, colour conventions, relief portrayal, etc. A fascinating and rewarding insight into the working background of the originator of the Ordnance Survey. Whilst members who attended this year's meeting can find no cause to thank the weather, we can all once more say 'Thank you' to Margaret Wilkes, Peter Milne, and other NLS Map Room staff for their warm and obliging hospitality. Photocopies of the August 1984 NLS list (14 pages) of Board of Ordnance plans (MSS.1645-1651) and of the 'List of signatures' (i.e. items arranged by surveyor/cartographer/draughtsman (5 pages) are obtainable from the Map Room at a cost of £2.52 inc.VAT.

NOTES AND QUERIES

O.S.N.I One-inch 'Third Series' John Cruickshank reports an addition to Appendix 5 of Richard Oliver's article on Irish 1:63,360 maps in Sheetlines No.13 - Sheet 3 of the Third Series in a 1965 reprint. M723, the military version of the same series, was first published in that year, and all nine sheets of Edition 1 - GSGS bear the print code 10,000/5/65/6717/OS (and the M.V.date 1967!) The marginal information conforms to Appendix 2, type I, except that the publication imprint, printcodes, and M.V.date are in purple. Copyright dates and unique numbers are exactly as the civilian version.

Grid-lines and the 1912 Kilworth Map - The earliest Ordnance Survey printed grids of any description seem to have appeared in 1910, on the Cambridge Third Edition District map and on the half-inch Manoeuvre Map of Southern England for that year. These are two-inch squares, giving very coarse map references although a suggestion for giving co-ordinates appears on the 1912 half-inch Manoeuvre Map of the Eastern Counties: each grid square should be divided mentally into four numbered squares, two each way, giving a two-figure reference. Tim Nicholson points out that the Irish one inch to the mile Manoeuvre Map of the Kilworth area for that year offers an improvement: a one-inch grid, in pale green (no doubt to avoid its lines obstructing or being confused with other features). A sticker pasted inside the front cover recommends that each square should be mentally divided into nine numbered squares, three each way, which was further progress towards precision in references. He wonders if there were any printed one-inch grids before this?

Kilworth was reprinted in 1913, while in 1914, with the coming of the war, sheets 115 and 107 of the Third Edition Large Sheet series, and also the 1914 Popular-style District maps for Aldershot North and South, were overprinted with a red one -inch grid for training purposes. On the standard Large Sheet maps subdivision into only four squares was again suggested; but a sticker on the Aldershot maps recommends subdivision into 100 squares, ten each way - a foretaste of the system made familiar to the public, and even more precise, with the kilometre grid of the New Popular series one inch maps from 1945. The Kilworth map, furthermore, uses the fine black broken contours at 100 ft. intervals better known from the group of experimental one-inch coloured maps that was launched with Killarney in 1913. Were there earlier instances? Though there is no layering, there is a delicacy of hillshading and hachuring that recalls the Dublin and Cork sheets of that group, if not Killarney; helped by an overall wash of palest green-brown that forms those maps' lowest layer colour. In some respects at least, he thinks that the Kilworth map furnished inspiration to the designers of the later ones, as well as initiating the use of small, and therefore useful, grid squares.

Irish 6" maps 1833-1846 Patrick Dempsey, Senior Reference Librarian of the Geography and Map Division at the Library of Congress, Washington DC 20540, has compiled a useful list of the libraries and other institutions known to him that contain sets of these first edition maps:

Armagh Observatory, Armagh	Public Record Office of Ireland, Dublin
Bibliothèque Nationale, Paris	P.R.O of Northern Ireland, Belfast
British Library, London	Public Record Office, Kew
Edinburgh University Library	Queens University, Belfast
Geological Survey, Dublin	Royal Geographical Society, London
House of Lords, London	Royal Irish Academy, Dublin
King's College Map Room, London	St. Patrick's College, Maynooth
King's Inns Library, Dublin	Trinity College Library, Dublin
Det Kongelige Bibliotek, Denmark	University College Library, Cork
Land Commission Office, Dublin	University College Library, Dublin
Linen Hall Library, Belfast ¹	University College Library, Galway
Marsh's Library, Dublin	University of London Library, London
National Library of Ireland, Dublin	Bodleian Library, Oxford
National Library of Scotland, Edinburgh ²	Valuation Office, Dublin
New York Public Library	
Newberry Library, Chicago	1. 9 counties of Ulster only
Ordnance Survey Office, Dublin	2. 26 counties of Eire, plus revision of remaining 6.
O.S. of Northern Ireland, Belfast ³	3. 6 counties of N.I. only
Public Archives of Canada, Ontario	4. 9 counties of Ulster plus Louth & Leitrim

He would be interested to hear of any other institutions with comprehensive holdings for a forthcoming Catalogue of Irish Maps.

ORDNANCE SURVEY MAPS.

The following is a list of the various Ordnance Survey Maps of the British Isles on sale to the public, together with the prices. E. Stanford, 13, 14 and 15, Long Acre, W.C., is the London agent; there are also provincial agents in most of the important towns of England, Scotland, and Ireland. Publications may also be ordered through any bookseller, and in towns where there are no agencies they may be ordered at the head post office.

scales or 15-753 miles to 1-inch scale.		Price per sheet.
1. United Kingdom. In two sheets. Size 31½ x 24½ inches. Price 5s.	On paper.	Mid. on lines.
Mounted as a wall map, 10s.	4.	4.
Ditto, with moulding and roller, £1.		
(Will be published by Messrs S. 1, 1905.)		
10 miles to 1-inch scale.		
2. Great Britain, engraved. Printed from a transfer from copper, latitude and longitude not marked.	1 0	
(a) Outline edition in 12 sheets, water in blue. Size about 30 x 13 inches. On paper.		
(b) Hill shaded edition in 8 sheets, with hills in brown, roads in blue and water blue. (Sheets 1 and 2) (3 and 4) (5 and 6) (7 and 8) of this edition are combined.) On paper.	1 0	
Sheets specially printed for mounting as one map, together with a title sheet and marginal lines. Price 9s. per set.		
The above sheets mounted on board, to form one map, and bound with blue ribbon. Price complete, £1 1s.; or with moulding and roller, £1 10s.		
4 miles to 1-inch scale.		
3. England and Wales, engraved in black, latitude and longitude marked, no hill shading or contours. Size 22½ x 15 inches. On paper.	1 0	
4. England and Wales, engraved. Printed from a transfer from copper, hills in brown, roads in blue, water blue, woods green. Size 22½ x 15 inches.		
(a) On paper.	1 0	
(b) On this paper, folded in cover or unfolded.	1 0	
5. Scotland, engraved. Printed from a transfer from copper, with water in blue, latitude and longitude marked, no hill shading or contours. Size 18 x 12 inches. On paper.	1 0	
6. Scotland, engraved. Printed from a transfer from copper, hills in brown, roads in blue, water blue, woods green. Size 18 x 12 inches.		
(a) On paper.	1 0	
(b) On this paper, folded in cover or unfolded.	1 0	
7. Ireland, engraved. Printed from a transfer from copper, with water in blue. Size 18 x 12 inches. On paper.	1 0	
8. County and District Maps of Great Britain, cheap edition, roads in brown, latitude and longitude marked, on this paper or folded in covers. In sheets. Unmounted.	1 0	
Folded in covers 6d. and 1s.		
2 miles to 1-inch scale.		
9. England and Wales, photo-etched on copper. Printed from a transfer from copper, hills and contours in brown, principal roads in blue, woods green, water blue, latitude and longitude marked. Size 18 x 12 inches.	1 0	
(a) Folded in cover or unfolded.	1 0	
(b) Combined sheets (various sizes) folded in cover or unfolded.	1 0	
1-inch scale.		
10. England and Wales, outline, contours in black, latitude and longitude marked. Size 18 x 12 inches. On paper.	1 0	
11. Ditto, hills hatched in brown, latitude and longitude marked. Size 18 x 12 inches. On paper.	1 0	
12. Ditto, hills hatched in black, latitude and longitude marked. Size 18 x 12 inches. On paper.	1 0	

* Publication in progress.

ORDNANCE SURVEY MAPS.

2

Price per sheet.		Mid. on lines.
On paper.	4.	4.
13. England and Wales, hills hatched in brown, contours red, roads in blue, water blue, woods green (on revised edition), magnitude variation shown, latitude and longitude not marked. Size 18 x 12 inches. On thin paper, either flat or folded in covers. Single sheets.	1 0	1 0
Combined sheets 1 0		
14. Scotland, outline and contours in black, latitude and longitude marked. Size 24 x 18 inches. On paper.	1 0	2 0
15. Ditto, hills hatched in brown, and black contours, latitude and longitude marked. Size 24 x 18 inches. On paper.	1 0	
16. Ireland, outline, not contoured, in black, latitude and longitude marked. Size 18 x 12 inches. On paper.	1 0	
17. Ditto, outline, not contoured, in black, latitude and longitude marked, showing county, rural, urban, and county through boundaries in red. Size 18 x 12 inches.	1 0	
18. Ditto, hills hatched in black, latitude and longitude marked. Size 18 x 12 inches. On paper.	1 0	
19. Ditto, hills hatched in brown, roads in blue, water blue, woods green, latitude and longitude marked. Size 18 x 12 inches. On thin paper, either flat or folded in covers.	1 0	
20. Combined maps of areas round certain large towns, or other areas, such as the New Forest and Lake District, and published in various forms and sizes. These maps usually show outline and contour in black and roads in brown. In sheets, unmounted 1s. to 1s. 6d. Folded in cover 1s. to 1s. 6d.	1 0	1 0
6-inch scale.		
21. Great Britain, water coloured blue or black lined, contours in black, latitude and longitude marked. Holograph or photostereograph. Size 18 x 12 inches. Engraved or photostereograph (where not published in quarter sheets). Size 36 x 24 inches.	1 0	
22. Ireland, engraved or holograph, contours in black, latitude and longitude not marked. Size 36 x 24 inches.	2 0	
4-inch scale.		
23. Houses ruled in black, water blue or black lined, latitude and longitude not marked. Size 38 x 25½ inches.	3 0	
24. Houses red, water blue, roads brown, latitude and longitude not marked. Unrevised editions only coloured in this form. Size 38 x 25½ inches. From 2s. 6d. to 23s., according to the amount of colouring. This form is gradually being superseded by 22.		
Town Scales.		
25. 1/4 inch scale, houses stippled. Size 38 x 25½ inches.	2 0	
26. Ditto, houses ruled. Size 38 x 25½ inches.	2 0	
27. Ditto, houses red, water blue, roads brown. Size 38 x 25½ inches. From 2s. 6d. to 15s., according to the amount of colouring. Applies to unrevised only.		
28. 5-foot scale, houses stippled. Revised. Size 38 x 24 inches.	3 0	
Index Maps.		
29. Indexes to the sheets of the 1-inch scale maps of England and Wales, Scotland, and Ireland, scale 50 miles to an inch. Size about 18 x 13 inches.	0 2	
30. Index to the sheets of the 6-inch scale map, parishes coloured. England and Wales. Size 18 x 12 inches.	1 0	
Scotland. Size 24 x 18 inches.	1 0	
31. Index to the sheets of the 1:2500 scale map, parishes coloured. England and Wales. Size 18 x 12 inches.	1 0	
Scotland. Size 24 x 18 inches.	1 0	
No. 31 and 32 are identical with Nos. 10 and 14, but with sheet lines added, printed on this paper, and coloured to show civil parishes.		

* Publication in progress.

O.S. leaflets - In Tim Nicholson's article 'OS map marketing ephemera before 1918' printed in Sheetlines No.13, in writing of 'a leaflet describing all the principal maps' of 1904-5 he continues, "This may have been the 16-page so-called 'leaflet' distributed to the trade (not the public)..." Francis Herbert suggests that this item was, in fact, just a single 2-page leaflet entitled Ordnance Survey Maps which gave brief descriptions of maps from 1: 1 000 000 to 1:500 scales with additional information on available indexes (see illustration). Copies of these undated leaflets were distributed, for example, as loose inserts in at least seven issues of The Geographical Journal (Royal Geographical Society) from September 1905 to November 1909 inclusive. The leaflet issued with the September 1905 GJ notes "(Will be published by March 31, 1905)" beneath the UK 1: 1 000 000 2-sheet map, indicating that this leaflet was printed prior to that date and even may have been issued to others (public or trade) around the end of 1904. The 5-line note at the head of the earlier leaflets says that maps are on sale from Stanford the London agent, or, "in towns where there are no agencies they may be ordered at the head post office." This is altered in copies of the leaflet issued in the April 1907 GJ onwards; large-scale maps are to be had from Stanford, small-scale maps from Fisher Unwin. Post Offices are 'out' - this reflects the known change in OS sales policy at the time. It is perhaps significant to add that, in addition to being the main agent for OS maps, Stanford was also the agent for the publications of the RGS at this time.

The Salmon Collection Francis Herbert also advises that he is indebted to Dov Gavish (Air-photo Section, Department of Geography, The Hebrew University of Jerusalem) for pointing out that Salmon's first name was Frederick - not Francis (see 'The Salmon Collection of map samples in the Map Room of the Royal Geographical Society', Sheetlines No.4, September 1982). This was not a Freudian slip but only followed the RGS records. The same problems - and those of incorrect dates - were discovered on a much larger scale whilst checking records for his article 'The RGS's membership, the map trade 1830 to ca 1930: an introductory essay with listing of some 250 Fellows ...' (Imago Mundi, vol.35, 1983). Perhaps comments Francis, I should have learned from that experience, but I had assumed that the two colonels who proposed Salmon as a Fellow (Hedley and Winterbotham) 'knew their man'.

Bodleian bother 90 per cent of the map collection is located on the below-ground floors where work is programmed on the installation of an environmental control system. Betty Fathers of the Map Section advises that this material will probably not be available to either readers or staff from June 1986 to Easter 1987: further details will be available in the spring from the Library Secretary, Bodleian Library, Oxford OX1 3BG.

Repairs to maps John Beer writes that he has carried out many repairs to the items in his collection and agrees with much of the note in Sheetlines No.13, but he queries the use of Archivist's repair tape as being a relatively new product with little known of its long term effects. Perhaps one of our map librarians would like to comment. Wilber Cocke points out that Ademco Drimount Ltd have sold out to Powder Products, P O Box 5, Spondon, Derby DE2 7BP (0332-666400) and their Mr. Ron Buxton can advise enquirers the location of local stockists. John has had considerable success in reinforcing tears with a thinned patch of similar texture paper to the map applied to the reverse side with a stain-free paste. Great care must be taken with any localised repair of this type to prevent cockling of the map. He uses 'Locktite' vinyl mender for butt-joints and repairs to cloth backing, but the question must be raised here also of long term effects especially as this adhesive cannot be removed from the map in future.

1:50 000 Integral covers Many members have enquired about the history and present state of integral covers on the 1: 50 000 sheets: the following information prepared by Yolande Hodson is intended only as a brief resume. The first 1:50 000 map with an integral cover was sheet 103, Blackburn and Burnley, First Series, Edition A/* (this superseded Edition A with a card cover) published in 1979. It was the only integral cover sheet to be issued with a questionnaire which asked for the user's views on the new format. Since then there has been continual feed-back in the form of completed questionnaires and correspondence, and a review of this response is being undertaken before a decision is made on the future of integral covers.

Sheet 103 underwent a subsequent impression (Second Series A/*) to rectify an important disadvantage which soon became apparent to military users. The first printing of the integral cover sheet was to the joint specification (i.e. military and civilian) and required nine folds. The bigger sheet posed storage and handling problems in MOD; it was therefore necessary to have two sets of reproduction material (repmat) for the joint specification - one lacked a cover and was for MOD use. This proved unnecessarily expensive, so a distillation of the marginal text was agreed, excluding the French and German texts and omitting general OS information in order that the integral cover could be accommodated in eight folds. As a result of this experience, none of the other integral cover sheets was issued with nine folds.

At the time of writing (August 1985) the following sheets have been published with integral covers:

40,65 (with photograph), 103, 119, 125 (photograph), 132, 142 (photograph), 150 186, 197, 204.

O.S. Artists. - A short but interesting feature article by John Paddy Brown appears in The Scotsman Magazine for September 1985, complementing his contribution in Sheetlines No.6 concerning the artists whose work adorns the O.S. tourist maps in the inter-war period. Of particular attraction is the faithful reproduction in colour of the covers for Cairngorms, Deeside, Oban, Dunoon and The Clyde and Burn's Country. Interested members may obtain the appropriate back number for 48 pence post paid from Campbell Kennedy, 46 Cloan Crescent, Bishopbriggs, Glasgow G64 2HW.

FUTURE MEETINGS

Saturday 22nd March 1986 - Study group on the subject of OS map covers at the home of Guy Messenger, 27 South View, Glasgow, Sides. 1515 000 (0072-801013). Numbers will be limited: please contact Guy if you are interested in attending.

Saturday 10th May 1986 - Society AGM. Details in next Sheetlines

Saturday 14th June 1986 - Seventh Series Seminar. Details later.

STOP PRESS (1) Offprints of the biographical essay on Sir Charles Arden-Close (see Sheetlines 10 p.12) now available from Guy Messenger for £1.70 post free. (2) Richard Oliver co-opted to serve on the Committee. (3) Article on the marketing of OS maps before 1918 (I.Mumford/P.K.Clark) held over until next issue.

THE CHARLES CLOSE SOCIETY for the study of Ordnance Survey maps is open to all at an annual subscription of £5.00 (UK) or £7.50 for family, corporate, or overseas members. Remittances (Sterling please) to the Membership Secretary.

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