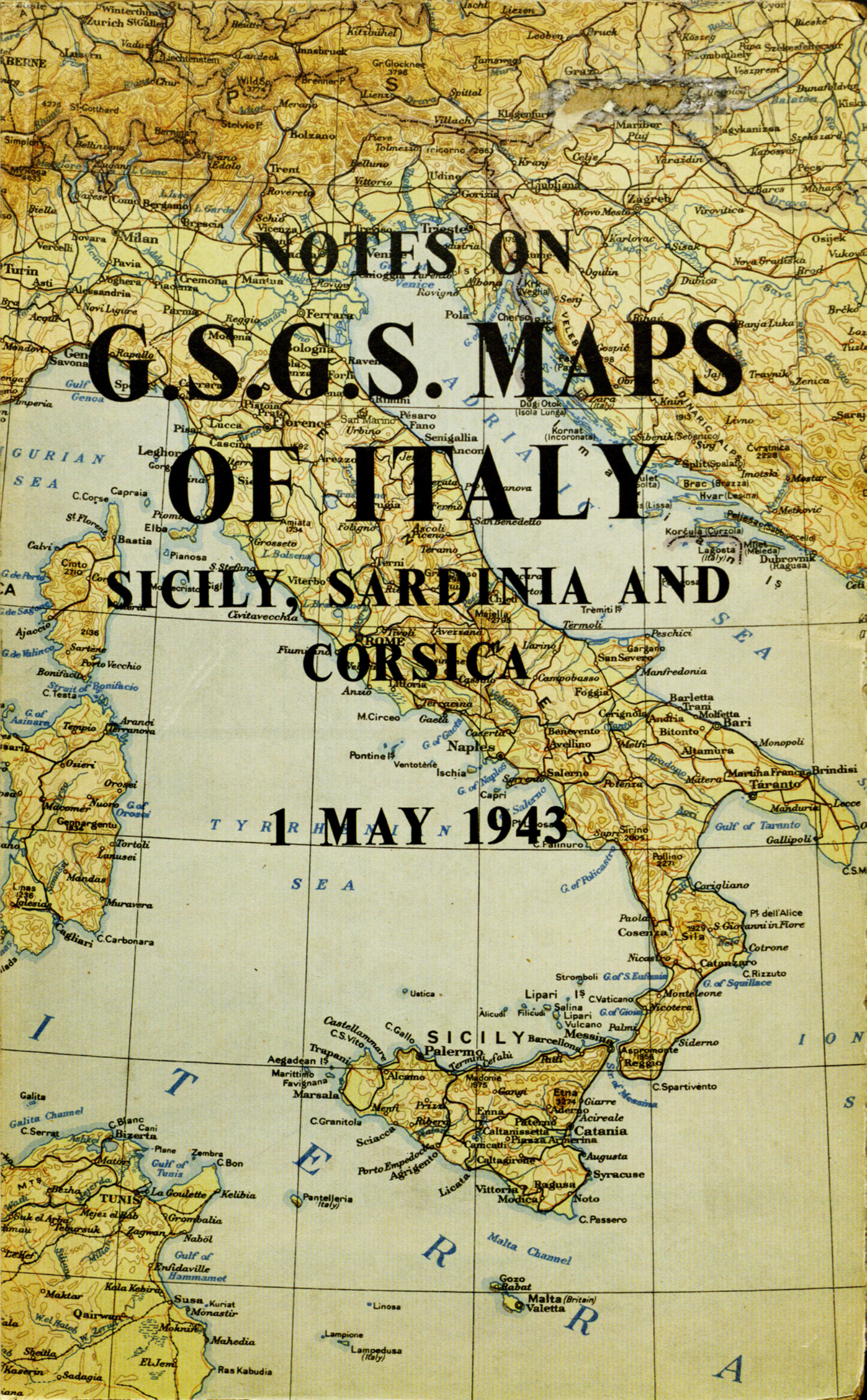


NOTES ON G.S.G.S. MAPS OF ITALY SICILY, SARDINIA AND CORSICA

1 MAY 1943



Accession No: 0011230

Class No: 912(45)

NOTES ON G.S.G.S. MAPS OF ITALY SICILY, SARDINIA, AND CORSICA

THE object of these notes, which supersede those on Sicily and on Sardinia dated 27 November 1942, is to set out as completely as possible the mapping position in this Central Mediterranean area. It must immediately be emphasized that the picture given is accurate only for a certain date, 1 May 1943. Projects given here may have to be abandoned, for either production or strategic reasons; others may take their place. Further town plans will almost certainly be produced; coloured editions of 1/50,000 and 1/25,000 sheets may or may not be extended beyond Sicily, Sardinia, and the south of the mainland of Italy. On the other hand, the series mentioned and the information supplied will, by and large, be that issued for operational requirements in this area.

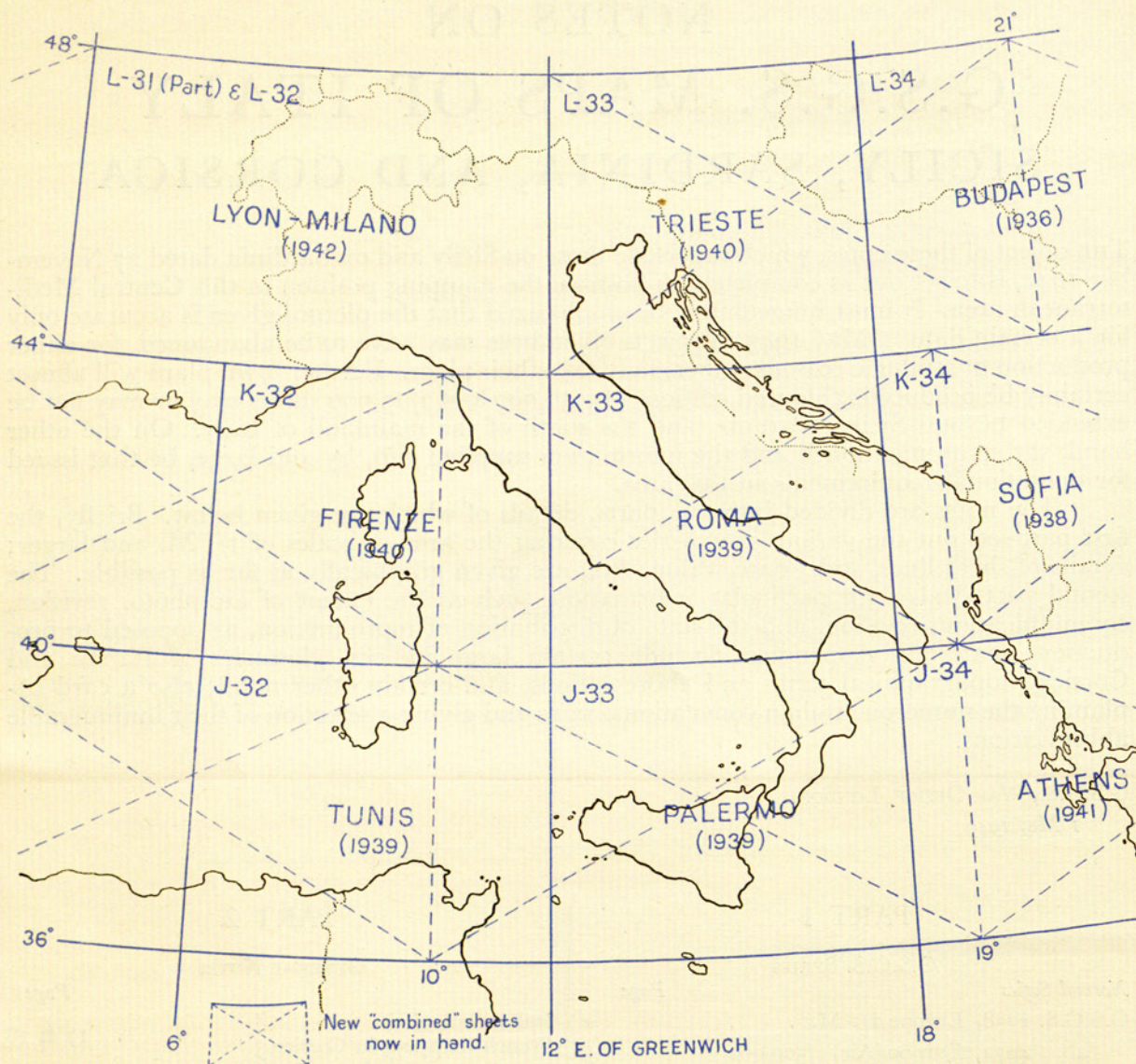
The notes are divided into two parts, details of which are given below. Briefly, the first part sets out the various map series covering the area at scales of 1/1 M. and larger; details of sheet lines, style, date, value, &c., are given graphically as far as possible. The second part deals with particular information, such as the extent of air photo. revision, communications revision, and the state of distribution of reproduction, as opposed to production, material. Appendices include certain large indices, glossaries of Italian and Corsican topographical terms and abbreviations, and certain other notes; also a card explaining the numerous Italian conventional signs and giving a selection of their innumerable abbreviations.

G.S.G.S., WAR OFFICE, LONDON.
1 May 1943

PART 1			PART 2		
<i>Normal Series</i>	G.S.G.S. SERIES	Page	GENERAL NOTES		Page
G.S.G.S. 2758,	Europe 1/1 M.	2	Italian mapping	}	17 & 18
„ 4072,	Europe (Air) 1/500,000	3	French mapping in Corsica		
„ 3982,	Europe (Air) 1/250,000	4	Air photo. revision		18 & 19
„ 4230,	Italy 1/250,000	5 & 6	Communications revision		20 & 21
„ 3982,	(Military) Sardinia and Corsica 1/250,000		Junctions of adjoining series round the Italian frontier		22 & 23
„ 4164,	Italy 1/100,000	7 & 8	Selection of G.S.G.S. Map Library material		24
„ 4229,	Italy 1/50,000	9, 10, & 11	Distribution of reproduction material		25
„ 4228,	Italy 1/25,000				26 & 27
„ 4163,	Pantelleria 1/25,000	11	APPENDICES		
„ 4406,	Lampedusa and Linosa 1/15,840		(i) Notes on the Italian Map reference system.		
„ 4240,	Corsica 1/500,000	12 & 13	(ii) Report on Italian Military Geographical Institute (1938).		
„ 4238,	Michelin (Sheet 90) 1/200,000		(iii) Glossary of Italian topographical terms and abbreviations.		
„ 4398,	Corsica 1/50,000	14 & 15	(iv) Glossary of Corsican topographical terms and abbreviations.		
„ 4380,	Italy (Mainland) Town Plans		(v) Gazetteers of Italy (Mainland) (provisional); of Sicily; of Sardinia; and of Corsica.		
„ 4379,	Sicily Town Plans	16	(vi) Detailed indices to G.S.G.S. 4164, 4229, and 4228.		
„ 4378,	Sardinia Town Plans		(vii) Indices to charts.		
„ 4381,	Corsica Town Plans	16	(viii) Glossary and Reference Card for G.S.G.S. Maps of Italy.		
<i>Special Maps</i>					
G.S.G.S. 3982,	with I.S.T.D. "Topo- graphical" overprints	16			
„ 4259, 4349, and 4289,	Geological maps	16			

(N.B. The cover is an extract from G.S.G.S. 2957, Europe & Asia 1/4,000,000, Sheet 31 A, *The Mediterranean*.)

G.S.G.S. 2758, EUROPE 1:1,000,000



General value. The primary use of this series is for topographical "form-at-a-glance", for both Army and R.A.F. purposes. In spite of its obvious limitations of scale, it has been found that, *faute de mieux*, these maps are of help on the ground.

Ample reliable material between the scales of 1/500,000 and 1/1 M. was available for the compilation of the series, and, at its scale, the series is accurate in this area for such basic details as relief, positions of towns, &c.; for communications it is of only general value.

It should be noted that on some sheets smaller names have thickened and are difficult to read.

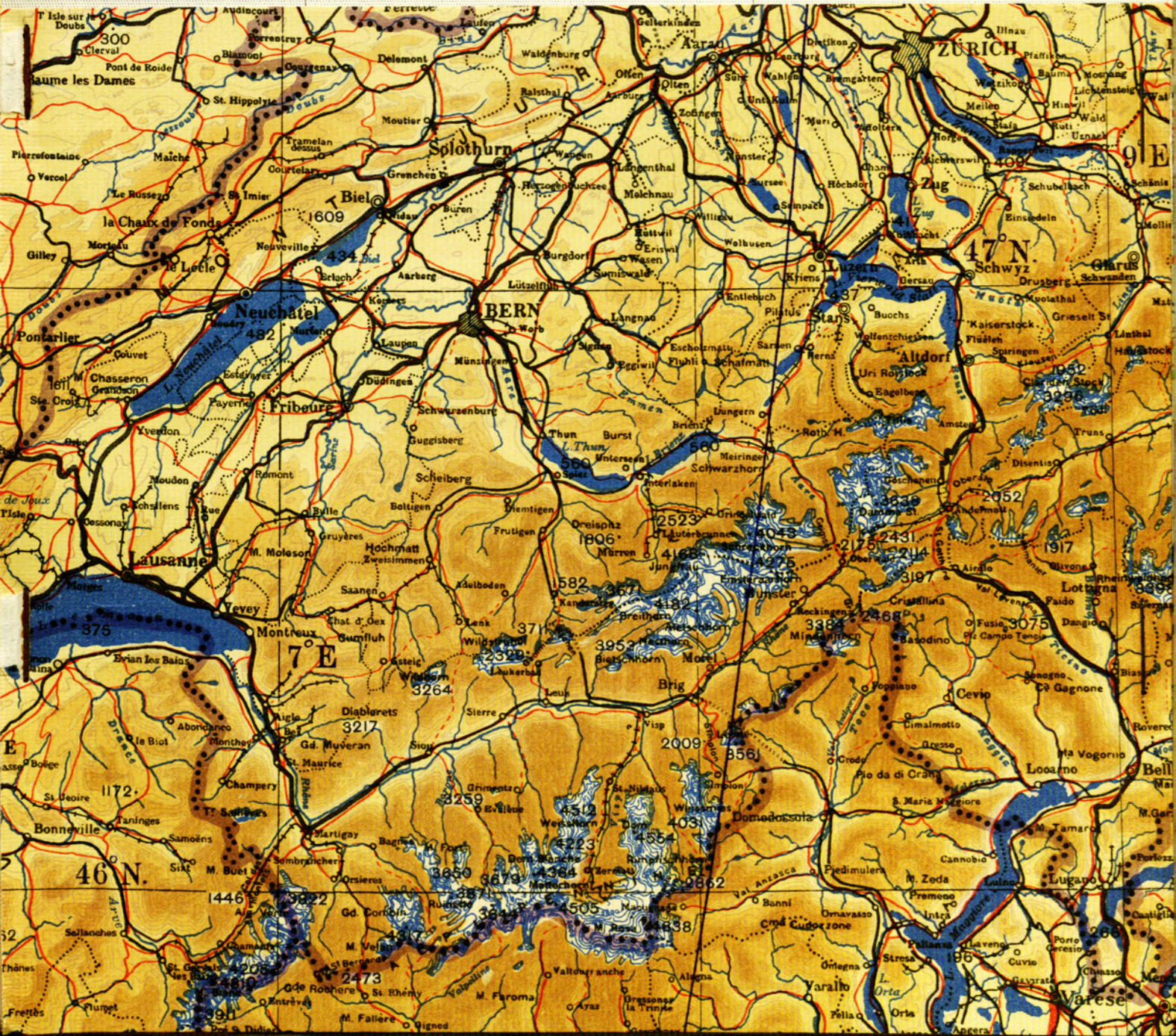
Developments in hand. A programme for converting all sheets to "Ground/Air" style (the lower sample) from their original form (the upper sample) is being implemented for this series. The main changes are in the tint colours used and in the additional emphasis laid on features conspicuous from the air.

In conjunction with the "Ground/Air-ing" of sheets a programme of combination (as illustrated by the diagonal broken lines in the index) is in hand. The only sheet published in this enlarged form to date is "Lyon-Milano".

Dates and current revision. Dates as given on the index are those of last revision, however slight.

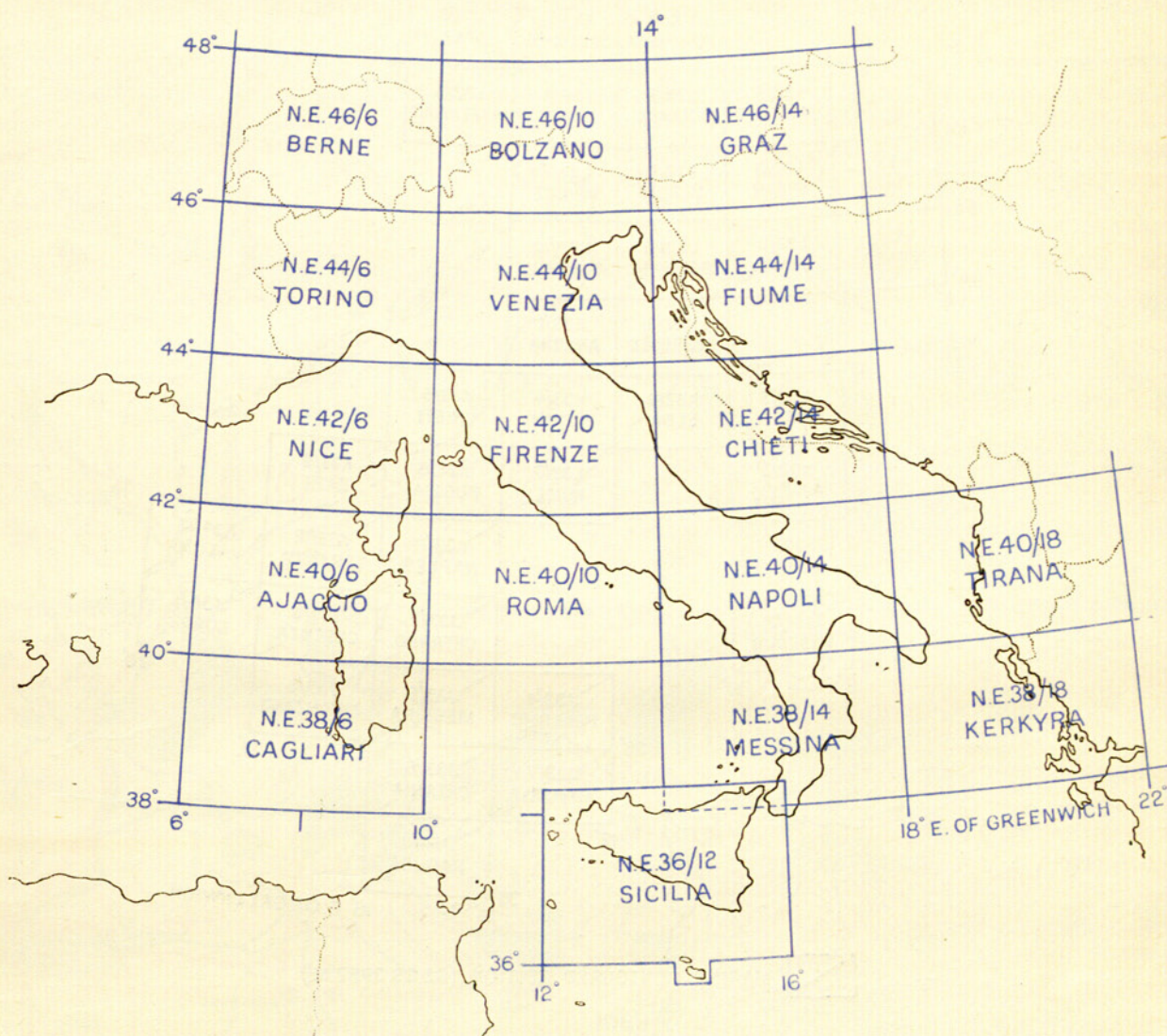
The alteration in style and sheet lines mentioned above is providing an opportunity for revision of the more flagrant errors, and for the incorporation of new developments (particularly of communications).

All sheets of the series are available.





G.S.G.S. 4072, EUROPE (AIR) 1:500,000



General value. As its title indicates, this series is principally a flying map. It has in fact been designed solely to meet R.A.F. (in particular, Bomber) requirements, and the emphasis on certain features, the generalization of all outline, and the elimination of detail not essential to the airman, is shown by the sample. Woods stand out conspicuously; in fact their very prominence is a danger, since generally they are not well defined on the ground in this area.

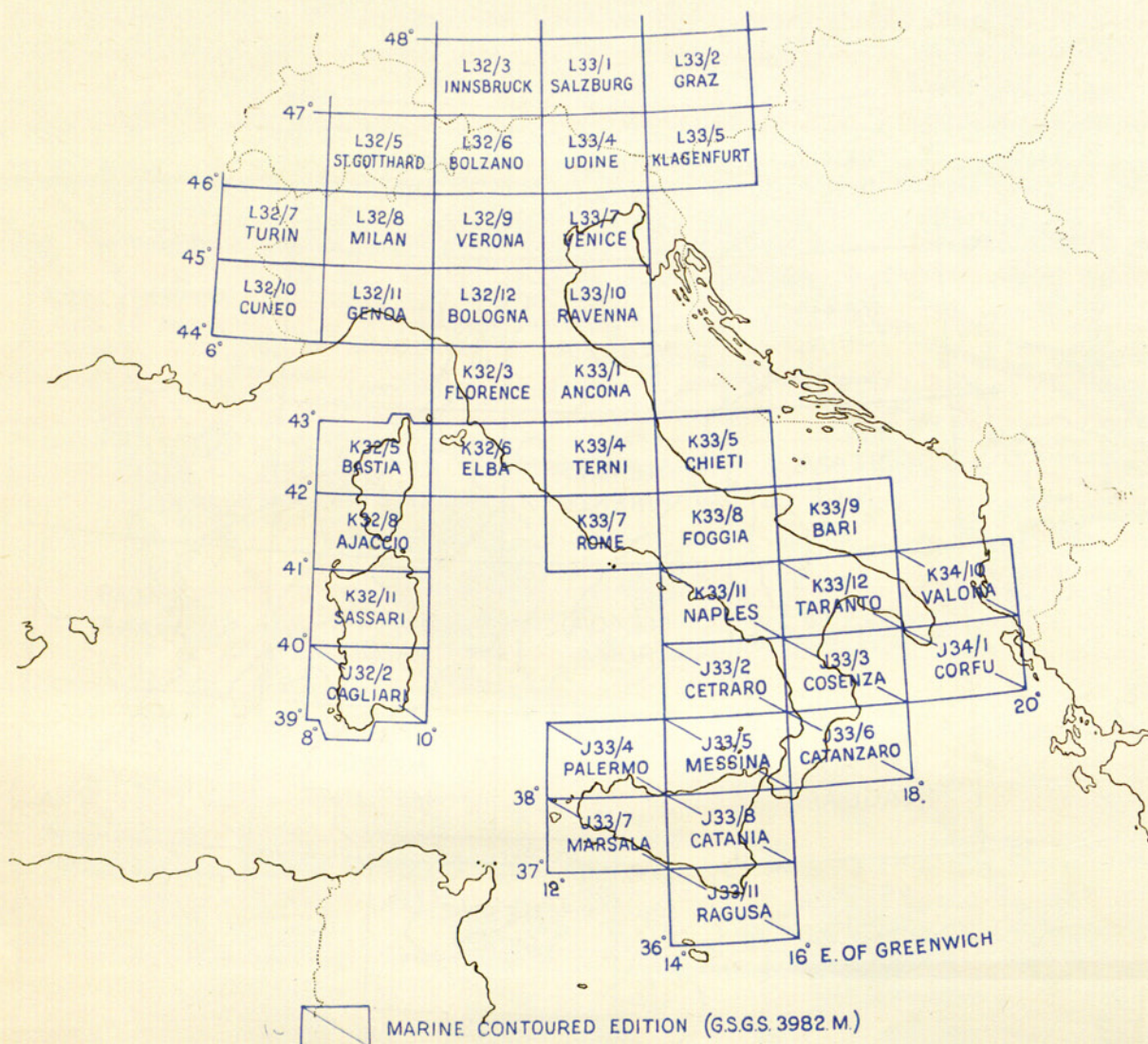
The generalized style of the series limits its value for military use, nor is it infallible for communications. The series has, however, been compiled from sound local maps of equivalent scale, and apart from this generalization should be accurate.

It should be noted that the military grid is shown by ticks and crosses (in red on the sample).

Each sheet overlaps by 20 minutes (about 2 inches) those to north, south, east, and west. Except in the case of the Sicilia sheet, these overlaps have not been shown on the index.

Date and current revision. Sheets of the series, of which all in this area are available, were compiled in 1941-1942. As a routine, corrections are recorded for future incorporation: no new editions are contemplated at the moment.

G.S.G.S. 3982, EUROPE (AIR) 1:250,000



General value. Again, this is essentially a map for use in the air, and comments made under this heading on page 3 apply here with equal force. At this scale it has been possible to show ground features in greater detail, but its "aertex" generalization, while of value for air use, still tends to reduce considerably its value as a military map. Compiled from sound material (principally the 1/250,000 "Carta d'Italia del Touring Club Italiano"), it is for the most part sound for positions and names. It is fairly up to date for principal communications, though (since it is an air map) this point is incidental. Its open complexion, combined with its grid ticks, make it useful for plotting information (e.g. intelligence) in manuscript.

Each sheet of the series overlaps by 10 minutes those to N. and S., and by 15 minutes those to E. and W.

The sheets covering Sardinia and Corsica are "layered", and are not available in unlayered form. No other sheets are being prepared in layered form at the moment.

A marine contoured edition of this series—known as G.S.G.S. 3982 M (to be distinguished from G.S.G.S. 3982 (Military), for which see page 6)—is superseding the straight edition. Sheets so far published in this style—the sample is an extract of one—are marked on the index. The "salmon and shrimp" tints denote fathom "layers" as plotted by the Admiralty. No revision to detail is incorporated in this edition.

Dates and current revision. Sheets of this series, of which all in this area are available, were compiled by G.S.G.S. in 1940–1942. While revision is noted, no new editions are contemplated for the moment in this area.





390,000 m. N.

Magnetic North at centre of sheet is 3° 28' West of True North.

8
7
6
5
4
3
2

CONVERSION TABLE

Metres	Feet
4,500	15,000
4,000	13,000
3,000	10,000
2,000	7,000
1,000	3,000
0	0

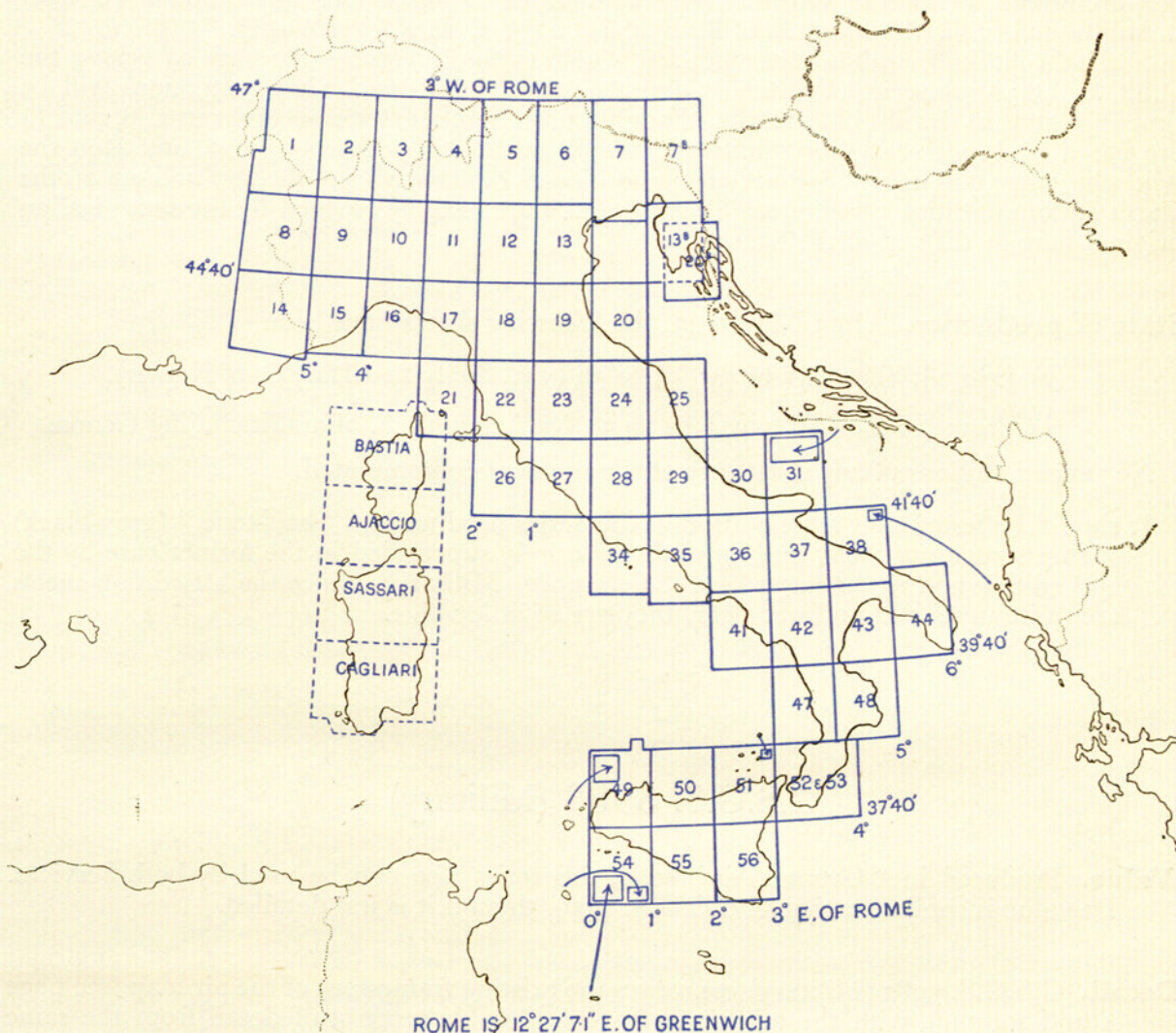
37°

2

METRES 2000

G.S.G.S. 4230, ITALY 1:250,000

G.S.G.S. 3982 (MILITARY), CORSICA & SARDINIA 1:250,000



The index illustrates that the main series, G.S.G.S. 4230 (sample opposite), covers only Sicily and the mainland of Italy. Corsica and Sardinia are covered by a Military edition of G.S.G.S. 3982 (sample and notes on page 6) on different sheet lines. The value of both series is similar.

G.S.G.S. 4230

Value. Produced in "Army/Air" style, this series is suitable for use by the two Services. Generally its sheets are equivalent in value to those of the Ordnance Survey's $\frac{1}{4}$ -inch-to-the-mile map of Great Britain.

Detail. G.S.G.S. 4230 was taken by direct photography from, and, except in the north, is on the same sheet lines as, the 1/250,000 Italian series "Carta d'Italia del Touring Club Italiano" dated 1929-1937. Communications revision has been carried out, and road and rail classifications agree with those on larger-scale series, red road-fillings showing the approved general road classification system for the country. The black name plate is extremely detailed, and some of the smaller names are difficult to read. The results of air photo. revision have not been incorporated; for their scale, however, the maps are generally accurate, except in regard to aqueducts, for which larger scales should be consulted. Agreement between this map and larger scales may not be precise, and some slight differences in detail may occur; without other evidence the dates of the originals should be the deciding factor. Dates on G.S.G.S. 4230 can be considered only as approximate within 2 or 3 years, as Italian originals carry only printing (and not production or revision) dates. Contouring (for layer boundaries) has been taken from old contoured editions of some of the Italian 1/250,000 originals. The sharply defined woods areas, taken from various sources, may again be misleading, though a footnote emphasizes that they are probably neither accurate nor indeed well defined on the ground.

It should be noted that the series is on graticule sheet lines, and that longitudinal values are based on Rome. This means in this case that the longitude value of any sheet corner (except the irregularly shaped sheets in the NW.) is a whole degree E. or W. of Rome. To convert this to an East of Greenwich reckoning, $12^{\circ} 27' 7.1''$ has to be added (if east) or subtracted (if west) (e.g. 3° E. of Rome is $15^{\circ} 27' 7.1''$ E. of Greenwich).

In the N. the series has been extended to join without overlaps (see page 24 below) the G.S.G.S. 1/250,000 series of France, Germany, and Yugoslavia. These extensions will be similar in style to the rest of the series, though the W. and S. extensions of sheets 1, 8, and 14 are based on French 1/200,000 material; the N. extensions of sheets 1, 2, 3, and 4 on the Michelin 1/200,000 map of Switzerland; and N. and E. extensions of sheets 7 and 7 B on the Carta Automobilistica 1/200,000. (Sheets 5 and 6 are entirely covered by the same Italian original map as the rest of the country.)

State of production. On 1 May 1943, the following sheets have been

(a) printed: Sheets 41 to 44; 47 to 56 (viz., Sicily and Italy S. of Naples).

(b) proved: Sheets 16 to 31; 34 to 38 (viz., roughly S. of and including Genoa).

No revised editions of any sheets are at the moment contemplated.

It should be noted that a 1st edition of this series produced in "half-tone" (grey-black) of sheets covering Sicily and Sardinia is entirely superseded in the former case by the 2nd edition and in the latter by G.S.G.S. 3982 (Military). Since the 1st edition sheets are quite unrevised and not clear, they are of little value.

G.S.G.S. 3982 (Military)

Value. Produced in "Ground/Air" style, this series also can be used by both Services. Its value is similar to that of G.S.G.S. 4230, though it is less detailed.

Detail. G.S.G.S. 3982 (Military) comprises the existing framework of the air map (see page 4 and sample), with the addition of a considerable amount of detail from the same 1/250,000 C.I.T.C.I. maps as are the basis of G.S.G.S. 4230. Among these additions are: added definition and extra tributaries to rivers; extra small towns and villages; improved alinement of railways and roads, and many additional tracks. The standard Italian road classification has been applied to Sardinia, with a few necessary local modifications. The road classification on Corsica has gone sadly astray on this series, and in most cases it gives a serious overestimate of the probable road widths (given correctly on G.S.G.S. 4398, Corsica 1/50,000). In Corsica, name spellings for smaller places on this series have acquired rather too strong an Italian appearance through the influence of the Italian 1/250,000 map, which was used for the addition of detail. G.S.G.S. 4238, Michelin 1/200,000, sheet 90, is of assistance in this respect.

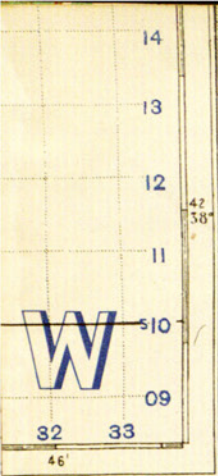
While believed to be sound in the main, these four sheets are not as detailed as sheets of G.S.G.S. 4230, and hence there is greater need to use them in conjunction with larger scales. Air photo. revision has not been incorporated from larger scales; e.g. the large new development of Carbonia, south of Iglesias, in Sardinia, is not shown on the "Cagliari" sheet.

As in the case of G.S.G.S. 3982 itself, sheets carry a 20-minute overlap. (G.S.G.S. 4230 carries no overlaps, except for the special case of sheet 20 B.)

Production. All four sheets are available.

Revision. While information for some degree of revision is available for all sheets (e.g. by comparison with larger scales), no revision is in fact in hand at the moment.

(Note: Other series covering Corsica are described on page 12.)



G.S.G.S. 4164, ITALY 1: 100,000



1ST EDITION SHEETS PUBLISHED } AS ON 1ST MAY 1943
 2ND " " " "

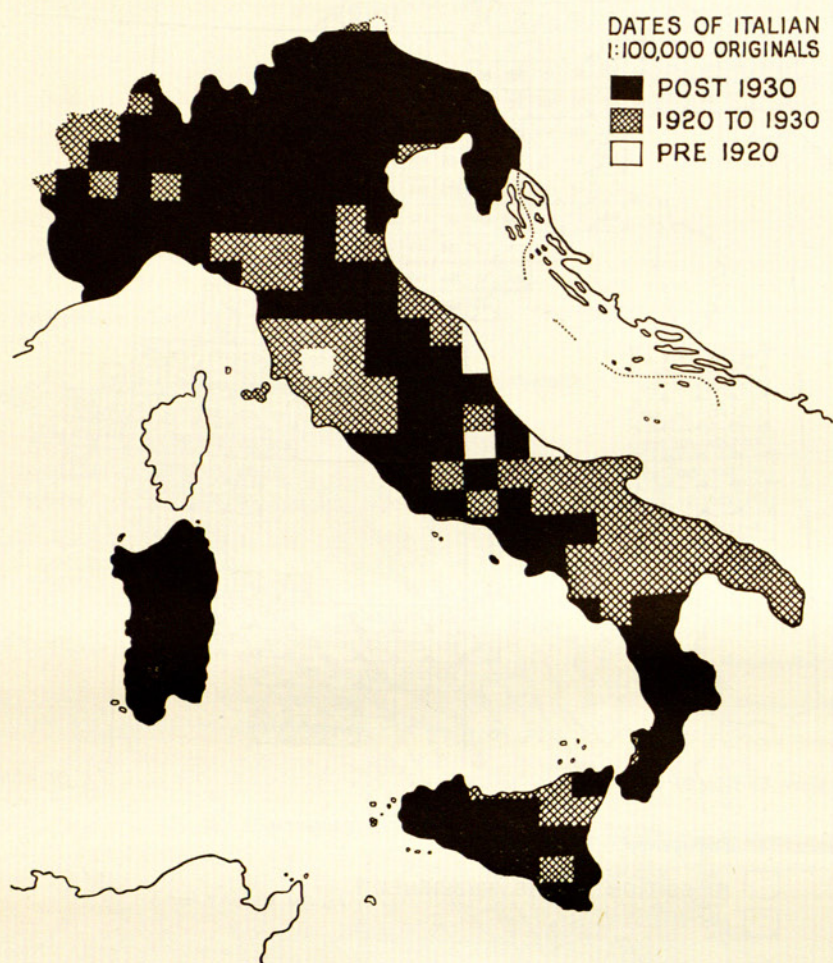
Value. As will be seen from the sample, part of the value of this series, which has been reproduced direct from Italian originals, is lost through the muzziness of the contours and the thickness of the black detail plate.

Detail. 2nd edition sheets in the S. and 1st editions in the N. carry communications revision whose probable date of value is 1936–1939. Road classification in this revision is shown by varieties of red filling, the route numbers of Strade Statali (the 6-metre-wide class) being given; it should be noted that far too great width values have been given to roads on editions without the red road fillings. In Sicily a certain amount of revision based on air photographs is also incorporated. In respect of accuracy the series is probably fairly sound, though in some cases out of date. The sample, which shows woods in green, is taken from one of nine Sicilian sheets (sheets 248, 249, 257, 258, 265–268, 271) in this style; on all other sheets woods are shown by a ubiquitous tree “stipple” in black which gets rather easily confused with the little black dots indicating houses. The shapes of woods have nowhere been revised, and should be accepted with caution. Aqueducts are reliable to the date of the Italian original maps copied, and no comprehensive revision in respect of them has so far been made (e.g. by comparing them with maps on other scales).

It should be noted that six sheets of this series cover the same area as one sheet of G.S.G.S. 4230; and that this series also is on graticule sheet lines, with longitudinal values based on Rome.

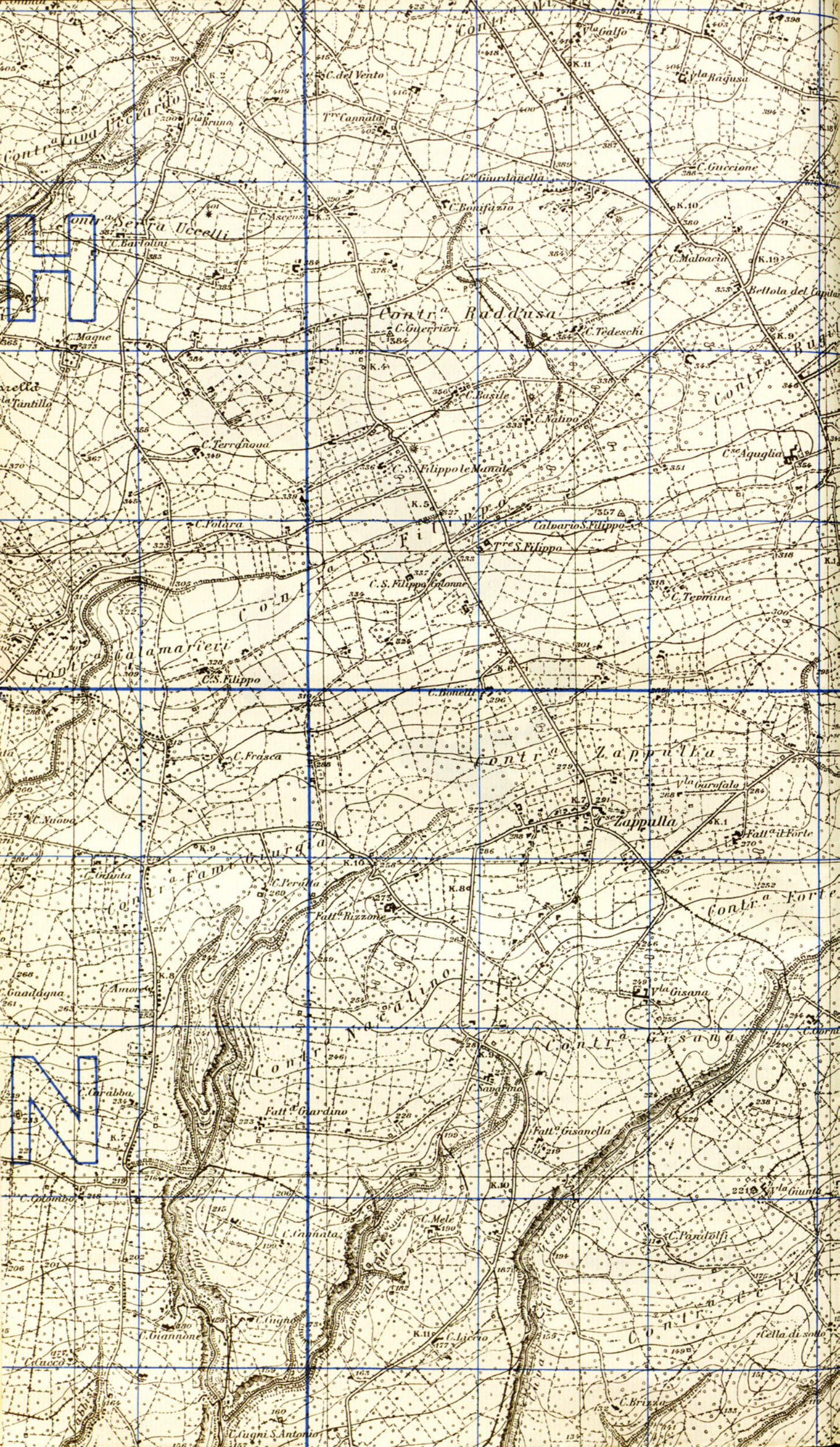
In the NW. corner sheets are being extended to join precisely with the G.S.G.S. 1/100,000 series of Germany and France. In the area of Switzerland they are being compiled and redrawn from Swiss 1/100,000 sheets, and hence will be in a slightly different style.

Dates. The official Carta d'Italia 1/100,000 sheets, from which this series is taken, vary in date between 1907 and 1937, most sheets being of the 1930 order. The index below shows the position with regard to dates of original sheets. Taking Sicily as an example: 8 sheets are dated 1937; 10 sheets 1930-1934; and the remaining 9 sheets 1923-1929. The block of eight 1937 sheets bring the average date for this area rather higher than in the rest of the country. In Sardinia all sheets are dated 1931.

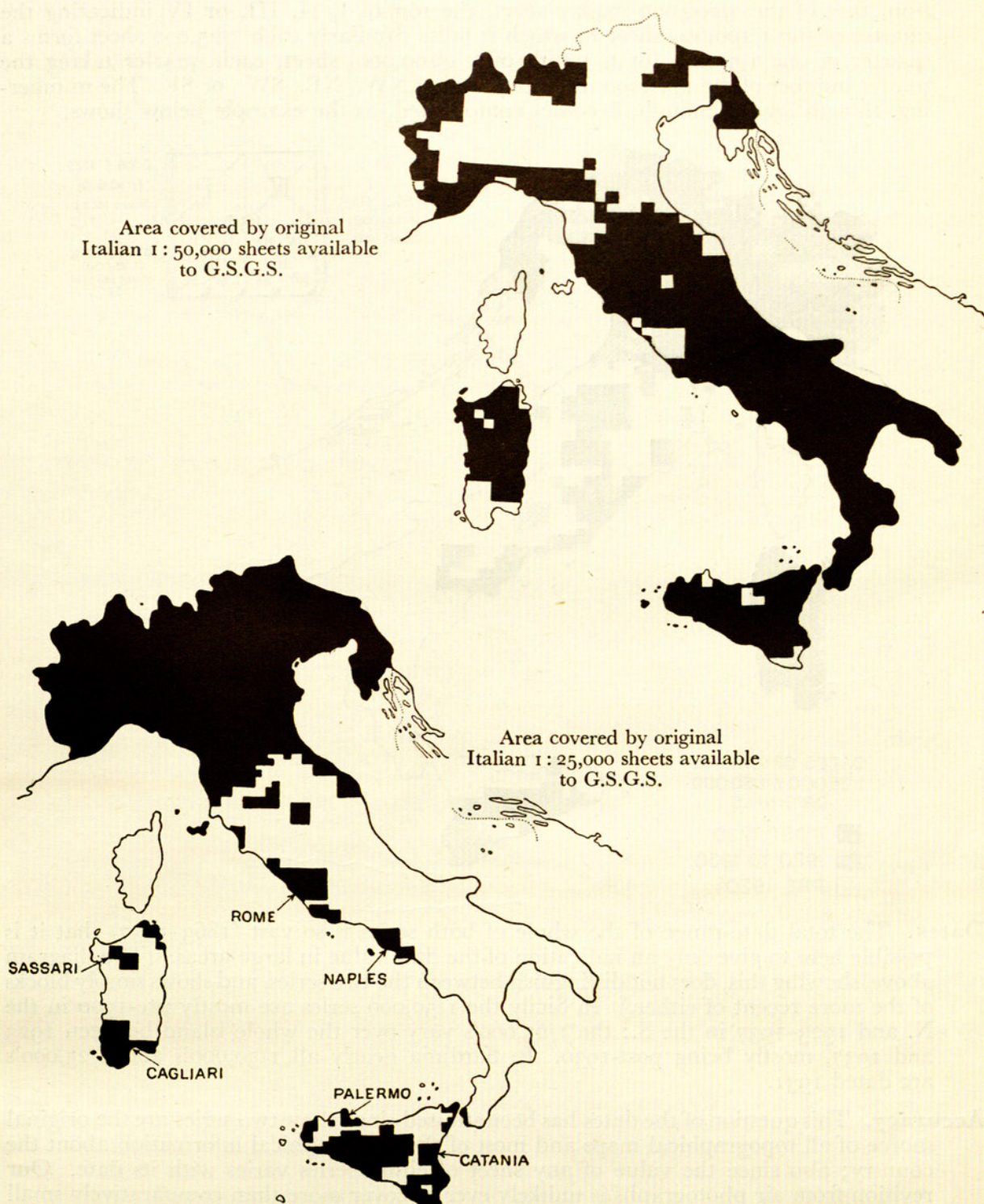


State of production

- (a) *Sicily.* 1st edition (published in 1941) was a straight copy of the Italian originals. 2nd edition (1942) supersedes it, and (as mentioned above) includes communications revision, some air photo. revision, and some "comparison" (with other more modern maps of different scales) revision. All sheets are available in 2nd edition form.
- (b) *Sardinia.* As for Sicily, except that for the most part only communications revision appears on 2nd edition. Examination showed that six sheets (168, 169, 192, 217, 233, 234) needed correction from air photographs, one sheet (233) seriously; revision of this sheet is now being carried out. No further revision is contemplated in the immediate future.
- (c) The index on page 7 shows the 1st edition and 2nd edition sheets so far published; sheets covering the remainder of the country are in hand. None of the published 1st edition sheets on the mainland includes the accepted road classification or revised railways; this will be included on future 1st editions, and the 1st editions already published without it will be superseded by 2nd editions with it.
- (d) An all-black edition of all sheets not published as G.S.G.S. 4164 also exists as G.S.G.S. 5001. It is primarily used in R.A.F. Map Folios. Sheets are direct copies of Italian 1/100,000 sheets, but are not very legible.

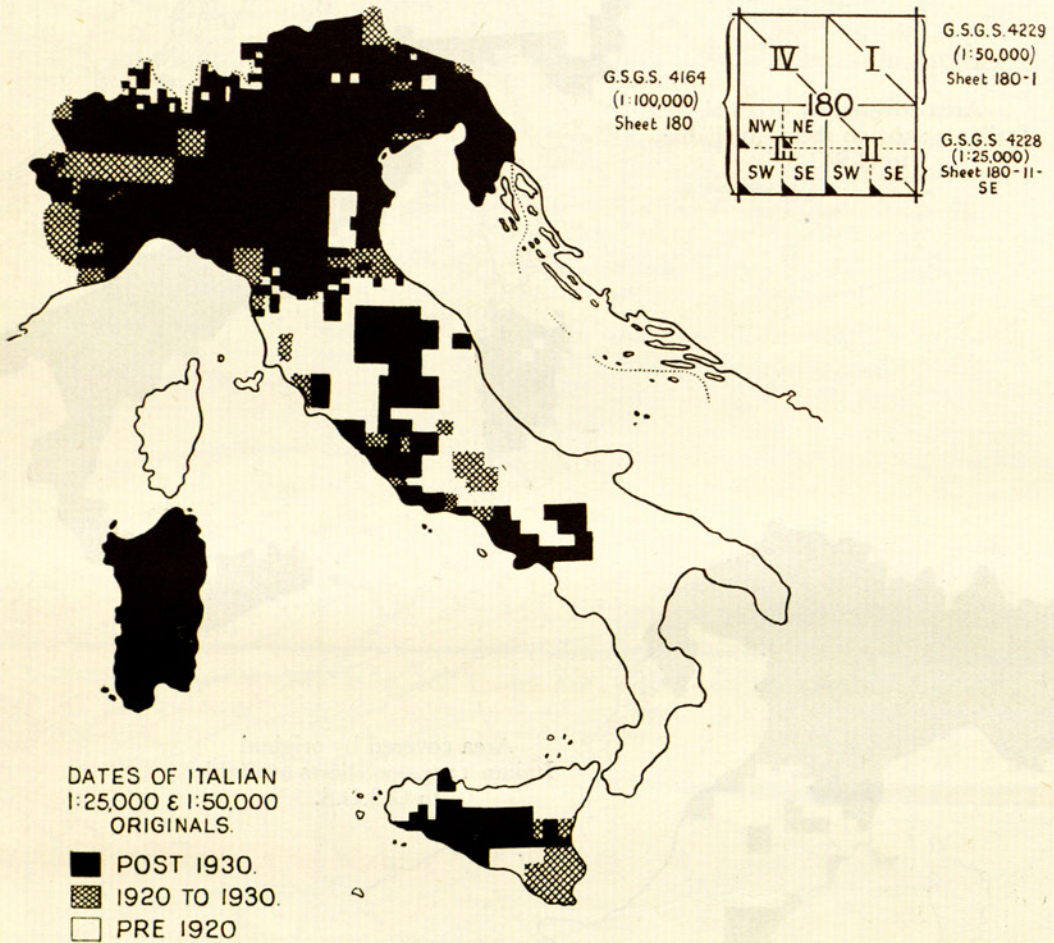


G.S.G.S. 4229, ITALY 1:50,000
 G.S.G.S. 4228, ITALY 1:25,000



General value. These two series together form the standard large-scale tactical map of the whole country. They are based on good Italian survey. Neither series is complete over the whole country, though where the one does not exist the other does. As they are, for the most part, identical in style and in conventional signs used, and are on corresponding sheet lines, they are here treated together, and for most areas will have to be used together. 1st edition sheets are straightforward (black) copies of the Italian (black) sheets, with addition of the British grid. (Sample opposite this page.) In Sicily, Sardinia, and the south of the mainland of Italy these have been, and are being, superseded by the "2nd edition coloured" (sample opposite page 10), which incorporates revision and emphasizes roads in red and water features in blue; this coloured edition is so designed that if required urgently it can always be printed in the old black style.

Sheet lines. Precise sheet lines of both series are given in six indices in Appendix (v), but the two diagrams on page 9 illustrate the area they (will) cover. Each 1/50,000 sheet forms a quarter of one 1/100,000 sheet (G.S.G.S. 4164; see page 7) and takes its number from that of the 1/100,000 master sheet, the roman I, II, III, or IV indicating the quarter of the 1/100,000 sheet in which it falls. Similarly each 1/25,000 sheet forms a quarter of one 1/50,000 (or a 1/16th of a 1/100,000) sheet, each quarter taking the master number of the 1/50,000 sheet and adding NW., NE., SW., or SE. The numbering, though logical enough, becomes complicated, as the example below shows.



Dates. The total date-range of the whole of both series is so vast (1863–1937) that it is possible here to give only an indication of the date value in large areas. (The diagram above, showing this, does not distinguish between the two series, and shows simply blocks of the more recent of either.) In Sicily the 1/50,000 series are mostly pre-1900 in the N. and 1923–1937 in the S.; the 1/25,000's vary over the whole island between 1923 and 1937, mostly being post-1930. In Sardinia nearly all 1/50,000's and 1/25,000's are dated 1931.

Accuracy. This question of the dates has been stressed since these two series are the original source of all topographical maps and most of the topographical information about the country; also since the value of any sheet of either series varies with its date. Our revision from air photographs is unlikely ever to cover more than comparatively small areas of the country, and revision from communications maps only provides an alteration in railway classification here and there, or a new road whose alinement often cannot be plotted exactly.

Thus in any edition of a sheet the accuracy of most features is directly dependent on the date of the original used.

It should finally be noted that in a few cases some Italian 1/25,000 originals are enlargements of the relevant quarters of 1/50,000 sheets. In each case this is obvious from the style of the map, and due allowance should be made.

Detail. A few points of detail require emphasis or explanation.

The series is on graticule sheet lines, with longitudes based on Rome.

The "Reference" in the margin of each sheet gives only a selection of the most important conventional signs. An explanation of all the signs so far discovered will be found in the Glossary and Reference Card in Appendix (vii) below; this card will be widely issued.





Both series are packed with Italian topographical terms and their numerous abbreviations. The glossary in Appendix (iii), and to a lesser extent the Glossary and Reference Card in Appendix (vii), give a considerable selection of these, but do not (especially in the case of abbreviations) attempt to be complete. Here the Italians appear to be quite inconsistent, and have been known to use one abbreviation for several terms and two different abbreviations for the same term. The problem is further complicated in Sardinia by the existence of a very well-developed dialect—almost a foreign language—which appears on the maps alongside normal Italian.

Heights are given in metres, as on all series in this area (and elsewhere). Certain sheets show depth contours round the coast; these too are in metres not fathoms, and should obviously be accepted only after checking with charts. No attempt to revise them has so far been made.

Revision in 2nd editions. Apart from the change of style of the 2nd editions (coloured), revision for Sicily and Sardinia has included comparison between series (1/100,000, 1/50,000, and 1/25,000). For example a 1/50,000 sheet of 1900 has been compared with and revised from a 1/25,000 sheet of 1925 and a 1/100,000 sheet of 1930. Revision from air photographs has also been incorporated for these two areas, and a small diagram on each sheet indicates, only generally, the area revised. (A note on the extent of this air photo. revision is given in Part 2 below.) For Sicily and Sardinia, and for the south of the mainland of Italy communications have been brought into line with the approved classification system. It should be noted that the road categories given on 1st editions in Sicily, Sardinia, and the mainland were considerably exaggerated, though taken from Italian sources.

3rd editions. In spite of this fairly thorough revision for Sicily and Sardinia, a number of errors have been found on sheets: some of these are small, such as the failure of an aqueduct to continue from one sheet to another; others are more important, such as the wrong alinement of a railway. As a result of investigation of Sicily, for example, 3rd editions are now being produced of seven sheets (259-III SW.; 262-III; 268-II NW.; 268-II SW.; 269-I SE.; 277-III NE.; 277-III SE.) to rectify important errors. Such other corrections as have been noted in Sicily have been forwarded to A.F.H.Q., who will produce other 3rd edition sheets as they consider necessary. Similar investigation will probably have similar results in other areas.

State of production

- (a) *Sicily.* 1st edition sheets of both series have now been almost completely replaced by 2nd editions (coloured).
The seven 3rd edition sheets mentioned above should be available by the middle of May.
Nine new 1/50,000 sheets are being prepared *ab initio* (no originals being available) to give complete 1/50,000 cover over the island.
- (b) *Sardinia.* 2nd editions (coloured) have now superseded 1st editions for the block of 1/25,000 sheets in the S. and in a few other scattered areas. Work is proceeding, and all sheets should shortly be available in 2nd edition (coloured) form.
Eight new 1/50,000 sheets are being prepared *ab initio* so as to give complete 1/50,000 cover over the whole island except for the south-west corner, which is covered by a block of 1/25,000 sheets.
- Note:* Stocks of 2nd editions (coloured) are available from normal centres of map supply.
- (c) On the mainland, 1st editions have so far been produced as far N. as the line of 1/100,000 sheets 135-141 (see index on p. 7). Thus the area roughly S. of Rome is now available, mostly in 1/50,000 form. The area to the N. is in hand at the moment.

G.S.G.S. 4163, PANTELLERIA 1/25,000

G.S.G.S. 4406, LAMPEDUSA AND LINOSA 1/15,840

G.S.G.S. 4228 and 4229 do not extend over these islands of the Sicilian Straits. The two above maps are in fact based on old Italian 1/50,000 sheets, with revision from complete air photo. cover for Pantelleria and Lampedusa, also from charts and such intelligence information as was available.

The two maps are similar in style, the sample opposite being taken from G.S.G.S. 4163, which is printed and available. G.S.G.S. 4406 will be available shortly.

CORSICA

Since Corsica is the only non-Italian part of the area covered by these notes, and since all the basic material for the island is French and hence of different style, the three G.S.G.S. series which cover only the Corsican part of the area are here considered together.

It will already have been noted that Corsica is covered at 1/1,000,000 by G.S.G.S. 2758, at 1/500,000 by G.S.G.S. 4072, and at 1/250,000 in "Air" and "Ground/Air" styles by G.S.G.S. 3982 (Military).

G.S.G.S. 4240, CORSICA 1/500,000 (*upper sample*)

This useful small-scale map is a direct reproduction of a French sheet of 1934, but includes some slight revision in respect of railways and roads (no width classification being attempted for the latter). As a diagram it is useful as well as pretty, though the hill-shading by which it shows relief restricts it to giving only a general indication of topography.

Copies of the sheet are available; no revised edition is contemplated.

G.S.G.S. 4238, EUROPE ROAD MAP (Michelin) 1/200,000, Sheet 90 (*lower sample*)

Reproduced direct from the normal and well-known Michelin map, which covers most of western Europe at 1/200,000. This sheet 90 carries the note "Revisée en 1939". As well as being the most authoritative road map, it is the most modern piece of map material of the island in our possession. It is believed to be entirely reliable for railways and roads, though, as in France, it does not attempt to classify roads in terms of widths.

G.S.G.S. 4398, CORSICA 1/50,000 (*sample opposite page 13; index on page 13*)

General. This series, which is produced as a tactical map, is based on the French 1/80,000 sheets. This French 1/80,000 map is all black, and relief is shown by hachuring, which in such a precipitous area as Corsica tends to be overpowering and makes the maps extremely difficult to read. The French sheets are probably dated 1925-1939, the date of the last revision being difficult to establish.

The 1/50,000 G.S.G.S. series has been entirely redrawn. Sheet lines correspond to those of the French 1/80,000 series, though in some cases two French sheets have been combined to form one of the new sheets.

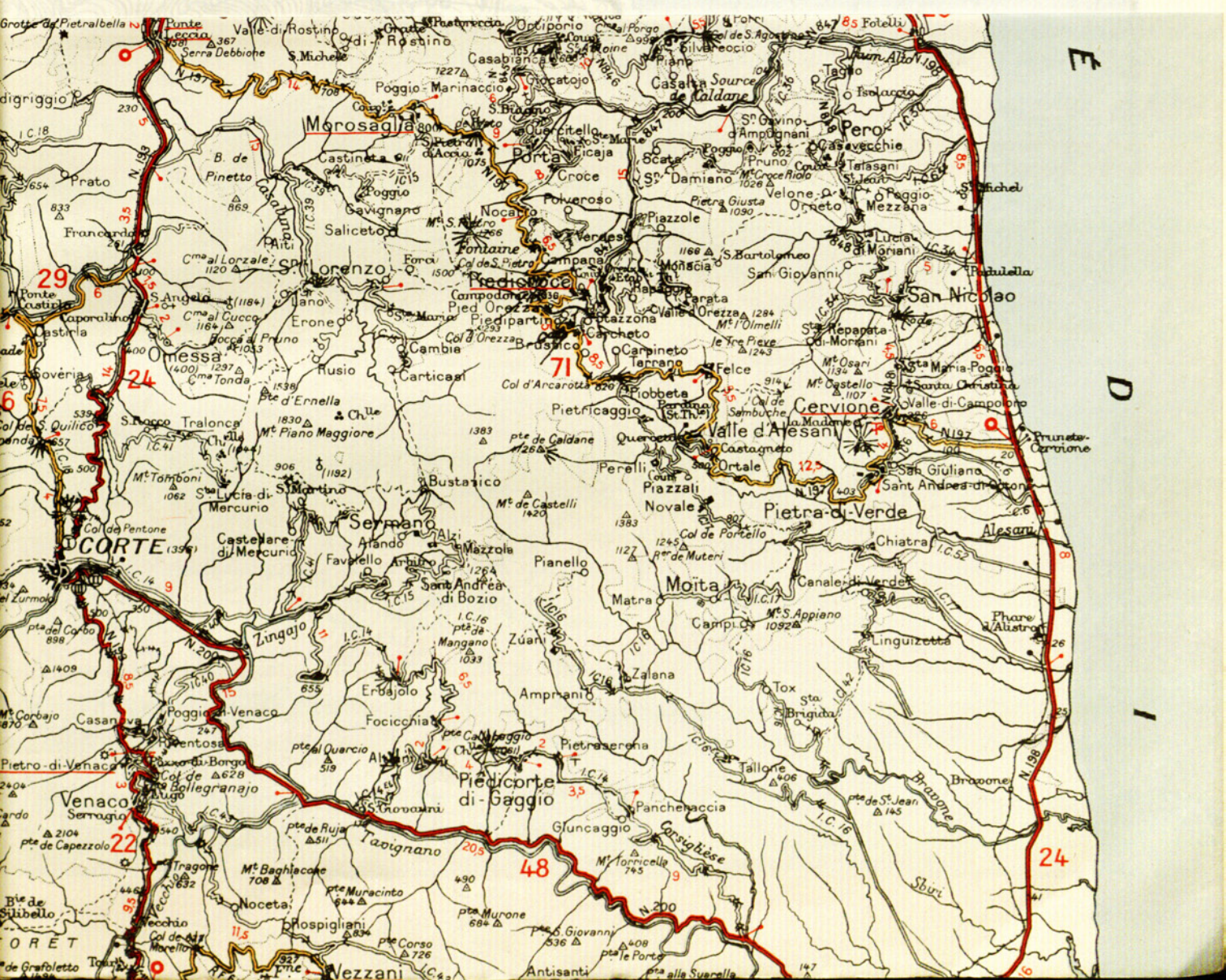
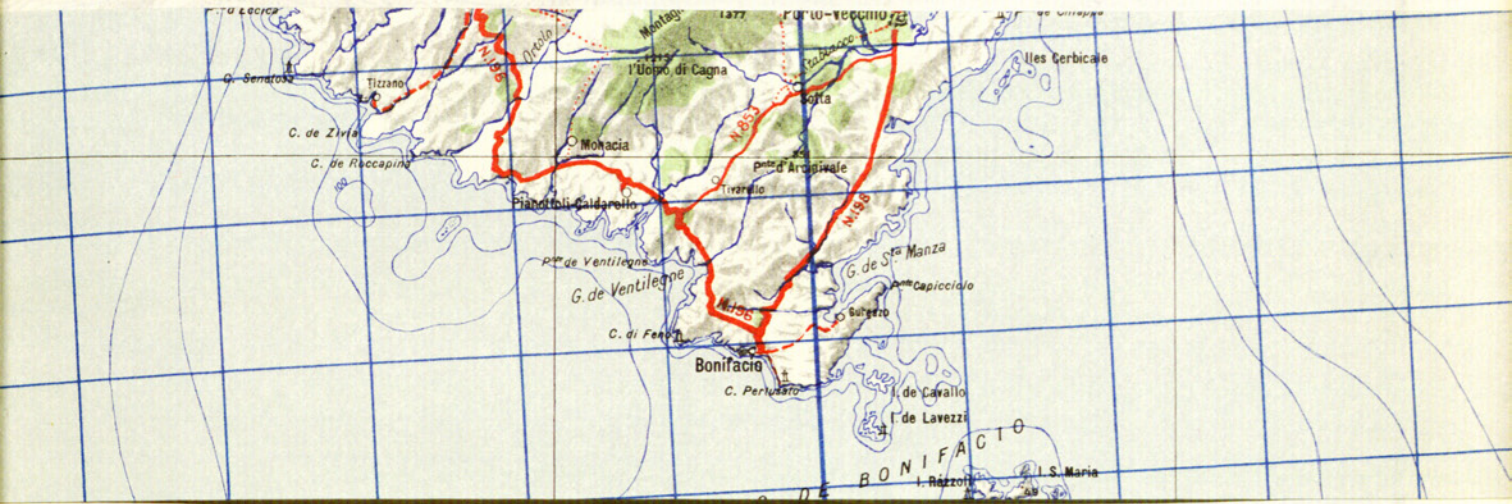
Enlargement. The enlargement of the French 1/80,000 sheets which has been involved is unlikely to introduce inaccuracies. The original French maps were surveyed at a scale of 1/40,000.

Contouring. The contours on the G.S.G.S. map were interpolated from the ample spot-heights and from the hachures, which in fact are reliable in spite of the difficulty of reading them. Three French 1/200,000 sheets very closely contoured were also used as a check for the contouring.

Communications. The map is believed to be reliable for railway classification. A good deal of investigation has gone into the formulation of the road width categories, which should also be reliable. This road classification, which at the moment only appears here, entirely cancels that on G.S.G.S. 3982 (Military) in this island.

Air photo. revision. The area affected by air cover is shown by a diagram on page 19; in fact it consists of little more than coastal strips. The air revision will be incorporated into printed sheets, though reproduction material (black pulls) in unrevised form will be distributed as an emergency measure.

State of production. As at May 1st the following sheets have been printed and are available: 1; 2; 3; 6; 7; 10; 14; 15. All the rest have been proved and will be available shortly.

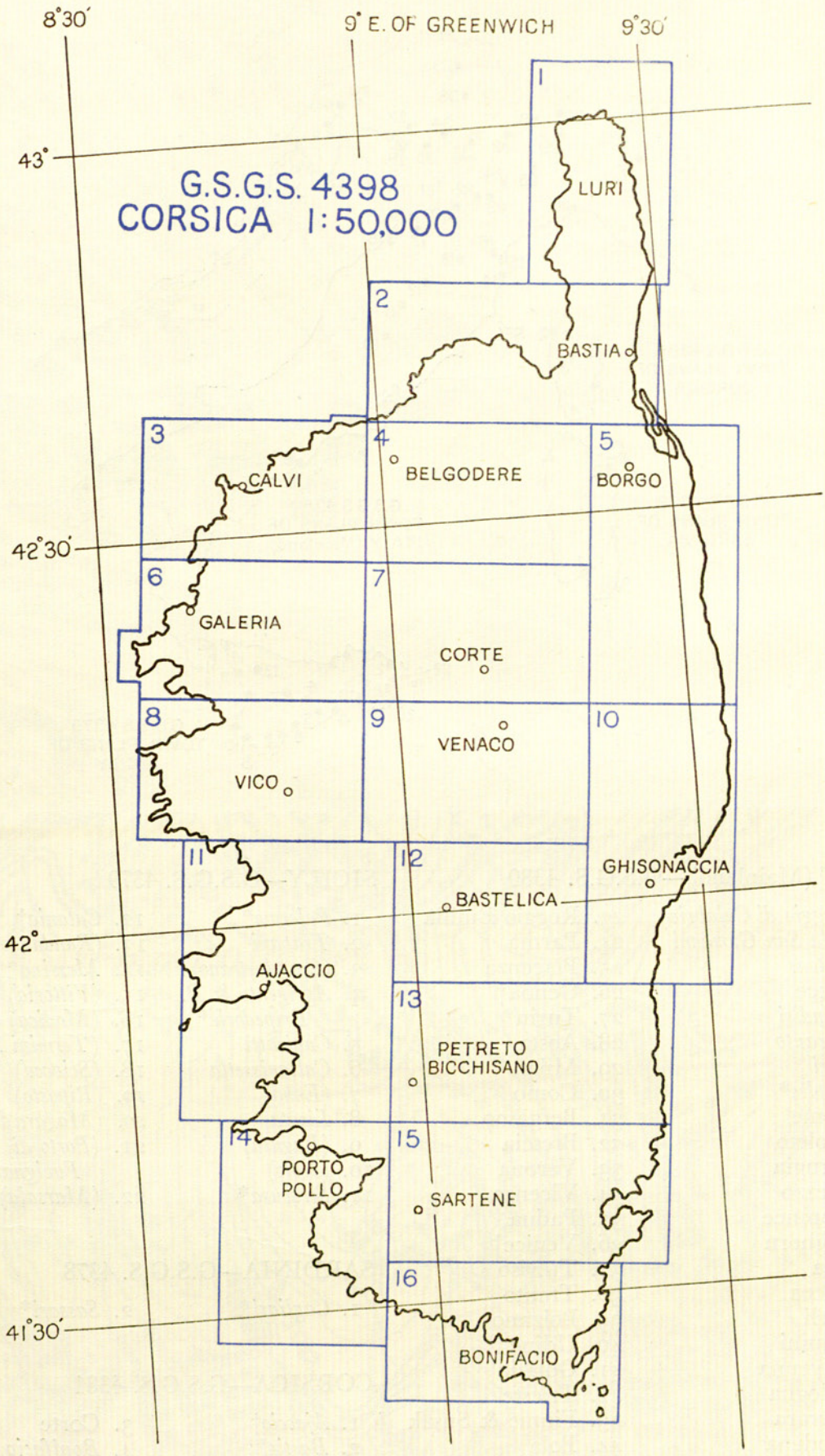




92
91
90
89
88
87
86
85
84
83
82
81
80
79
78
77,000
m. N.

Mucchiata
Grovenacce
Casanova
Pte. de Razzola
Mte. Barnello
Golfe d'Aliso
Marine de Scalo
Lavinese
Cioce
Pino
Mte. Rotto
Spergane
Poggio
Fieno
Licceto
Castello
Col. de Minervio
Mte. Minervio
Mte. Gupietta
Mte. Lasciole
Col. de Ventojele
Punta Minervio
Minervio
Pietricaggio
Col. de Pizzo Vargine
Mte. Zuccharallo
Masdaracote
Brachelle
Stazzona
Marine de Giotani
Canchiglio
Marinca
Vignale
Imiza
Mte. della C
Marine de Scalo
Chine
Pinzuta
Piazza
Olimi
Mte. Cuccaro
Salge
pta. di Canelle
Mte. Livido
Cima da
Marine de Canelle
Ogliastro
Cima di Mte. Prato Picolo
Rocher d'Albo
Marine d'Albo
Col. de Galeraggio
Lainosa
Martinasene
Col. de Kola

34,000
15 16 17 18 19 20 21 22
Nonza
420



TOWN PLANS



ITALY (Mainland)—G.S.G.S. 4380

- | | |
|--------------------------------|-------------------|
| 1. <i>(Reggio di Calabria)</i> | 23. Reggio Emilia |
| 2. <i>Villa San Giovanni</i> | 24. Parma |
| 3. <i>Crotone</i> | 25. Piacenza |
| 4. <i>Lecce</i> | 26. Genoa† |
| 5. <i>Brindisi</i> | 27. Turin |
| 6. <i>Taranto</i> | 28. Aosta |
| 7. <i>Bari</i> | 29. Milan |
| 8. <i>Naples*</i> | 30. Como |
| 9. Rome | 31. Bergamo |
| 10. Spoleto | 32. Brescia |
| 11. Perugia | 33. Verona |
| 12. Arezzo | 34. Vicenza |
| 13. Florence | 35. Padua |
| 14. Leghorn | 36. Venice† |
| 15. Pisa | 37. Treviso |
| 16. Lucca | 38. Trento |
| 17. Forli | 39. Bolzano |
| 18. Rimini | 40. Udine |
| 19. Ravenna | 41. Gorizia |
| 20. Bologna | 42. Trieste |
| 21. Ferrara | 43. Fiume & Susak |
| 22. Modena | 44. Pola |

SICILY—G.S.G.S. 4379

- | | |
|---|---------------------------------|
| 1. <i>Palermo*</i> | 12. <i>Catania†</i> |
| 2. <i>Trapani</i> | 13. <i>(Randazzo)</i> |
| 3. <i>(Castelvetrano)</i> | 14. <i>Messina*</i> |
| 4. <i>Agrigento & P. Empedocle*</i> | 15. <i>(Vittoria)</i> |
| 5. <i>Canicattì</i> | 16. <i>(Modica)</i> |
| 6. <i>Caltanissetta</i> | 17. <i>(Termini Imerese)</i> |
| 7. <i>(Enna)</i> | 18. <i>(Sciacca)</i> |
| 8. <i>Licata</i> | 19. <i>(Riposto)</i> |
| 9. <i>(Ragusa)</i> | 20. <i>(Mazara del Vallo)</i> |
| 10. <i>(Noto)</i> | 21. <i>(Porto di Favignana)</i> |
| 11. <i>Siracusa*</i> | 22. <i>(Marsala)</i> |

SARDINIA—G.S.G.S. 4378

- | | |
|---------------------|--------------------|
| 1. <i>Cagliari*</i> | 2. <i>Sassari*</i> |
|---------------------|--------------------|

CORSICA—G.S.G.S. 4381

- | | |
|--------------------|---------------------|
| 1. <i>Ajaccio†</i> | 3. <i>Corte</i> |
| 2. <i>Bastia†</i> | 4. <i>Bonifacio</i> |

Note. Numbers to the left of each list of plans key town locations to index. Towns with names italicized have been revised from air photographs. Brackets mean that plan is still in hand.

* 2nd edition published.

† 2nd edition in hand.







Style and basis

The notes and diagram on page 14 give almost the entire picture of the town-plan position in the area; it only remains to draw attention to the variety of styles in which the plans are available. The large sample opposite page 14, with the bulk of the town in grey and street names and important buildings in black, occurs only in the case of the seven 2nd edition plans of G.S.G.S. 4379 and 4378 (the sample being an extract from Agrigento). This style of plan is based on enlargements (with additions and revision) of the 1/25,000 sheets. The full explanation of signs and abbreviations on them, as for the 1/25,000 and 1/50,000 sheets, is given in the Reference Card in the Appendix.

The small sample opposite page 14 is similar in origin to the large one, though simpler (if cruder) in style. It is an extract from Padua, and is typical of many in the G.S.G.S. 4380 series.

The top sample opposite this page is an extract from Milan, which (along with Turin, Rome, and Florence) has been produced directly (by colour separation) from existing local productions, and incorporates no other information or revision. (Rome and Florence are not in full colour.)

The bottom sample opposite this page (taken from G.S.G.S. 4379, Licata) is of an entirely redrawn group which is certainly the clearest and probably the most reliable. The remaining plans (1st editions) in G.S.G.S. 4379 are in this style, as are also those of G.S.G.S. 4381.

All of the plans in Sicily, Sardinia, and Corsica have been compiled with the assistance of I.S.T.D.

It should finally be pointed out that new plans will be prepared to meet new needs, and, as new information becomes available, new editions of existing plans will appear. More than anything else in these notes, this list of plans is provisional, and both index and lists should constantly be kept up to date.

The following is a list of other towns in the area for which original plans are available in G.S.G.S. Map Library (see also the selection of Map Library material on page 25):

Abbazia	Cesena	Macerata	San Remo
Acireale	Chieti	Mantova	Santa Maria Capua
Acqui	Città di Castello	Massa Marittima	Vetere
Alessandria	Civitavecchia	Matera	Savona
Ancona	Cortina d'Ampezzo	Merano	Siena
Aquila	Cortona	Montepulciano	Sondrio
Ascoli Piceno	Cosenza	Novara	Sorrento
Assisi	Crema	Orvieto	Spezia
Asti	Cremona	Otranto	Sulmona
Avellino	Cuneo	Parenzo	Taormina
Bagnoli	Fabriano	Pavia	Teramo
Barletta	Faenza	Pesaro	Terni
Belluno	Fiesole	Pescara	Tivoli
Benevento	Foggia	Pinerolo	Todi
Biella	Foligno	Pirano	Urbino
Bitonto	Formia	Pistoia	Varese
Bordighera	Frattamaggiore	Potenza	Vercelli
Campobasso	Gaeta	Pozzuoli	Viareggio
Capodistria	Gallipoli	Prato	Viterbo
Capua	Grado	Riva	Volosca
Carrara	Grosseto	Rovigno	Volterra
Casale Monferrato	Gubbio	Rovigo	Zara
Caserta	Ivrea	Salerno	
Catanzaro	Littoria	Saluzzo	
Cefalù	Lodi	S. Gimignano	

SPECIAL MAPS

I.S.T.D. "Topographical" Maps (*upper sample*)

A special overprint on sheets of G.S.G.S. 3982 (unlayered), covering only Sicily (3 sheets) and Sardinia (2 sheets), has been printed for I.S.T.D. and is issued with their reports (C.B. 4096 H and C.B. 4096 G respectively). A good deal of the information given on these overprints requires explanation from the text. The object of the overprint is to emphasize particular features of landscape and topography that may not be obvious from a map. Unlike the "Going" maps produced by the Middle East (which were based on actual ground reconnaissance), these maps do not attempt to draw any conclusion from the terrain as regards cross-country movement, and any implication on these lines is left for the reader to make.

The overprint is compiled from detailed study of large-scale maps and air photographs, investigation of guide books, local literature, and ground photographs and postcards, and from the examination of "contacts" who are thoroughly familiar with certain areas.

I.S.T.D. alone are responsible for the accuracy of the information and for the production of future editions.

Geological Maps (*lower sample*)

A geological map of Italy at 1/100,000 in full geological colouring is being reproduced as G.S.G.S. 4259. Sheets are on the basis of the normal 1/100,000 series (same sheet lines and sheet numbering: see G.S.G.S. 4164 and index on page 7). The only sheets so far available are 184 (which covers Naples) and (in Sicily) 265, 270, 274, 275, and 277.

G.S.G.S. 4349, a one-sheet geological map covering Sicily at 1/500,000, is also available.

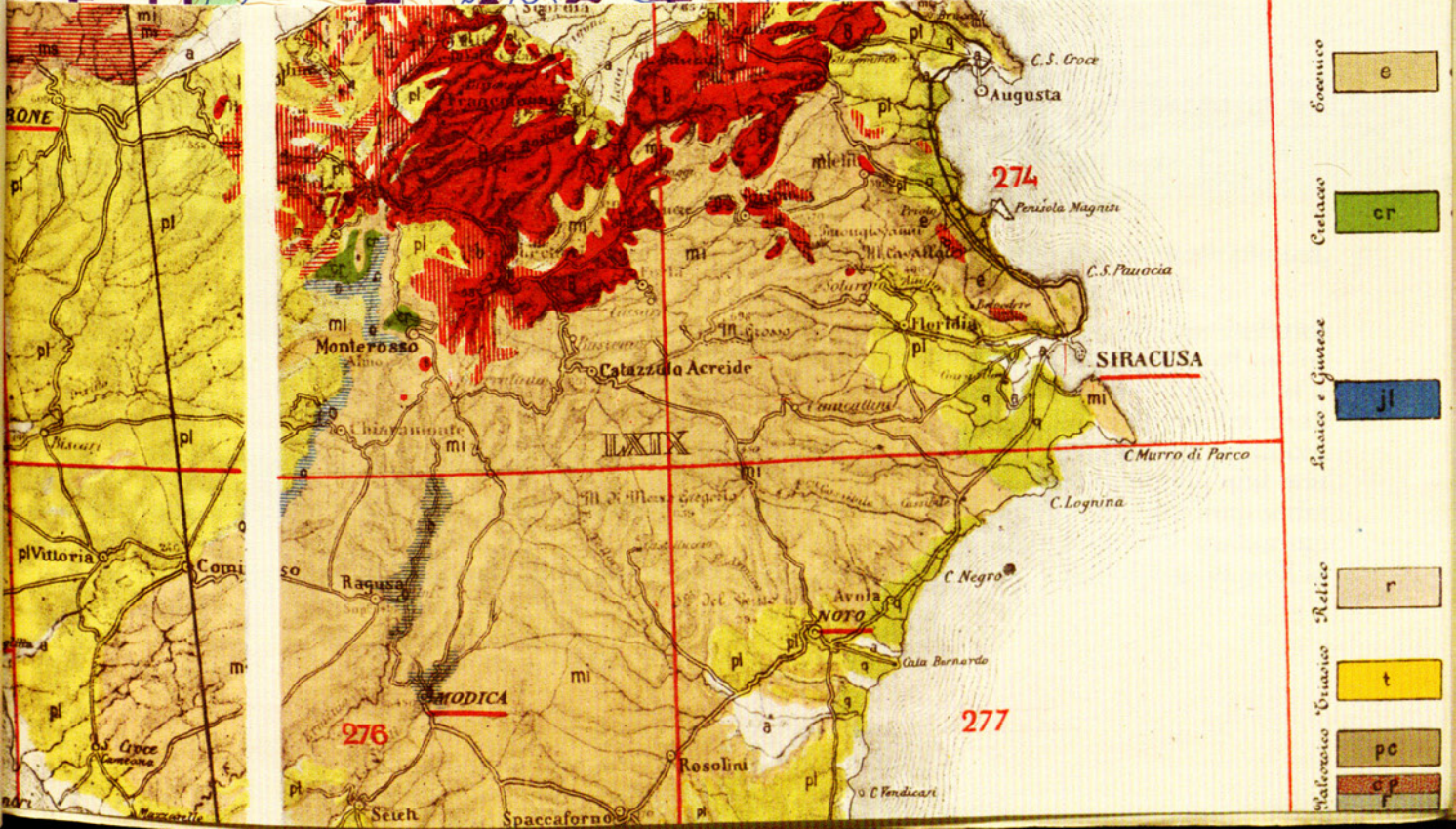
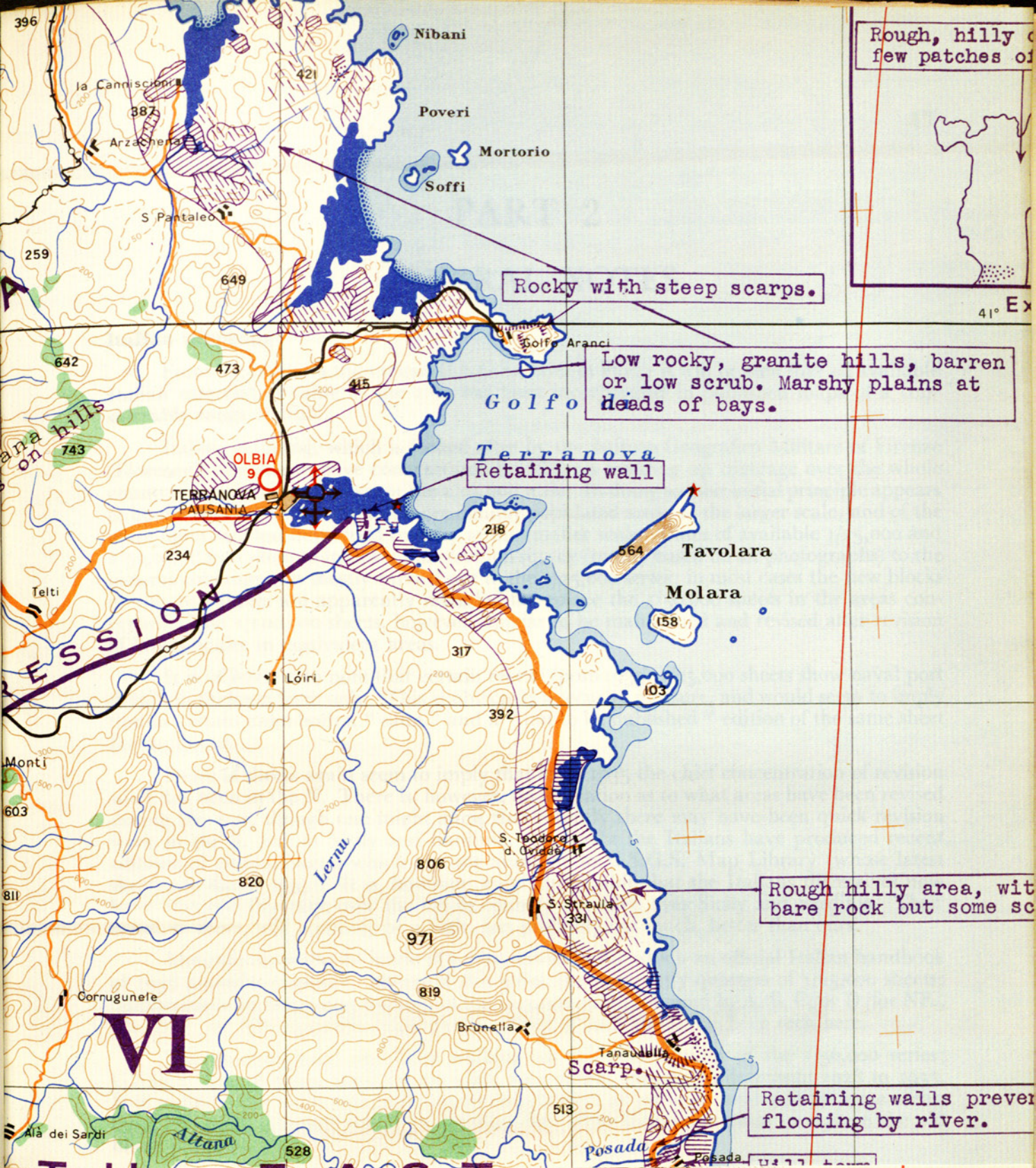
Two sheets of a further geological map series, G.S.G.S. 4289, cover Sicily (sheet 7) and Corsica and Sardinia (sheet 4) at 1/1 M.

All these geological maps are straight reproductions of Italian originals, stress being laid in production on copying the precise tints of the originals.

It should be noted that the reproduction of these maps is a lengthy and costly affair, and only a limited stock of them is available. Hence issues are restricted as far as possible.

Chart-Maps

A number of these have been produced by the Hydrographer for selected areas. They are at large scales, and consist of the normal chart with full map detail inland.

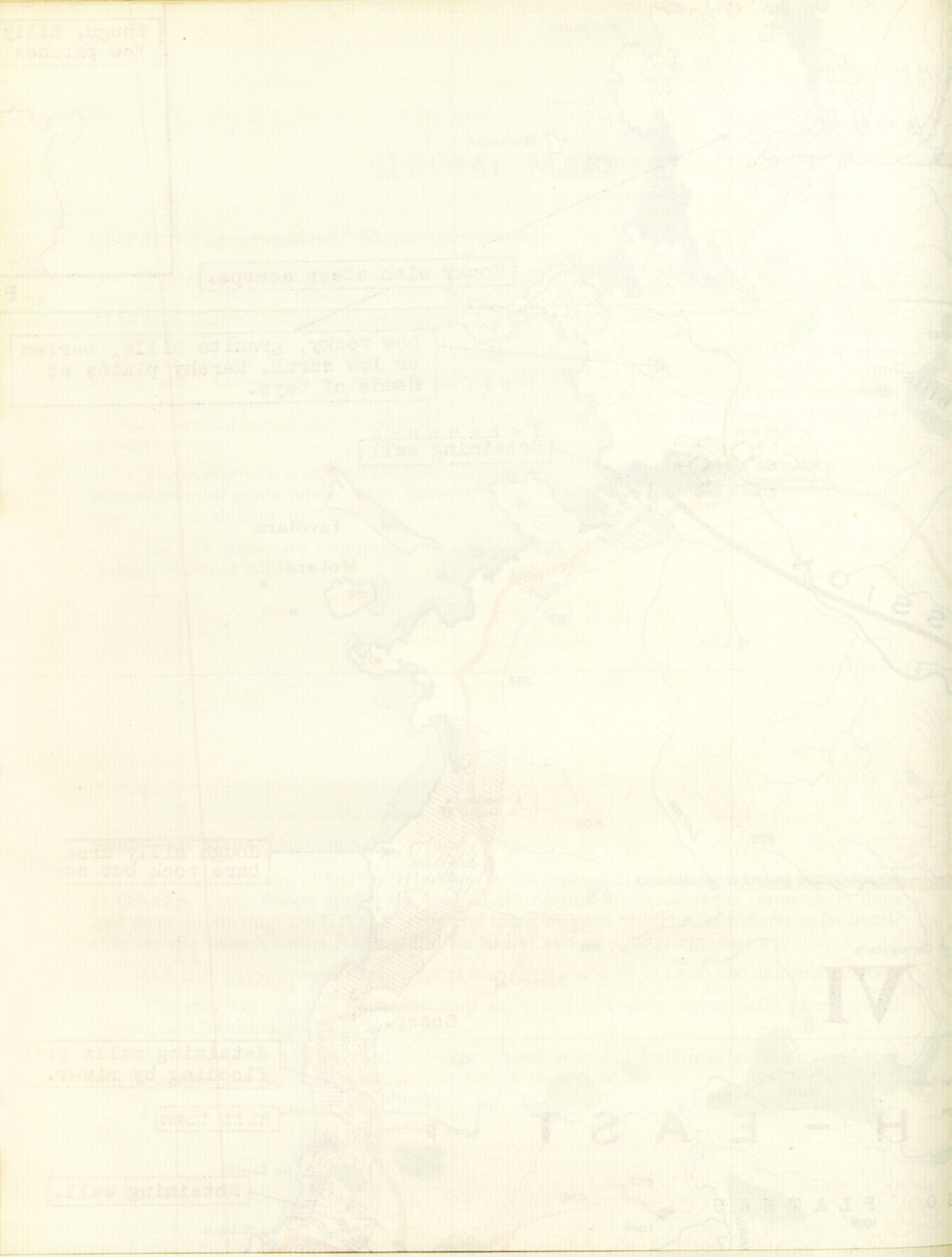




are held by Military H.Q.s, at airfields, and possibly at local municipal offices.

Italian charts often carry a great deal of land detail, generally fairly accurately plotted, and large-scale charts are often of considerable value for plans of coastal towns.

Mention must be made of the unofficial maps published by the "Consociazione Turistica Italiana" of Milano. Their excellent 1/250,000 series has already been mentioned as the basis of G.S.G.S 4230. They have also published a Carta Aeronautica at 1/250,000 as a parallel production to the road map; among other air information, this map carries small airfield plans round its borders. The 1/200,000 Carta Automobilistica series, also produced by the C.T.I., has been the basis of road classification throughout the country, and was used in the compilation of G.S.G.S. 3982. It should be noted that none of these map series (except an obsolete edition of the 1/250,000) is contoured, relief being shown by hachuring. In addition the C.T.I. have produced a number of "Through-way" town plans, as well as



Rocky hills, barren
low plateau

Rocky with steep slopes

Low rocky, granitic hills, barren
or low slopes, heavily eroded as
heads of gorges.

Retaining wall

Volcanic

Volcanic

Hotter hills, steep
bare rock outcrops

Retaining walls
flooding by river.

Hill town

Retaining walls

VI

H - E - A - S - T

FLANK

PART 2

GENERAL NOTES

Italian mapping

From the notes on the various G.S.G.S. series in Part 1 it will be seen that all available Italian material of value in the area has been incorporated in published maps of a considerable range of scale.

Italian mapping, which is looked after by the Istituto Geografico Militare of Firenze (Florence), appears to have concentrated initially on building up coverage over the whole country on either the 1/50,000 or the 1/25,000 scale. In doing so their initial principle appears to be the coverage of towns and more densely populated areas at the larger scale, and of the more open and less developed country at the smaller scale. Dates of available 1/25,000 and 1/50,000 sheets seem to indicate that revision survey (mostly based on air photographs) to the general coverage was mostly carried out to the 1/25,000 series; in most cases the new blocks of 1/25,000 sheets are apparently intended to replace the 1/50,000 sheets in the areas concerned. The 1/100,000 sheets, however, appear to be maintained and revised after revision of larger scales in equivalent areas.

It is of interest to note that certain recent (post-1935) 1/25,000 sheets show naval port details in skeleton form only. This is obviously a security measure, and would seem to imply that in certain cases both a "sales" and a "not to be published" edition of the same sheet are produced.

Dates of sheets again seem to imply that from 1935 the chief concentration of revision work has been in the N. There is, however, no indication as to what areas have been revised during the war, though one might guess that recently there may have been quick revision work in the S. and in Sicily and Sardinia. No doubt the Italians have produced recent editions of various sheets which are not available to G.S.G.S. Map Library (whose latest sheets are dated 1937). It is, however, most improbable that the Italians themselves now have 1/25,000 coverage over the whole country—or even over Sicily and Sardinia. Their maps, in short, will certainly be a little, but probably not much, better than ours.

Mention must also be made of a 1/10,000 series for which an official Italian handbook of 1936 provides evidence. Sheets of this series are apparently quarters of 1/25,000 sheets; numbering is by the master number of the 1/25,000 sheet, followed by A, B, C, or D (for NE., SE., SW., or NW. quarters respectively). None of such sheets has been seen here.

The Italians have also been working on coloured editions of the 1/50,000 series; G.S.G.S. Map Library holds twenty-eight such sheets, ranging in date from 1928 to 1935. It is unlikely that such coloured 1/50,000 sheets have as yet been produced for large areas, since the work involved would be considerable. They form an attempt to replace the old black 1/50,000 series.

If experience in other areas such as Libya or France applies here, it is unlikely that the strong German influence will have had much effect on Italian cartography. The German Army appears to accept local maps for what they are.

Information of 1938 about the Istituto Geografico Militare is given in an appendix. It has field units and subsidiary branch offices; consultation of local telephone directories might help in locating some of the latter. It is probably fair to assume that stocks of maps are held by Military H.Q.s, at airfields, and possibly at local municipal offices.

Italian charts often carry a great deal of land detail, generally fairly accurately plotted, and large-scale charts are often of considerable value for plans of coastal towns.

Mention must be made of the unofficial maps published by the "Consociazione Turistica Italiana" of Milano. Their excellent 1/250,000 series has already been mentioned as the basis of G.S.G.S. 4230. They have also published a Carta Aeronautica at 1/250,000 as a parallel production to the road map; among other air information, this map carries small airfield plans round its borders. The 1/200,000 Carta Automobilistica series, also produced by the C.T.I., has been the basis of road classification throughout the country, and was used in the compilation of G.S.G.S. 3982. It should be noted that none of these map series (except an obsolete edition of the 1/250,000) is contoured, relief being shown by hachuring. In addition the C.T.I. have produced a number of "Through-way" town plans, as well as

many good small-scale road maps. Nearly all their maps are undated, though printing dates may sometimes be found. The club changed its name in 1936 from "Touring Club Italiano" to "Consociazione Turistica Italiana", and this sometimes gives a clue to dates.

A selection of various Italian maps not reproduced as G.S.G.S. series will be found on page 25.

Italian Military conventional signs are listed in "Notes on the Italian Army".

Notes on the Italian system of map reference, as far as it is known, are given in Appendix (i).

French mapping in Corsica

There is very little information on French mapping activities in this area; available evidence tends to imply that after the original survey, and some revision in the 1920-1930 period, little work has been done. Old French 1/20,000 sheets of the Bonifacio area are known to exist, but are not available in this country; there is no knowledge of any other 1/20,000 sheets, or of 1/50,000 sheets (other than enlargements of 1:80,000 sheets).

The three sheets of the French 1/200,000 series (printing date 1935-1939 in this area) are the best and most recent medium-scale topographical maps available, while the Michelin sheet 90 (*see page 12*) is the most up-to-date map, and is believed to be first-rate for roads.

Some French charts show considerable inland detail, and large-scale ones are of value for coastal town plans.

Air photo. revision

The diagrams opposite illustrate the extent of air photo. cover that was available in time for incorporation in 2nd editions of the 1/50,000 and 1/25,000 series (G.S.G.S. 4229 and 4228) of Sicily and Sardinia, and that which will be incorporated in the 1/50,000 series (G.S.G.S. 4398) of Corsica; these areas are shown in black. The shaded areas in Sicily and Sardinia are those for which air cover is now available and which have been used for 3rd editions of G.S.G.S. 4229 and 4228. It will be noted that all available cover in Corsica is being incorporated in G.S.G.S. 4398; at the same time it should be emphasized that no other series of Corsica (except G.S.G.S. 4381, Corsica Town Plans) carries any air photo. revision.

Page 14 shows those town plans which include air photo. revision.

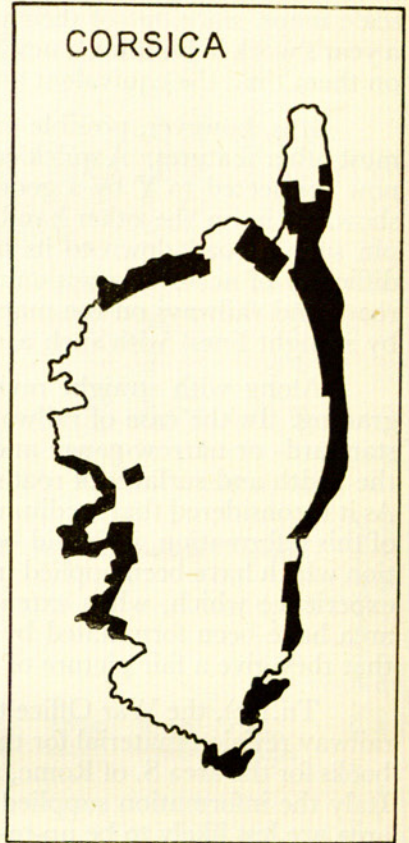
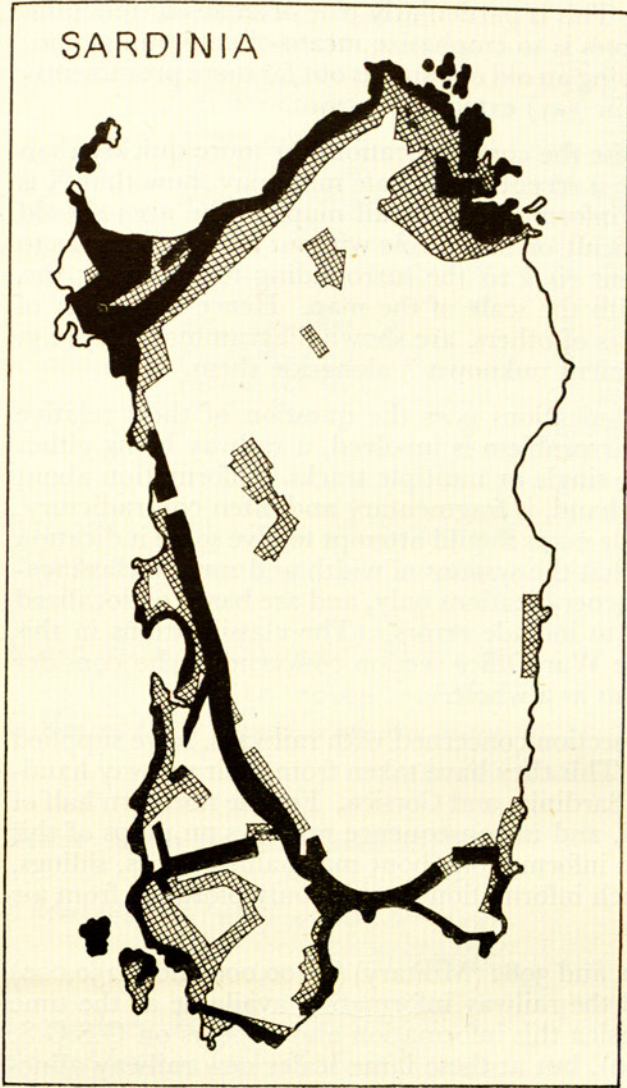
In Sicily strips of coastal revision have been carried out on G.S.G.S. 4164, the 1/100,000 series. Time was not available to extend this revision over the whole of the black area on the diagram, but it does cover the areas of the big towns such as Palermo and Catania. In fact it was found that at the 1/100,000 scale the extent of the air revision was extremely slight. It is very doubtful whether further revision of this type would be worth the time spent on it.

In Sardinia the current 2nd edition of G.S.G.S. 4164 carries no air photo. revision. The 3rd edition of sheet 233 which is being prepared will incorporate revision from the revised 1/25,000 and 1/50,000 sheets, and from new air cover.

No air photo. revision worth mentioning has been carried out to maps on the mainland of Italy with the exception of the Livorno area, where experimental revision to a few 1/25,000 sheets appears in 1st editions. This lack of revision in Italy implies that time, rather than air photographs, has not been available. Later on when there is more time and more photographs it is quite possible that revised editions of town plans and of 1/25,000 and 1/50,000 sheets will be produced.

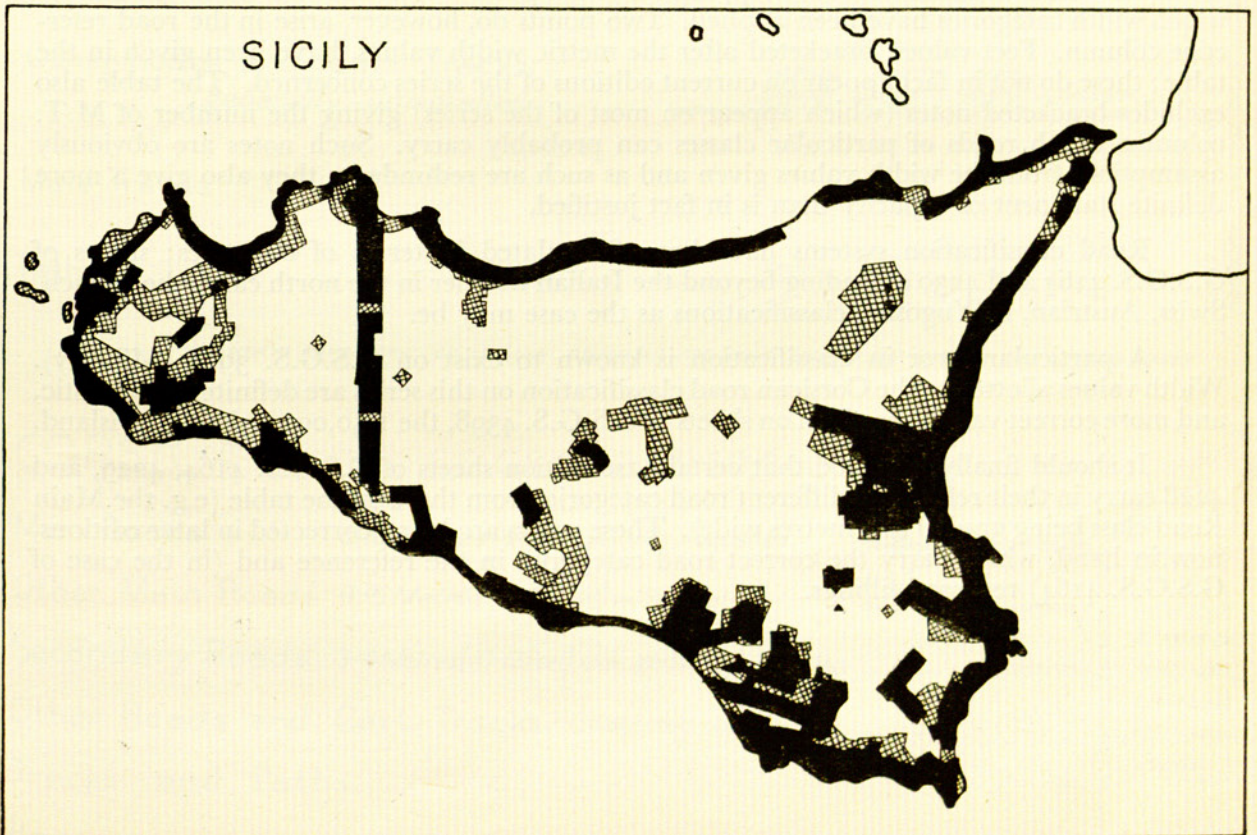
A general point worth mentioning is that on the one hand, with the basis of good ground survey which exists over the whole area, revision from clear well-flown photographs is the ideal for bringing old maps up to date in most of their important features. On the other hand, while cover so far received embraces only a very small part of the total area of the three islands, revision from it and correction to the existing maps involves considerable labour: obviously every photograph has to be given the most detailed study, and the insertion of (say) new railway sidings runs the danger of throwing an area out of drawing. Finally, some important features such as aqueducts cannot be picked up from photos. Thus, even without considering relative production priorities, it must be appreciated that it is almost impossible to keep revision up to date even with available air cover.

AIR PHOTOGRAPH COVER
Approximate areas available to G.S.G.S. on 1 May 1943



■ COVER INCORPORATED INTO
G.S.G.S. 4228 & 4229, 2ND EDITION
& G.S.G.S. 4398.

▨ ADDITIONAL COVER
NOW AVAILABLE.



Communications revision

It is in terms of roads and railways that a map based on good ground survey becomes out of date most quickly and most flagrantly. This is particularly true of small- or medium-scale maps, since one of their principal purposes is to emphasize means of communication; a year's work in building a new road or improving an old one stands out far more prominently on them than the equivalent amount of work in (say) extending a town.

It is, however, possible on a map to revise the communications far more quickly than most other features. A quick comparison with a recent small-scale map may show that X is now connected to Y by a good road; this is information that all maps of the area should show. It is, on the other hand, generally difficult or impossible without air photographs to pin such a road down to its precise alinement *vis à vis* the surrounding topography; this difficulty of accurate positioning increases with the scale of the map. Hence a number of roads and railways on the maps of this area, as of others, are shown diagrammatically (e.g. by straight lines) with such a note as "alinement unknown" alongside them.

Along with straight revision to communications goes the question of their relative grading. In the case of railways no particular problem is involved, a railway being either standard- or narrow-gauge and having either single or multiple tracks. Information about the width and surfaces of roads, on the other hand, is fragmentary and often contradictory. As it is considered that medium- and large-scale maps should attempt to give some indication of this information, it should be pointed out that the systems of width and surface classification which have been applied in the area are generalizations only, and are based on localized experience which, when extended, is bound to include errors. (The classifications in this area have been formulated by M.I.10(c), the War Office section concerned, who consider that they give a fair picture of the road systems as a whole.)

Tn.1(c), the War Office transportation section concerned with railways, have supplied railway revision material for the whole area. This they have taken from their railway handbooks for the area S. of Rome, and for Sicily, Sardinia, and Corsica. For the northern half of Italy the information supplied is less detailed, and in consequence railways on maps of this area are less likely to be up-to-date. Detailed information about marshalling yards, sidings, &c., has not been supplied as such; in fact such information is really only plottable from air photographs or detailed large-scale diagrams.

Current editions of G.S.G.S. 4164, 4230, and 3982 (Military) (1/100,000 and 1/250,000) contain (or will when published contain) all the railway information available at the time of production. For Sicily, Sardinia, and Corsica this information also appears on G.S.G.S. 4229, 4228, and 4398 (1/50,000 and 1/25,000), but at these large scales new railway alignments in areas not covered by air photos. are liable to be diagrammatic.

The road classification table opposite is self-explanatory; it covers the only series to which width categories have been applied. Two points do, however, arise in the road reference column. Feet values, bracketed after the metric width values, have been given in the table; these do not in fact appear on current editions of the series concerned. The table also excludes bracketed notes (which appear on most of the series) giving the number of M.T. columns which roads of particular classes can probably carry. Such notes are obviously assumptions from the width values given and as such are redundant; they also give a more definite statement of capacity than is in fact justified.

Road classification systems have been formulated in terms of countries; sheets of G.S.G.S. 4164 and 4230 extending beyond the Italian frontier in the north carry the French, Swiss, Austrian, or Yugoslav classifications as the case may be.

A particular error in classification is known to exist on G.S.G.S. 3982 (Military). Width values allotted to the Corsican road classification on this series are definitely optimistic, and more correct values are given on sheets of G.S.G.S. 4398, the 1/50,000 series of the island.

It should finally be noted that certain 1st edition sheets of G.S.G.S. 4164, 4229, and 4228 carry in their references different road categories from those on the table (e.g. the Main Road class being graded as 8 metres wide). These errors are being corrected in later editions, now in hand, which carry the correct road categories in the reference and (in the case of G.S.G.S. 4164) red road-fillings.

ROAD CLASSIFICATION TABLE

ITALY, SICILY and SARDINIA

ROAD REFERENCE

ROAD CLASSIFICATION IS NOT BASED ON RECONNAISSANCE ITS RELIABILITY IS UNCERTAIN

ALL CLASSES OF ROAD TEND TO NARROW IN VILLAGES

ROAD SYMBOLS

Italy 1:250,000 and 1:50,000 G.S.G.S.4228 and 4229 (Coloured)
 Italy 1:250,000 and 1:50,000 G.S.G.S.4228 and 4229
 Italy 1:100,000 G.S.,G.S.4164 2nd. Edition
 Italy 1:250,000 G.S.,G.S.4230 2nd. Edition
 Italy 1:250,000,G.S.,G.S.3982 (Military) (Sardinia only)

CORRESPONDING SYMBOLS ON CARTA AUTOMOBILISTICA DEL TOURING CLUB ITALIANO 1:200,000

National Highways (Autostrade) 8 Metres (26 Feet) wide, metalled.						
Main Roads (Strade Statali) with route numbers. 6 Metres (19 Feet) wide or over, metalled.						
Other Main Roads (Strade di grande comunicazione) 5 Metres (16 Feet) wide or over, metalled.						
Secondary Roads 3-5 Metres (10-16 Feet) wide, generally metalled.						
Other Roads and Cart Tracks, generally unmetalled.						
Mule Tracks						
Paths						

CLASSIFICATION IS BASED ON "CARTA AUTOMOBILISTICA DEL TOURING CLUB ITALIANO" 1:200,000 WITH MODIFICATIONS FROM "CARTA AUTOMOBILISTICA" 1:650,000 & R.A.C.I. CARTA DELLO STATO DELLE STRADE" 1:1 M. 1939 & "CARTA D'ITALIA DEL TOURING CLUB ITALIANO 1:250,000".

N.B. ROAD GRADIENTS APPEARING ON ITALIAN ORIGINALS ARE ONLY SHOWN ON G.S.G.S. 4230, 4228 & 4229

CORSICA G.S.,G.S.4398 1:50,000

Main Roads	5-6 Metres (15-19 Feet) wide, metalled.		
Other Main Roads	4-5 Metres (13-16 Feet) wide, metalled.		
Secondary Roads	3-4 Metres (10-13 Feet) wide, generally metalled.		
Other Roads and Cart Tracks	Sometimes metalled.		
Tracks and Paths.			
Roads under construction.			

CORRESPONDING SYMBOLS ON MICHELIN CLASSIFICATION IS BASED ON INTELLIGENCE REPORTS AND ON MICHELIN 1:200,000 1939

MOST ROADS IN CORSICA DEMAND CAUTIOUS DRIVING

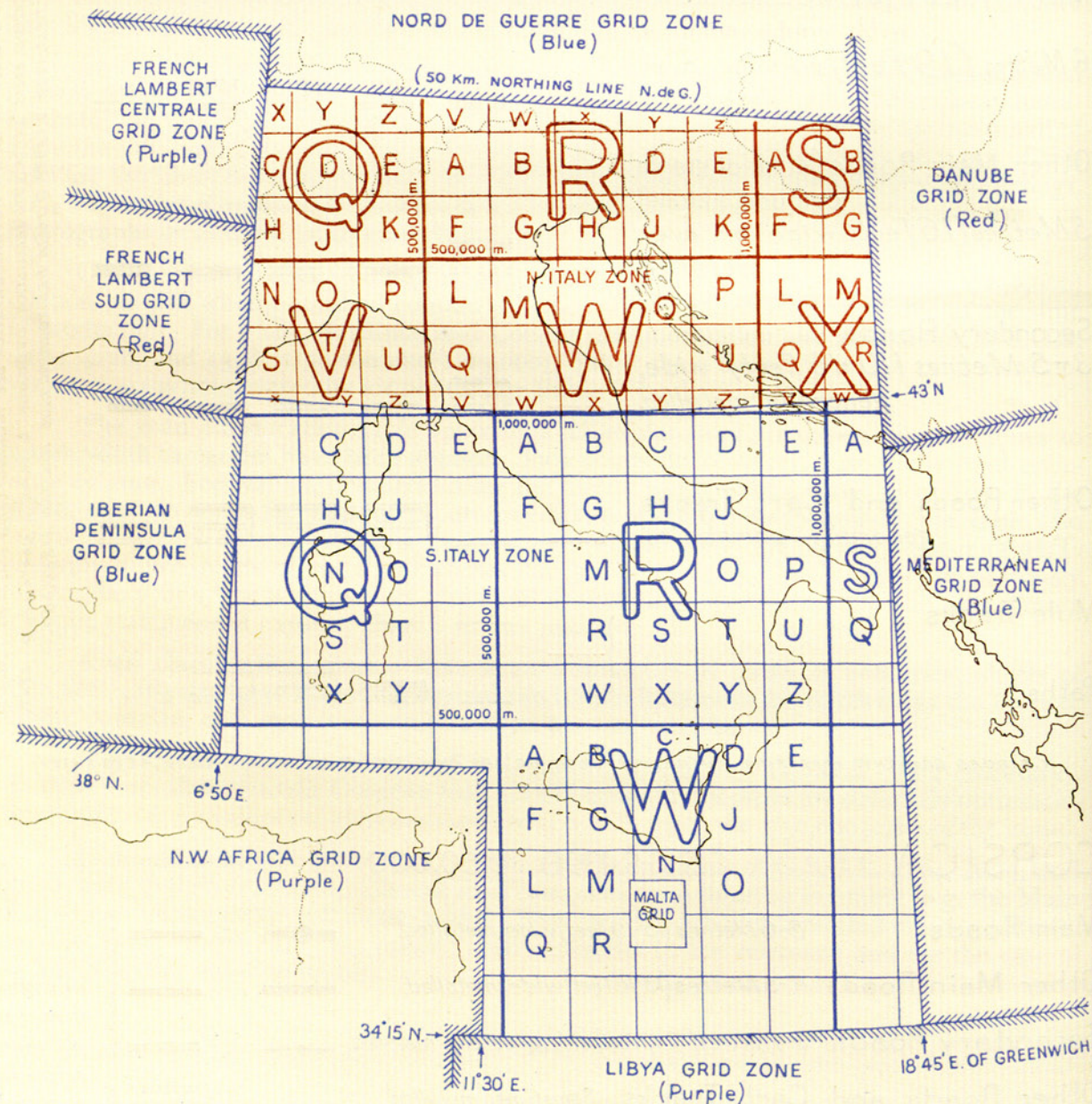
Grids and Grid junctions

Full and detailed descriptions of grids in the area are outside the scope of these notes. It does, however, seem of value to emphasize that the area falls into two grid zones, as shown by the diagram below. The junction between these two—the North and South Italy grids—falls along the 43° N. parallel. The lower diagram on the opposite page shows how this grid junction affects sheets at scales of $1/250,000$ and $1/100,000$.

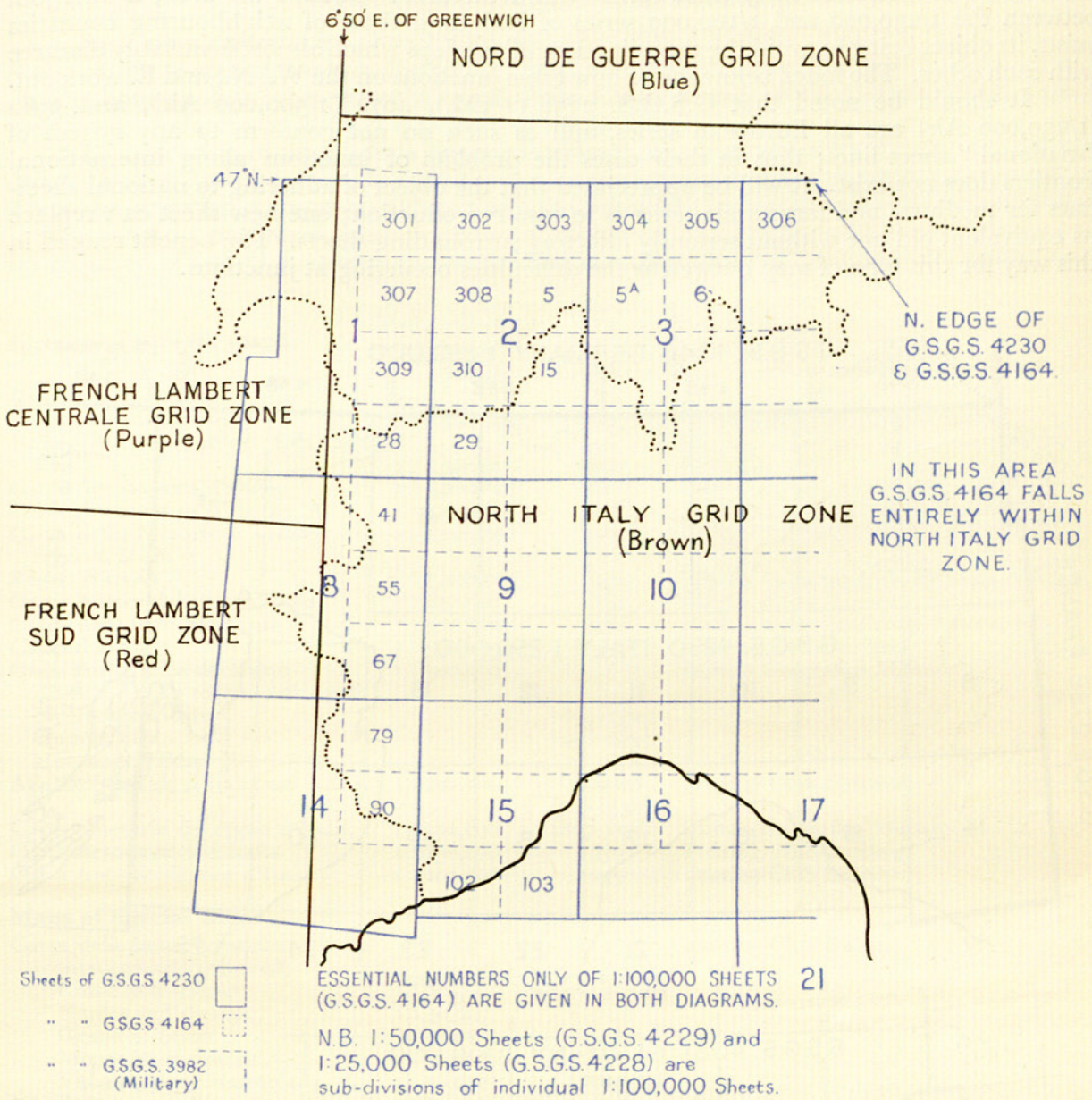
Two westerly points on the Italian frontier in the Alps fall just within French grid zones. The junctions between series fall in such a way that sheets of G.S.G.S. 4164 are not affected by French grids; the NW. sheets of G.S.G.S. 4230, on the other hand, are affected, since they protrude across the international frontiers and the grid junctions. Thus sheets 1 and 14 of this series carry two grids, and sheet 8 three grids.

It should also be noted that all G.S.G.S. maps of the area at scales of $1/500,000$ and larger—including Town Plans—carry grids. In certain areas, too, the Hydrographic Department has produced charts carrying the military grid, which is in sympathy with the grid on the maps of the same areas.

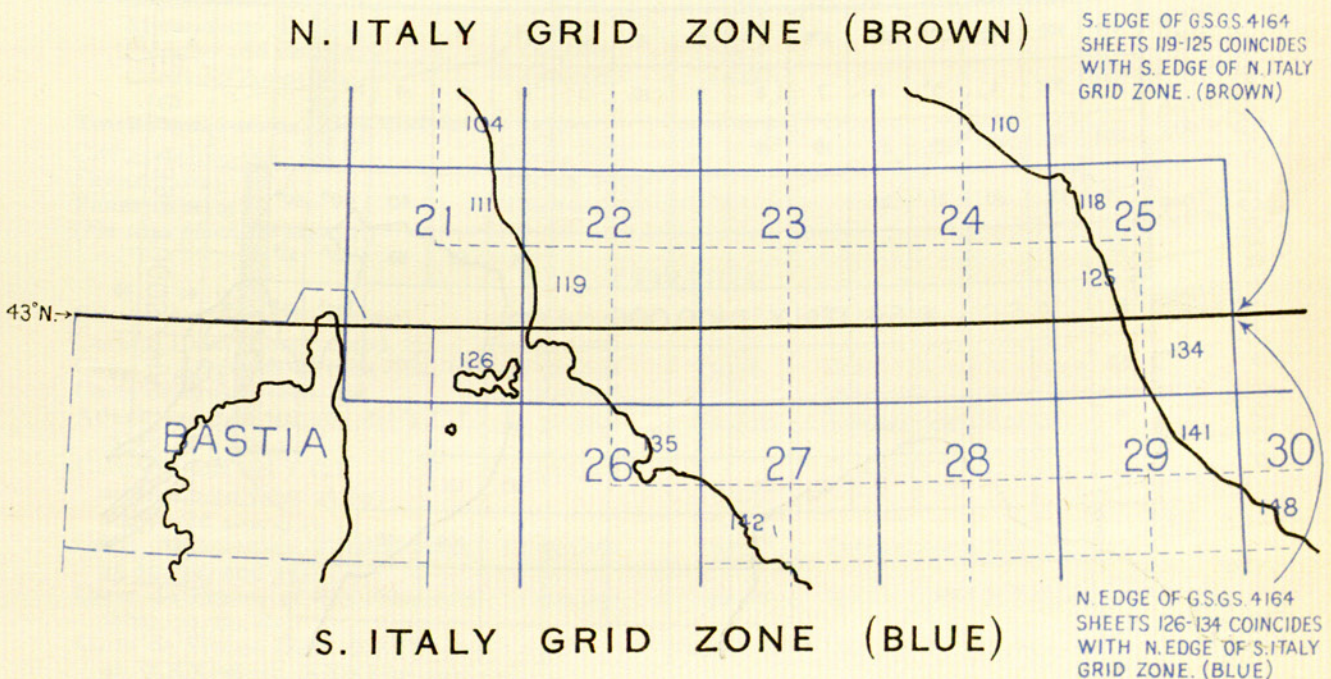
BRITISH MILITARY GRID ZONES & BOUNDARIES



DIAGRAMS OF SHEETS AFFECTED BY GRID JUNCTIONS.



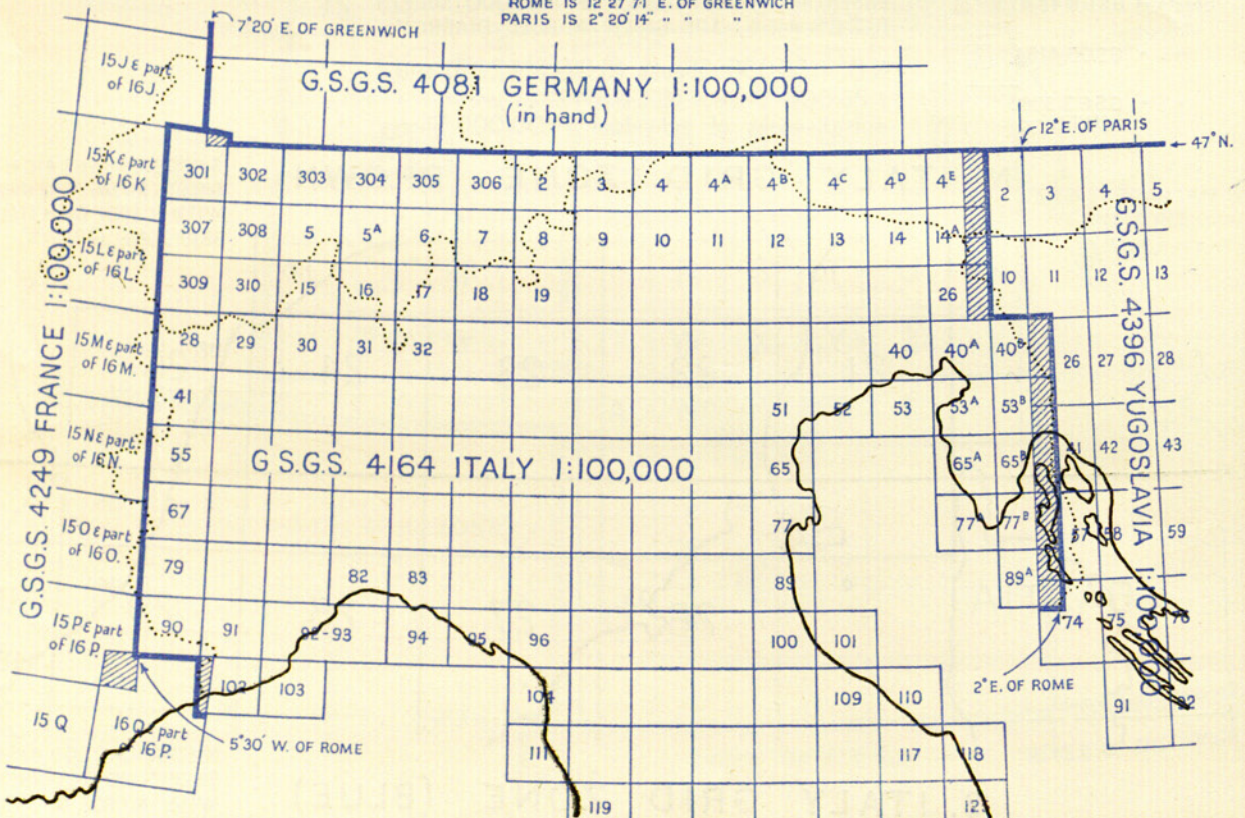
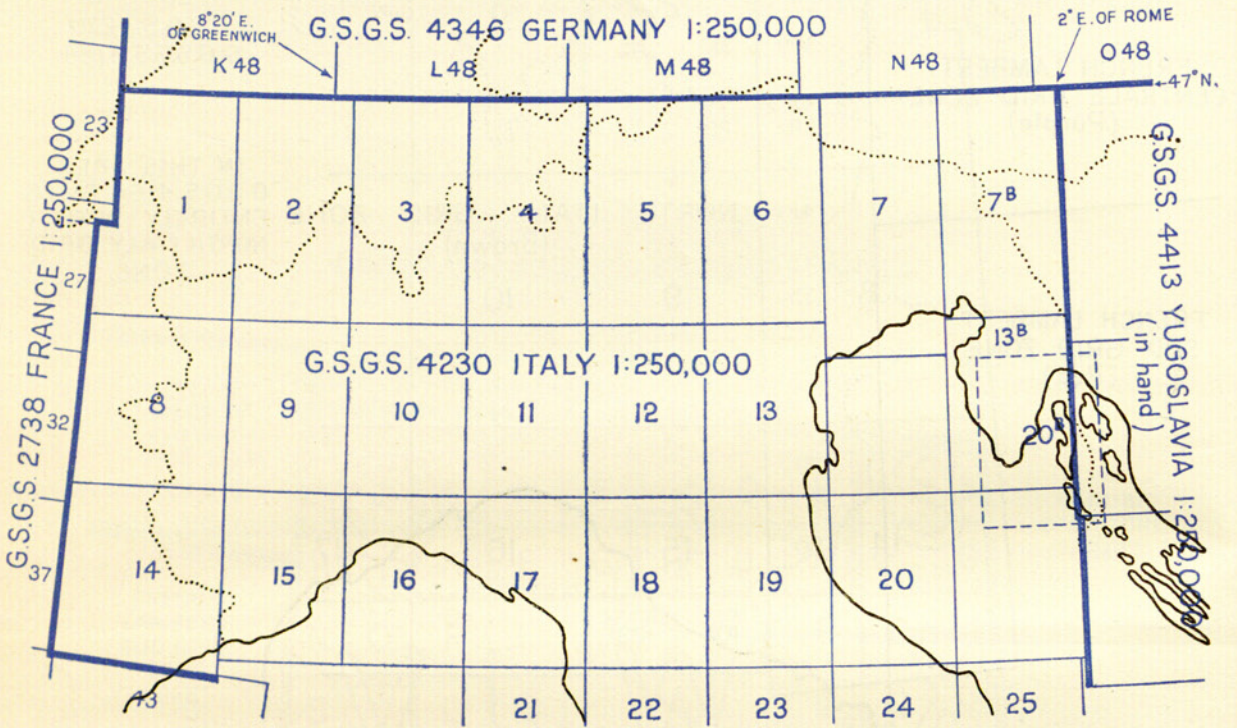
N. ITALY GRID ZONE (BROWN)



Series junctions

The small indices to the various G.S.G.S. series in Part I, as well as the text, will have illustrated the interrelation of these series within the area. Outside the area, a butt join between the 1/250,000 and 1/100,000 series of Italy and those of neighbouring countries exists, its object being to avoid the complications of overlaps which almost invariably disagree with each other. The index below shows how these junctions on the W., N., and E. work out.

It should be noted that G.S.G.S. 2758 (1/1M.), 4072 (1/500,000 Air), and 3982 (1/250,000 Air) are all European series, and as such do not conform to any system of "national" sheet lines; thus in their cases the problem of junctions along international frontiers does not exist. It will be appreciated that the object of adhering to national sheet-lines for medium- and large-scale series is to ease reproduction; one new sheet can replace its equivalent old one without seriously affecting surrounding sheets. The benefit reaped in this way for this type of map outweighs the difficulties occurring at junctions.





BAY OF BISCAY

GIRONDE

GULF OF LIONS

GULF OF VALENCIA

BALEARIC ISLANDS

ALGIERS

CONSTANTINE

MOUNTAIN

MADRID

MURCIA

ORAN

ALGERIA

Bordeaux

Lyons

Marseilles

Barcelona

Valencia

Majorca

Algiers

Constantine

Santander

Bilbao

Vitoria

Burgos

Alcala

Madrid

Alcala

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