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“Grid colours on military maps ”

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The Charles Close Society was founded in 1980 to bring together all those with an interest in the maps and history of the Ordnance Survey of Great Britain and its counterparts in the island of Ireland. The Society takes its name from Colonel Sir Charles Arden-Close, OS Director General from 1911 to 1922, and initiator of many of the maps now sought after by collectors.

The Society publishes a wide range of books and booklets on historic OS map series and its journal, *Sheetlines*, is recognised internationally for its specialist articles on Ordnance Survey-related topics.

## ***Grid colours on military maps***

***Mike Nolan***

On the Series M726 1:50,000 map series of Great Britain, a variant of the Ordnance Survey 1:50,000 series, the grid lines and the kilometre values of grid lines around the neat line are shown in blue. In earlier times both elements would probably have been on the black detail plate. It is believed also that at one time the grid lines may have been 'rouletted', or drawn as a series of faint dots with a small wheeled instrument in order to make the grid less obtrusive on the map face. The reason why blue is used is not known and the author would be pleased to hear from anyone who may know the background to this practice. An enquiry to the Ordnance Survey has not resulted in any positive information but perhaps members of the Society may have some information.

What is known is something of the background to the use of grid colours on military maps and it may well be that the use of blue is an offshoot of military practice.

Surprisingly, perhaps, there is little mention of 'grid colours' in Brigadier Clough's monograph on Military survey in World War Two, *Maps and survey*, HMSO 1952. The only index entry of note refers to the use of the Egyptian 'red' and 'purple' grids in the Middle East.

However, a letter has been found introducing a policy for the depiction of grid colours on British military maps. This predates the entry into the war of the USA and it is thought likely that the policy would have been immediately adopted by the Americans when they entered the war. The policy letter, found in PRO WO 193/202 & 203, is reproduced in full below:

*147/G.S.G.S.*

### ***TECHNICAL INSTRUCTION No. 1 – COLOURS OF GRIDS ON MAPS.***

*It is considered desirable that the colours of grid overprints should be standardised to call attention to a change in the grid system and to familiarise users with a particular colour for each grid.*

*Standard colours when they differ from those already used will be introduced only when a reprint is required in order to avoid cancellation of existing stocks.*

*It is not proposed, however, to insist on coloured overprinted grids where the grid is or will be put on the black outline plate, but standard colours should be used for the grid figures on the sheet margins.*

*In certain cases it is appreciated that the proposal cannot be rigorously adopted but the principle of one grid one colour should be followed as far as is practicable.*

*The attached chart shows the colours to be used on reprint for overprinted grids and/or grid figures on the majority of grid systems now in use.*

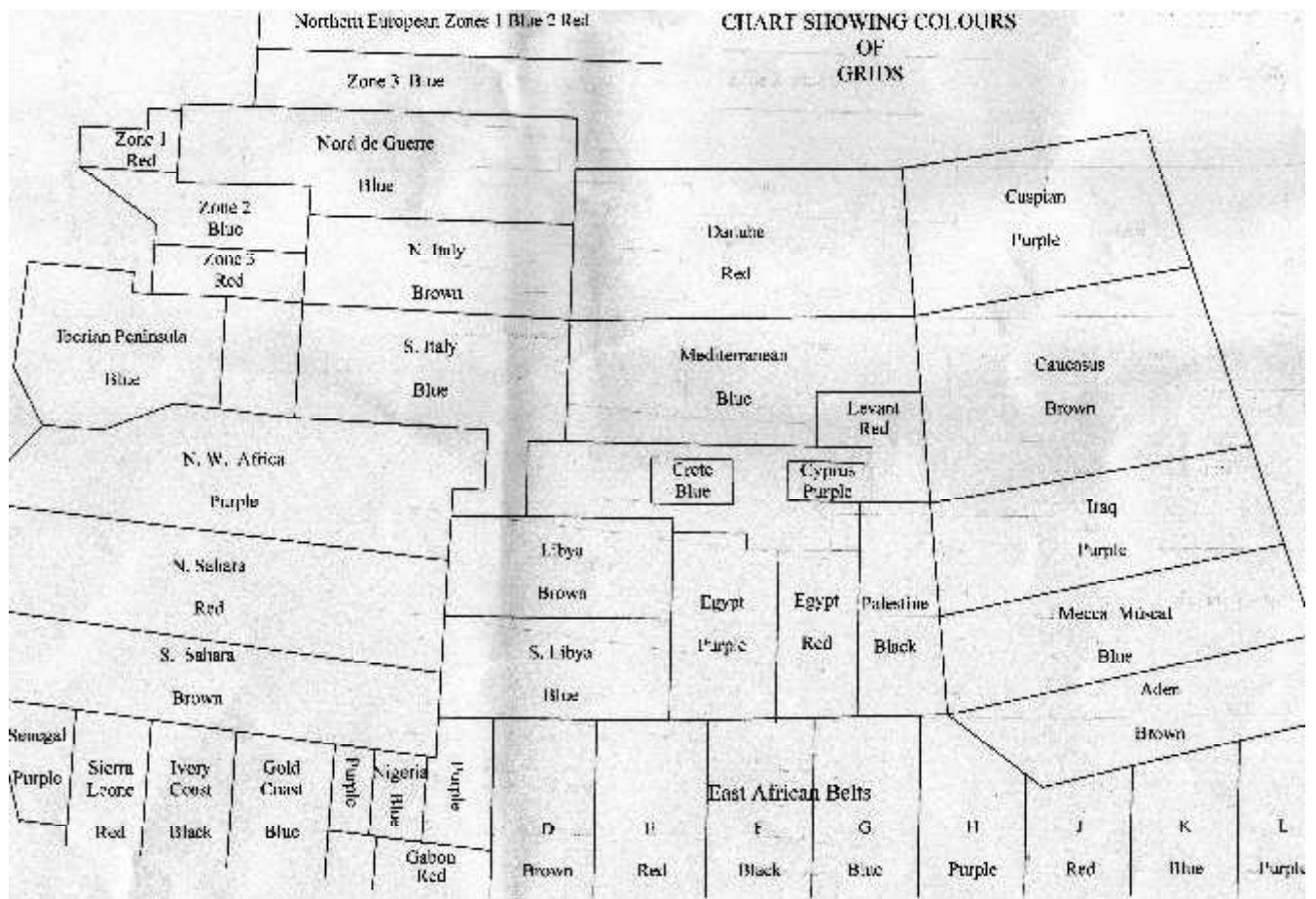
*(Signed) J. Calder Wood  
For Colonel, G.S.*

*13<sup>th</sup> November, 1941.*

*Distribution –*

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		<i>G.S.G.S. L</i>	2

The graphic illustrating this policy produced originally as a spirit-duplicated or Gestetner printed diagram is reproduced below as a modern Autocad drawing as faithfully as possible. It will be noted that the policy as illustrated in the graphic was confined to the European Theatre of Operations but doubtless the policy was extended to cover the Far East and the South West Pacific Area theatres of operations as well after the entry of Japan into the war.



In the post-war period, guidance on the system has been found in *Military Engineering*:

**Grid Colours**

24. To assist the user in recognizing the grid in use on a particular map, a system of colour codes has been introduced. Colour codes are particularly useful in the complex situations which can sometimes arise at junctions between UTM/UPS and

*British Grids. In the case of operational grids, the grid colour is always used for the figures defining the easting and northing values but not necessarily for the lines themselves. When only one grid appears on a sheet, the lines are printed in the grid colour but, when a grid junction occurs, all lines take the colour of the grid covering the larger part of the sheet to ensure accurate registration between both grids. The treatment of overlapping and secondary grid values and ticks varies from scale to scale and reference should be made to current instructions for full details. In such cases, the standard grid colour may not be used where it would entail an additional printing. Generally, either brown or blue, each a colour which will already occur on the sheet, is substituted and the printing combined with either the contours or the drainage as appropriate.*

*25. Occasionally grids of the same colour abut. In such cases, an extension of the grid across the junction to form an overlapping grid could cause ambiguity. To overcome this, the overlapping grid values and ticks are shown in a different colour.*

(Source – *Military Engineering* Vol. XIII, Part XII Cartography, 1971, pages 26-27)

Shortly after, the above was repeated with minor amendment in the *Manual of graticules and grids on Military maps and air charts, GSGS 5191 Edition 1, GSGS, September 1973, pages 3-5*):

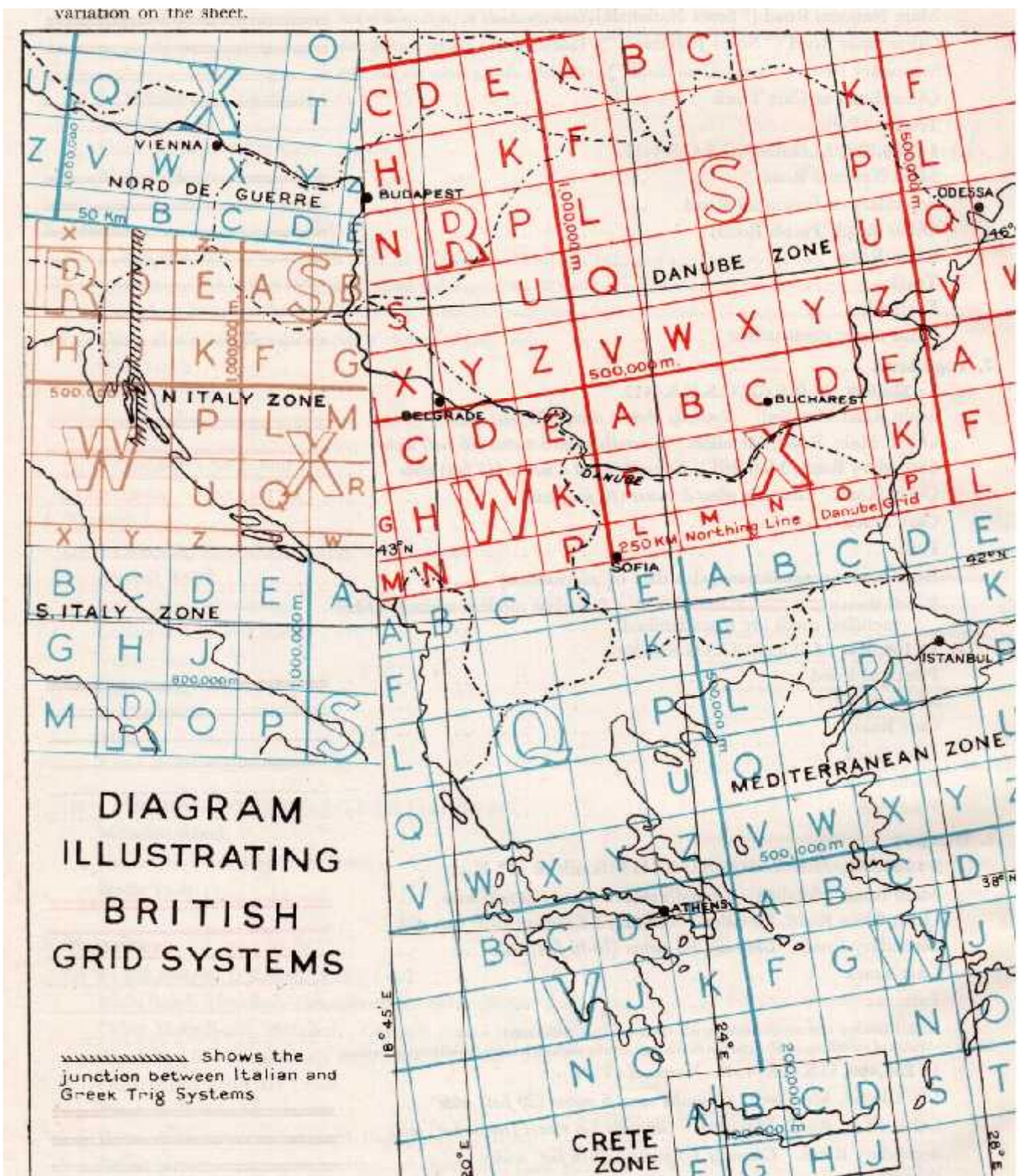
### **Grid Colours**

*19. To assist the user in recognizing the grid in use on a particular map, a system of colour codes has been introduced (See Appendices 2 – 43 at Annex C). Colour codes are particularly useful in the complex situations which can sometimes arise at junctions between UTM/UPS and British Grids. In the case of operational grids, the grid colour is always used for the figures defining the easting and northing values but not necessarily for the lines themselves. When only one grid appears on a sheet, the lines are printed in the grid colour but, when a grid junction occurs (paras 16a, b), all lines take the colour of the grid covering the larger part of the sheet to ensure accurate registration between both grids. The treatment of overlapping and secondary grid values and ticks varies from scale to scale and reference should be made to Chapter 4 for full details. In these cases, the standard grid colour may not be used where it would entail an additional printing. Generally, either brown or blue, each a colour which will already occur on the sheet, is substituted and the printing combined with either the contours or the drainage as appropriate.*

*20. Unfortunately, grids of the same colour do occasionally abut. In such cases, an extension of the grid across the junction to form an overlapping grid (see para 17) would cause a colour problem. To cater for this, the overlapping grid values and ticks are shown in a substitute colour (see Chapter 4).*

The author would be pleased to hear from anyone who may have further information on this subject.





*Diagram illustrating British grid systems in the Balkans in World War Two and also the colours used for the various grids.*

*Taken from Notes on maps of the Balkans, July 1944.*