Soviet military mapping of Britain study day

John Davies

A study day was held at Cambridge University Library on 8 October as a follow-up to the recent *Sheetlines* stories on the subject. The purpose of the event was to explore the content of the maps and the context in which they were produced. Several examples of Soviet small scale topographic maps and large scale town plans were displayed alongside contemporary OS maps, together with examples from territory where Soviets had unrestricted access and some of the maps available to their own civilian population.

Three speakers, David Watt, Henry Dodds and John Davies, gave presentations and many of the audience contributed opinions and information. David Watt's talk on the history and global reach of the Soviet mapping agency appears above. Below are the main points which emerged from the other speakers, the open forum session and the exhibition.

Strategic importance during Cold War era

Henry Dodds was editor of *Jane's Soviet Intelligence* during 1988-92, with previous experience in the Royal Engineers and the Intelligence Corps. He illustrated the Soviet superiority in terms of fire power during the period 1987-8 using these statistics:

- Number of battle-ready tanks available to USA, UK, Germany and all other western forces combined, 21,000;
- number available to USSR, 51,000.

However, if there were to be an invasion of UK then the number that could be landed during a first sea lift would be crucial. This would amount to only about 300 tanks and crew and about 7,000 men. Assuming normal deployment of allied forces, this would be insufficient.

Imagine, though, the following 'wildly speculative' scenario. Suppose the Cuban missile crisis had escalated; suppose a stand-off had occurred between US and Soviet tanks in Germany and shooting had started; a period of extreme tension develops in Europe; British forces in Germany are reinforced causing reduced defence of UK; Scandinavian countries declare neutrality. Result would be the possibility that the first sea lift would in fact be sufficient and Soviet forces take command of Britain.

The intriguing question is: was there a Soviet attack plan of which the maps were an important component, or were the cartographers just making maps anyway, which military commanders could use as and when necessary. In the context of the history of the Russian Military Topographic Directorate outlined by David Watt, it would be reasonable to suppose that the maps and the military strategy have independent existences, although the purpose of the maps would be to facilitate any proposed invasion, occupation and subsequent command and control of any territory in UK, Europe or world-wide.

Sources of content

John Davies concentrated on an examination of specific details on selected town plans to demonstrate a hypothesis about how these maps were compiled.

The known town plans at scales of 1:10,000 and 1:25,000 date from 1950s to 1990, with about eighty examples of British and Irish towns and cities. Several examples exist of places which were mapped more than once and many instances can be suggested of places which

are apparently un-mapped but would be expected to have been (eg Derby, Dundee, Hull, Reading, Slough, Stirling etc) when others such as Gainsborough and Kilmarnock were.

This seems somewhat random and John suggested the following set of assumptions:

- If the Crewe map (1957) on display is typical, then the town plans of 1950s were derived almost entirely from pre-war six-inch OS maps supplemented with recent developments from contemporary two-and-a-half inch OS maps.
- It is likely that most towns and cities were in fact mapped at that time and that an on-going programme of revision was in force; the fact that relatively few examples are available is probably due to the circumstances of discovery after the collapse of USSR.
- From the time that satellite and high-altitude 'spy-planes' became available (say the mid-sixties) the revisions have been based on aerial images.
- Considerable additional information has been gathered by investigation and the acquisition of published street atlases, trade directories, etc, supplemented by local knowledge.
- Some errors have crept in during copying from one edition to the next.¹
- The maps show more recent developments than contemporary OS maps; latest developments are almost always un-named but generally names are derived from commercial town plans and not OS maps.
- The net effect is that for the town plans of 1970s onwards, the only information that can be seen to be derived from OS material is the spot heights, which are largely as the original six-inch maps (typically dating from 1910s and 1920s).
- Railways are an anomaly as they generally continue to be shown as early layouts despite closures which would be apparent from aerial views.

Questions of copyright

The open forum following John's presentation discussed the matter of copyright and in particular the OS statement to the British Cartographic Society in 1997 claiming that the Soviet maps contravened Crown Copyright. The main points arising were:

- Copyright in OS maps lapses after fifty years.
- Examination of the OS statement reveals that it may not necessarily refer to the Soviet town plans, as it specifically refers to 'small-scale mapping' but also refers to scale of 1:25,000.
- USSR was not a signatory to Berne Convention, but the Russian Federation later was and now claims retrospective copyright over the maps: this has not been tested.
- The effect of the OS statement was to prevent UK-based dealers from handling the maps and forcing libraries such as BL to obtain them at much higher prices from US-based dealers.
- When considering copyright, the courts apply the test of whether the copied content is 'significant' (although this term is not defined).

See Brownsea Island on the Bournemouth and Poole maps of 1974 and 1991 for vivid examples.

- In the context of the likely sources and dates described above, whether or not the copied content is 'significant' and within the time limit would be a matter of contention.
- At the time that the OS issued the statement they had recently launched proceedings against AA for breach of copyright which resulted in a settlement worth £20 million in 2001.
- The purpose of the OS statement was to prevent map publishers from using the Soviet material to produce commercial maps free from royalties and in this they were successful.
- In view of the above, whether or not the OS would now pursue a claim against anyone reproducing the maps today is an open question.

The full text of the OS Statement can be seen at www.Jomidav.com.

Other topics discussed

- Place names the Soviet maps generally display transliterations of the 'official' pronunciation of place names in accordance with standard conventions, but some anomalies are seen, such as Wymondham in Norfolk which is rendered (on 1:500,000 map) as, УИНДЕМ, the equivalent of 'Wyndem' but Milngavie near Glasgow is rendered as spelt although the Scottish pronunciation is 'Mullguy'.
- Photogrammetry it was noted that no tests have been applied to determine whether the positioning of aerial images is exactly as OS.
- What is not shown several examples were suggested of installations which the Soviets must have known about but which are not identified on the maps (eg MI5 HQ, Cambridge Regional Seat of Government). The known maps are labelled 'Secret' and it is speculated that another level of mapping 'Top Secret' may have existed showing more sensitive information.
- 'Reserves' the maps identify National Trust property with the label 'Reserve' and it was suggested that this word implies a 'secret or special' place.
- Descriptions of localities the town plans contain detailed description of the locality and the 1:200,000 maps generally contain detailed description of the wider area. Translations of those for Cambridge city and Cambridgeshire by Charles Aylmer were available and it was noted how comprehensive and how (generally) accurate they are. A collection of these would constitute a formidable research document.
- Hydrography it was noted that the undersea depths do not generally correspond to UKHO Admiralty charts and it was suggested that 'Notices to Mariners' may have been used to derive information such as channels annotated as 'Dredged to x metres, 19yy'.
- Chinese maps Charles Aylmer has used the Soviet maps of China extensively and reported that they represent the best or only topographic maps available of much of the country, but that the veracity of some place names is questionable. Tony Baggs mentioned Chinese maps of Malaya (copied from British maps), which he has presented to CUL.

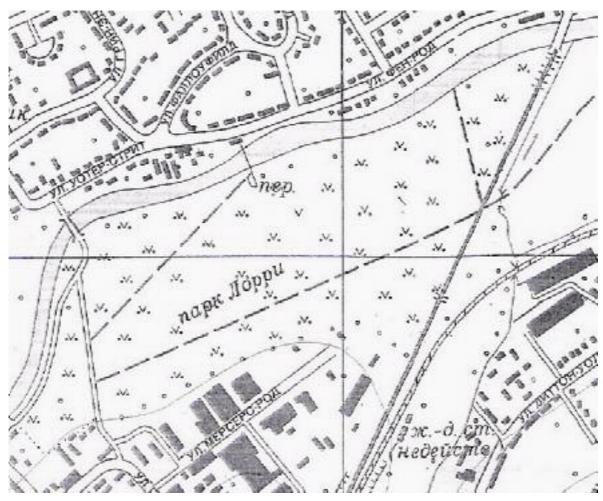
Exhibition

The accompanying exhibition demonstrated three themes:

- The range of dates and range of scales of the mapping with examples from 1938 to 1990 of all seven scales, mostly concentrating on Cambridge and East Anglia.
- Specific examples of British town plans showing particular details in comparison with contemporary OS and other material and also picking up discrepancies and errors in the maps.
- Examples of military and civilian mapping of cities where the compilers had unrestricted access, showing the depth of detail of the former and the vagueness of the latter.

The illustrated Exhibition Guide is available for download at www.Jomidav.com.

Where to park your lorry in Cambridge



This extract from the 1989 Soviet 1:10,000 town plan of Cambridge shows a public park known as Stourbridge Common to the east of the city by the River Cam. The name shown translates as 'Park Lorry', which rather suggests that a visiting agent has misunderstood a nearby sign. Incidentally, the street just below is shown as Mercers Road, but this is named on local maps as Mercers Row.