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# Lists of Important Objects on Soviet Military City Plans – An Initial Analysis

John Davies & David Watt

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#### **OBSERVATION PAPER**



## Lists of Important Objects on Soviet Military City Plans – An Initial Analysis

John Davies and David Watt

Independent Scholars

#### **ABSTRACT**

The plans of world cities outside the USSR that were produced by the Soviet military during the Cold War each include a List of Important Objects. These are items of significant strategic economic, administrative or military importance. This paper examines these object lists from Soviet military plans of British cities and discusses their contents. It concludes that there is considerable variation in their comprehensiveness and some inconsistency in the criteria used to select objects for inclusion.

#### **KEYWORDS**

Soviet cartography; military mapping; City plans; Spravka; Important Objects

#### Introduction

The existence of secret Soviet military mapping of the world, ranging from small-scale topographic sheets to large-scale city plans, became known in the West after they were offered for sale by a Latvian source at the 1993 International Cartographic Conference in Cologne, Germany (Watt, 2005; Davies and Kent, 2017; Kent et al., 2019). Since then, much attention has been given to the cartographic content of the maps, but little interest has been paid to the marginal data, which, in the case of the city plans, comprises a 'CПРАВКА' [Spravka] ('Reference', a descriptive essay) and 'ПЕРЕЧЕНЬ ВАЖНЫХ ОБЪЕКТОВ' [List of Important Objects]. This paper looks at the latter, with the aim of exploring the criteria used for the selection of such items for inclusion.

The List of Important Objects appears in the city plans either on the sheet itself (see Figure 1) or in an accompanying booklet. 'Important Objects' are those items which were deemed to be of significant strategic economic, administrative or military importance, such as essential infrastructure, utilities and industrial and military premises. Other prominent buildings, landmarks, navigational aids or non-strategic factories may (or may not) appear on the plans, but are not included in the listing.

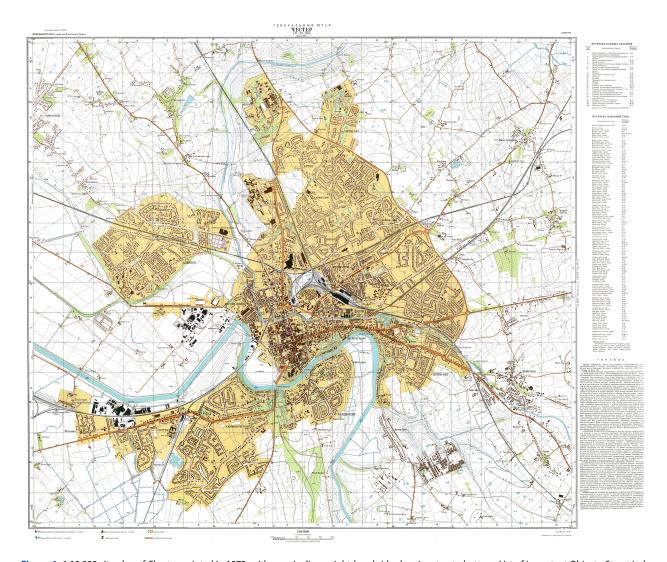
Objects are listed and numbered in alphabetical order and (except for examples produced before 1972) are classified and portrayed on the maps by colour-coding, as follows:

- Правительственные й административные учреждения [Governmental and administrative agencies], coloured purple
- Военные объекты, объекты связи [Military facilities, communication facilities], coloured green
- Военно-промышленные объекты [Military-industrial facilities], coloured black.

A typical example of a plan extract with colour-coded objects appears in Figure 2, whereas Figure 3 is a detail of the accompanying list, with a translation in Figure 4. 'Governmental and administrative agencies' includes academic institutions, law courts and prisons, banks and custom houses, civic buildings, police stations, fire stations, labour exchanges and observatories. Included in 'Military and communications facilities' are airports, barracks, hospitals, radio and TV stations and masts, post offices, military and naval depots, and training and medical facilities. 'Military-industrial' covers factories, railways and other transport infrastructure, power stations, docks, warehouses, gas works, water and sewage plants, and coal mines.

## **Analysing the Lists of Important Objects**

For the purposes of this paper, the object lists appearing on Soviet military plans of 91 British towns and cities were examined. These were chosen out of the thousands of world-wide examples due to the authors' local knowledge and the availability of materials for comparison. The plans date from 1950 to 1997; the latter date being post-Soviet, but representing a continuation of the Soviet style and format. Of the maps examined, the



**Figure 1.** 1:10,000 city plan of Chester, printed in 1973, with marginalia on right-hand side showing, top to bottom: List of Important Objects, Street Index and Spravka. Size: 105 cm x 90 cm (private collection).

singular exception to the conventional colour-coding is Barrow-in-Furness (1975), which has the green and purple colours interchanged.

The question of information sources remains to be studied in detail, but Ordnance Survey (OS) large-scale plans and captured German mapping from the Second World War (itself derived from pre-war OS maps, overprinted with similar identification of strategic targets) were evidently available to the compilers, supplemented with reference material such as trade directories and guide books.

The number of objects listed varies from less than 20 (Great Yarmouth: 14, Gainsborough: 16, Guildford: 18, Falmouth: 19) to over 250 (Manchester: 255, London: 374, Birmingham: 395). In all but one of the cases where more than one edition of a plan was produced, the later version lists fewer objects:

- Bournemouth, 1974 and 1990: 94 and 67, respectively
- Cambridge, 1977 and 1989: 62 and 53, respectively
- Coventry, 1972 and 1984: 99 and 95, respectively
- Halifax, 1975 and 1989: 103 and 75, respectively
- Luton, 1973 and 1986: 31 and 66, respectively (but the later plan covers a significantly larger area).

There is a distinct difference between the pre- and post-1970 plans and their object lists. The earlier maps (Pembroke, 1950; Crewe, 1957; Kilmarnock, 1958; Wolverhampton, 1963; Belfast, 1964; Harwich, 1964) do not have the classification and colour-coding and most have relatively few objects identified (20–27), although Belfast has 91 and Wolverhampton 124. These maps include object types which were not deemed to be relevant in the later specification and do not appear on the later maps, such as:

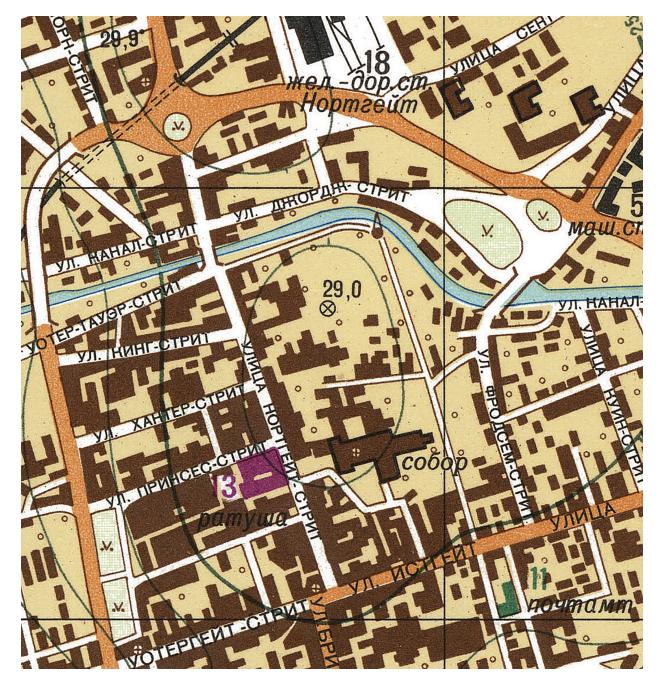


Figure 2. Detail of Chester city centre on the 1973 plan, showing colour-coded objects, numbers 18 (black, railway station), 13 (purple, town hall) and 11 (green, post office).

- Academy or School (other than Military): Crewe has 2, Belfast, Kilmarnock and Wolverhampton have 1 each
- Bakery: Belfast has 1
- Church or Cathedral: Belfast, Pembroke and Crewe 1 each, Wolverhampton has 7
- Club: Wolverhampton has 2
- Hotel: Wolverhampton has 2, Harwich 1
- 'Union Workers House': Pembroke and Wolverhampton have 1 each. (The former is marked on 1940s six-inch OS maps as Public Assistance Institution, the latter as Union Workhouse.)
- Theatre: Belfast has 1

These maps also include anachronistic information, evidently derived from long-outdated OS or other sources. Examples include:

- Pembroke: 'Pater Battery' (this named only on the 1869 OS 1:10,560 plan)
- Kilmarnock: 'Workshops of the Glasgow and South Western Railway' (this company was absorbed into London Midland & Scottish Railway in 1923)

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11 П 12 П 13 Ра 14 С		
12 П 13 Ра 14 С	олиция	H-5
13 Po 14 C	очтамт	K-10
14 C	редприятие промышленное*	3-9
	атуша	K-9
	клады	Д-17
15 C	танция водоснабжения	K-12
16 C	танция железнодорожная Блейкон	H-5
	танция железнодорожная грузовая и пас-	И-11
18 C	танция железнодорожная Нортгейт	И-9
19 C	танция железнодорожная Солтни	H-6
	танция железнодорожная Солтни-Ферри, ортировочная	H-1
21 C	танция очистки сточных вод	H-7
	правление полиции главное	Л-9
23 Ц	<b>Цтаб Западного военного округа</b>	M-10
24 9	лектростанция	K-8

Figure 3. Detail of the 1973 city plan of Chester, showing the List of Important Objects.

- Group of factories (2 machine tool, Mechanical engineering and chemicals)
- Sealand Industrial Group \*
- Car repair plant
- Gasworks
- Hydraulic Engineering company
- Metalworking plant
- Lead Refinery
- 8. Barracks
- Electrical substation
- 10. Police
- Post office 11.
- 12. Industrial enterprise \*
- 13. Town hall 14. Warehouses
- 15. Waterworks
- 16. Blacon railway station
- 17. Chester General railway goods and passenger station
- Northgate railway station
- 19. Saltney railway station
- 20. Saltney Ferry railway station and marshalling yard
- 21. Wastewater treatment plant
- 22. Police HQ
- Western Military District Headquarters 23.
- 24. Power station

Note: \* Production unknown

Figure 4. Translation of Chester's List of Important Objects.

• Wolverhampton: has two 'tram depots' (the tramway closed in 1928) and 'Osier Bed Metallurgical plant' (which is shown as 'disused' on the 1919 OS 1:2,500 plan)

With the introduction of new specifications came a standardized colour-coding of important objects. Unlike most other symbology, the colour-code and definition appear as a legend in the marginalia of every plan. However, the selection of items for inclusion is inconsistent, as the following examples illustrate.

Banks. Whilst there are obviously far too many bank branches for all to appear, it might be expected that every plan would show at least one or two major banking premises. In fact, of the 91 plans studied, 'bank' appears in only 21. Of these, several instances are misinterpretation of street names, such as Cherry Bank, Aberdeen and, in Wolverhampton, Comely Bank and Rock Bank. No banks are named, other than 'Prescot branch', St Helens and 'Lloyds Bank', Leicester. London has two listed: 'Bank of England' and 'Royal Bank', with the latter being a misinterpretation of the function of the Royal Exchange.

Bridges and tunnels. Only particularly important crossings would be expected to be included and this is largely so. The Tamar road and rail bridges in Plymouth, the Tay road and rail bridges in Dundee and road bridges in Exeter, Newport and Chatham are the only bridges listed, other than two railway bridges on the pre-1970 Crewe plan. Missing from the lists, but appearing on the plans, are major road bridges such as the Erskine Bridge, London's Thames bridges, the A19 Tees bridge and the M1 Tinsley viaduct, as well as important road tunnels such as the Mersey and Blackwall tunnels (but the A19 Tyne tunnel is listed). Numerous railway tunnels are listed, but by no means all that appear on the plans. The London list, for example, includes only one railway tunnel (Elstree). A pedestrian tunnel is listed in Cardiff, but not those in London and Newcastle.

Bus stations. Although almost every town has a bus station, they are listed on only 15 plans. The 1974 Bournemouth plan lists three; the others have one each.

Hospitals (other than military/naval). The pre-1970 plans each have several hospitals named and listed, but only 13 post-1970 plans include hospitals in the objects lists, although they generally do appear on the plans themselves. Of those which are listed, the only ones named are Addenbrookes Hospital, Cambridge; Stobhill Hospital, Glasgow; Gloucestershire Hospital, Gloucester; 'Port hospital (quarantine)', Portland and Haslar Hospital, Portsmouth. All are colour-coded green (military) except Addenbrookes, which is purple (governmental).

Fire stations. Only 32 of the 91 plans have fire stations listed; of these, six are coloured purple, the rest are black, thus not classified as administrative but as military-industrial. In most cases, as only one fire station is listed (in reality many more existed). In London, only ten of the 100+ have been selected.

Labour exchanges. There are only ten instances of a Labour Exchange; one each on plans ranging from Leicester (1974) to Dundee (1992).

Shopping centres. These appear only on the 1982 Exeter plan, which has two named occurrences: 'Marsh Barton shopping centre' and 'Pinhoe shopping centre'.

Universities. There is a significant difference between the Oxford and Cambridge plans in the treatment of their Colleges. In Oxford (1973), only one building is identified and listed as 'University' but is in fact one of the Colleges, known as University College. In Cambridge, individual Colleges are identified. The 1977 plan has 30 College and associated buildings listed, all but one of which is named. The 1989 plan has 16, of which 11 are named.

Factories. A considerable part of most lists is devoted to factories and similar industrial premises. In many cases, the ownership and product are identified, but this was not always possible from the sources available. An analysis of the 85 post-1970 object lists shows a total of 6,341 items, of which 2,647 (42%) are factories. Of the factories 712 (27%) are named, 1,239 (47%) are unnamed but have the product identified and 696 (26%) are labelled as 'unknown product'. At least two of the 'unknown' would have been readily identifiable by most Britons: the 'Golden Shred factory' in Manchester and 'Wedgwood factory' in Stoke-on-Trent.

There are substantial differences between the lists in the identification of names and products. The percentage of factories named in Cardiff is 84%, in Plymouth 83% and in Northampton, Havant and Derby 80%, whereas in 12 cities, including Edinburgh, the proportion is effectively zero. The figure for London is 1%, Birmingham is 6%, Glasgow 10% and Manchester 12%.

The percentages of factories having 'unknown production' is 50% or more in 11 lists and 10% or less in 26. However, the fact that these are included implies that their compilers had reason to believe that they had 'strategic importance' (for example, engineering rather than, say, foodstuffs). Many other factories are ignored in the lists (even if appearing on the plan) if not considered to be of importance.

It is notable that the 1985 London list differs from others in that relatively few instances of common features such as fire stations, post offices, police stations, town halls and telephone exchanges have been selected for inclusion. Birmingham (1977), for example, lists 28 police stations and 83 post offices, whereas London has only one (Scotland Yard) and three respectively. This is evidently a deliberate editorial choice to avoid overwhelming the user.

Some of the anomalies and anachronisms noted include 'Air terminals' listed at St Enoch's railway station in Glasgow and the Midland Hotel in Manchester, although both had closed 20 or more years earlier, whereas 'tram depot' appears in Burnley, Coventry, Dunfermline, Newport, Sheffield and Southend-on-Sea; more evidence of the use of long-outdated source material. Similarly, Swansea (1976) includes Bryn-Lliw coal mine, which was indicated as being disused on 1936 OS plans.

Particularly significant errors are three instances of objects being included and numbered in the lists, but not actually appearing on the plan itself. These are Colchester 'Customs', Lancaster 'Hest Bank station' and Nottingham 'Health department'. This can be assumed to be evidence that the object lists were compiled independently of the plans. However, further research is required into the processes of data-gathering and compilation of the object lists and their inclusion on the plans.

Some errors arise through misinterpretation of English words or unawareness of British usage and culture. As noted above, the name 'Bank' has been assumed to be a financial institution in Aberdeen and Wolverhampton (actually a hilly road), whilst 'Court' is mistaken as being a law-court in both Cambridge and Ipswich (actually either a stately home or modern apartments). In Huddersfield, the Mechanics Institute (a historic philanthropic establishment offering a library and lectures, intended to give the working man an alternative pastime to the local pub in the evenings) has been listed as the 'Institute of Technology', whilst in London, Her Majesty's Theatre has been mis-identified as 'The Residence of The Queen and The Prime Minister'. However, far from being a criticism of Soviet cartographers, such errors highlight the extent to which a priori knowledge gained 'in the field' helps native cartographers interpret Britain's complex socio-economic and political structure; something their Soviet military counterparts could not hope to gain.

### Conclusion

This examination of the lists of important objects on the Soviet city plans of 91 British cities has found that there is considerable variation in the comprehensiveness of the lists and apparent inconsistency in the criteria used to select the objects for inclusion. Whether this reflects the processes of compiling source material for producing the city plans in multiple cartographic factories across the USSR, and/or that compilers within one factory inconsistently interpreted the same or different editions of compilation instructions over a production lifecycle of nearly fifty years, may never be known. The preservation of their choices on the plans themselves, however, provides some indication of the complexities of interpreting foreign urban landscapes.



#### **Disclosure statement**

No potential conflict of interest was reported by the authors.

#### **Notes on the contributors**



John Davies is a life-long map collector and enthusiast. He encountered Soviet mapping whilst working in Latvia in the early 2000s. John was editor of Sheetlines, the Journal of The Charles Close Society for the Study of Ordnance Survey Maps, and since retiring from a career in Information Systems has been writing and lecturing on Soviet maps. He lives in London and runs the website www.sovietmaps.com.



David Watt is a retired geospatial professional, map collector, enthusiast, and member of a small diverse group researching Soviet, Russian and Warsaw Pact mapping. He was introduced to Soviet mapping through the International Cartographic Association in the early 1990s. David was one of the first Royal Geographical Society Chartered Geographers and has served as Publications Manager for The Charles Close Society for the Study of Ordnance Survey Maps and as a Council member of the British Cartographic Society. He lives in Bedfordshire.

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