

The numbered factories and other establishments of
the Soviet defence industry, 1927–67: a guide

Part II. Research and design establishments

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Preface

Scope and coverage

Part I of our project to compile a guide to ‘The numbered factories and other establishments of the Soviet defence industry, 1927–67’ was published in February 1999 as Occasional Paper no. 2 of the Soviet Industrialisation Project Series of the University of Birmingham Centre for Russian and East European Studies, and also electronically at www.warwick.ac.uk/staff/Mark.Harrison/VPK.

Part II covers research and design establishments. It was originally intended to include in this list only numbered establishments. However, in the course of our work we found so many closely similar and duplicated acronyms that for clarity we have listed all known enterprises of this type that existed up to 1991, both numbered and unnumbered.

The present list shows research and design establishments under ten column headings, defined and explained in table 1 below. The list is further divided into eight sections in the following order:

OKB

This section deals with the *opytnoe konstruktorskoe byuro* (experimental design bureau), a relatively large establishment, usually with its own manufacturing and testing facilities.

Also included here are establishments named *osoboe* (special) *konstruktorskoe byuro*, also known by the slang terms *sharaga* or *sharashka*, subordinated to the NKVD–MVD

TsKB

Tsentral’noe konstruktorskoe byuro (central design bureau) denoted a large establishment serving an entire production branch of industry.

SKB

Spetsial’noe konstruktorskoe byuro (special-purpose design bureau) was a designation favoured in the armoured vehicle, tank and shipbuilding industries.

Also listed under SKB are establishments named GSKB for added prestige: either *gosudarstvennoe* (state) or *glavnoe* (chief) *spetsial’noe konstruktorskoe byuro*.

KB

Konstruktorskoe byuro (design bureau) was the term used both generically to refer to any type of design bureau, and specifically for those institutions of which it was the official title. The bureaux formed in the late 1920s and early 1930s were generally named KB but, as they grew in number and variety, the title became differentiated in various ways.

While OKB, TsKB, and SKB are listed separately, included under KB are all other bureaux including the following: PKB, *proektno-*

konstruktorskoe byuro (project design bureau), specialised in completely new designs to the exclusion of the development of existing products; PKTB, *proektno-konstruktorskoe i tekhnologicheskoe byuro* (project design bureau for technology), specialised in the design of new production processes; TB, *tekhnicheskoe byuro* (technical bureau), usually in engineering, and MKB, either *mashinostroitel'noi* (engineering, again) or *Moskovskoe* (Moscow, indicating location) *konstruktorskoe byuro*.

GSPI

Gosudarstvennyi spetsial'nyi proektnyi institut (state special-purpose planning institute) covered establishments responsible for production technology and factory design.

TsNII

Tsentral'nyi nauchno-issledovatel'skiy institut (central scientific-research institute), like TsKB, denoted a large establishment serving an entire production branch of industry, but responsible for research rather than design.

Also included here are all other 'central' institutes.

NII

Under *nauchno-issledovatel'skiy institut* (central scientific-research institute) are listed all other institutes.

NIP

Nauchno-issledovatel'skii poligon (scientific-research firing range) covered all types of test installations for artillery, missiles, and naval munitions.

Nomenclature and numbering

When it is recalled that we are considering the evolution of a system over more than sixty years, during which the size and structure of the Soviet defence industry changed beyond recognition, it is not surprising that with hindsight classification and numbering may appear inconsistent and even confused.

'Core' defence plants were consolidated into a single list in 1927; the numbering of design bureaux and scientific research and development institutions began at about the same time. Many numbered bureaux and institutes were linked to numbered factories. For example, OKB-156 (the Tupolev design bureau) was the lead organisation in factory no. 156, and official documents sometimes referred to it as OKB *zavoda* No. 156. In the same spirit NII-88 (Korolev's missile bureau) was the lead organisation within factory no. 88. However, this was not a general rule; for example, the design bureau associated with factory No. 467 was OKB-27; thus it would be incorrect simply to

assume that a numbered OKB or NII was always linked to a factory of the same number.

A further complication was the internal numbering applied to multiple research and design establishments attached to a single factory. Thus in 1948 we find both OKB-1 GOZ-1 (*gosudarstvennogo opyt'nogo zavoda* No. 1, a special experimental factory employing German aviation specialists) and OKB-2 GOZ-1.

Separately from the core defence list, many people's commissariats (later, ministries) ran their own numbering schemes; this resulted in replication of numbers and later, acronyms. To distinguish among them a reference to the establishment was often accompanied by the name of its ministry or commissariat; for instance, NII-1 of NKAP (by 1958 there were no less than three NII-1s).

Numbered establishments within each category are listed first in numerical order, followed by named establishments in alphanumerical order. Thus, TsKB-1 precedes TsKB-820, both precede TsKBS-1, and all precede TsKB-SPK.

When searching or filtering for a particular establishment please note that there was no uniform practice with regard to inserting spaces within acronyms. Thus NII avtomatikii i priborostroeniya was abbreviated to both NIIAP and NII AP.

Future work

At the next stage we propose to post revised versions of both 'Factories and shipyards' and 'Research and design establishments' to our website. We are pleased to welcome Ivan Rodionov as a new co-author for these projects; by drawing on his previous research we propose also to publish a list of named defence plants.¹

The author

Keith Dexter is an independent researcher and writer.

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¹ Ivan Rodionov is the author of 'Rodionov's Chronology', a comprehensive annual survey (in Russian) of Russian and Soviet aviation from 1916 to 1946; his work is in progress and has so far reached mid-1939. For further detail see www.airforce.ru/history/chronology/index.htm

complex from Lenin to Khrushchev' (principal investigators: M. Harrison and J.D. Barber); and the British Academy and the Leverhulme Trust for financial support under grants towards research on 'Invention, imitation, and the birth of Soviet aerospace' (principal investigator: M. Harrison).

The author alone is responsible for all the errors of fact, interpretation, and omission which are sure to be present in a work of this nature.

Table 1. Column headings used in the list of establishments

1. No.	The establishment number.
2. Name	The establishment name, where given, during the period under investigation; factory names from the pre-Soviet period, the 1920s, or the present day are given under 'Other details'.
3. Subsidiary units	Design bureaux, research institutes, and production establishments linked to the establishment.
4. Location	The town or city (occasionally, the oblast' or other territorial division). Where the town is obscure, the oblast' is also given, where known, in brackets. In the case of the city of Moscow the suburb is also given, where known, in brackets. Where the city's present-day name has been changed from the Soviet period, both names are given if possible.
5. Branch	The main branch of defence production with which the factory was identified is coded as follows: AERO Aerospace (aircraft, missiles, and space) ARMOUR Armoured vehicles ARMS Armament (artillery and infantry armament) ATOM Atomic weapons ELEC Electronics and the radio industry FUEL Liquid fuels MUNS Munitions (ammunition, explosives, and chemical agents) SHIP Shipbuilding OTHER Other or not known
6. Ministry	The responsible government department, usually VSNKh (until 1932), or subsequently the relevant people's commissariat (1932-46) or ministry (1946-91). Dates given under this heading are those of the relevant documentary evidence.
7. Designer or Director	The name of chief designer or director. Again, dates given under this heading are those of the relevant documentary evidence.
8. Other details	Under this heading are given more specific detail of the establishment's profile, previous and present-day names, details of wartime evacuation, and other changes of status.
9. Date	The period over which the existence of the establishment under the given number and at the given location is confirmed by documentary evidence.
10. Source	The documentary evidence; references are to the list of sources, below.

Glossary

AO		joint stock company
APO		aviation production association
<i>filial</i>		factory affiliated to another in a subordinate relationship
GAZ	(1)	State Automobile Factory
GAZ	(2)	State Aircraft Factory
GKAT		State Committee for Aviation Equipment
GKOT		State Committee for Defence Equipment
GKRE		State Committee for Radioelectronic Equipment
GKSP		State Committee for Shipbuilding
GKVT		State Committee for Military Equipment
GP		state enterprise
GSKB	(1)	chief special-purpose design bureau
GSKB	(2)	state special-purpose design bureau
GSPI		state special-purpose planning institute
GU, Glav-		chief (main) administration (directorate)
GUVP		Chief Administration for War Industry
GVMU		Chief War-Mobilisation Administration
<i>im. (imeni)</i>		named after
KB		design bureau
MAP		Ministry of Aircraft Production
MATOMP		Ministry of Atomic Energy Industry
MB		Ministry of Ammunition
ME		Ministry of Electrical Industry
MEP		Ministry of Electronic Industry
METP		Ministry of Electro-Technical Industry
MKB	(1)	engineering design bureau
MKB	(2)	Moscow design bureau
MKhP		Ministry of Chemical Industry
MMP		Ministry of Machine and Instrument Building
MO		Ministry of Defence
MObM		Ministry of General Machine Building
MOP		Ministry of Defence Industry
MPSS		Ministry of Communications Equipment
MRF		Ministry of the River Fleet
MRKh		Ministry of Fisheries
MRP		Ministry of Radio Industry
MRT		Ministry of the Radiotechnical Industry
MRT		Ministry of Radiotechnical Industry
MS		Ministry of Communications
MSKhM		Ministry of Agricultural Engineering
MSM		Ministry of Medium Machine Building
MSP		Ministry of the Shipbuilding Industry
MTM		Ministry of Transport Machine Building
MTsvetM		Ministry of Nonferrous Metals
MV		Ministry of Armament
MVD		Ministry of Internal Affairs
NII		scientific-research institute
NIP		scientific-research firing range
NKAP		People's Commissariat of the Aircraft Industry
NKB		People's Commissariat of Ammunition
NKChermet		People's Commissariat of Ferrous Metallurgy
NKEP		People's Commissariat of the Electrical Industry
NKES		People's Commissariat of Electricity Supply
NKKhimProm		People's Commissariat of the Chemical Industry
NKLP		People's Commissariat of Light Industry
NKMF		People's Commissariat of Merchant Fleet
NKMP		People's Commissariat of Local Industry

NKMV		People's Commissariat of Mortar Armament
NKNeftProm		People's Commissariat of the Oil Industry
NKO		People's Commissariat of Defence
NKOP		People's Commissariat of the Defence Industry
NKPS		People's Commissariat of Transport
NKPSM		People's Commissariat of Building Materials
NKRechFlot		People's Commissariat of the River Fleet
NKRezinProm		People's Commissariat of the Rubber Industry
NKRybProm		People's Commissariat of the Fishing Industry
NKSM		People's Commissariat of Medium Machinebuilding
NKSP		People's Commissariat of the Shipbuilding Industry
NKStankProm		People's Commissariat of the Machine Tool Industry
NKTankProm		People's Commissariat of the Tank Industry
NKTP		People's Commissariat of Heavy Industry
NKTsvetM		People's Commissariat of Nonferrous Metallurgy
NKUP		People's Commissariat of Coal Industry
NKV		People's Commissariat of Armament
NKVD		People's Commissariat of Internal Affairs
NKVMF		People's Commissariat of the Navy
NKVT		People's Commissariat of Foreign Trade
NPO		science production association
OKB	(1)	experimental design bureau
OKB	(2)	special design bureau (usually of NKVD–MVD)
PKB		planning design bureau
PKTB		planning design and technology bureau
PO		production association
SKB		special-purpose design bureau
SKB		special-purpose design bureau
TB		technology bureau
<i>tsekh</i>		workshop
TsKB		central design bureau
TsNII		central scientific–research institute
<i>verf'</i>		dockyard
VPK		military–industrial complex
VSNKh		Supreme Council of the National Economy
<i>z–d (zavod)</i>		factory

Sources

Notes

- (a) Books and journals in English are published in London, and those in Russian are published in Moscow, unless otherwise stated.
- (b) The starting point for this list of sources is the list of sources found in Cooper, J., Dexter, K., Harrison, M. (1999), 'The numbered factories and other establishments of the Soviet defence industry, 1927–67', part 1, 'Factories and shipyards'; additional references have been added incrementally, and therefore out of alphanumerical order.

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