# The Factories, Research and Design Establishments of the Soviet Defence Industry: a Guide

Version 11

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and

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#### **Preface**

Version 11 is a single list of the *Defence Factories, Research and Design Establishments of the USSR* and combines Parts 1 and 2 of version 5. It also gives some data up to 2003. Electronic sorting allows previous sections to be retrieved if required and extra columns have been added to enable the lists or numbers of different types of organisations existing in a particular year up to 1991 to be determined.

- Column 1 gives the number of the enterprise if it had one.
- Column 2 gives names of the enterprise during the period under investigation. Other names that it had at other times are also given in column 7
- Column 3 gives the name of the town or city and region of Russia or republic of USSR at the time covered with the district shown in brackets and a later or former names if it has subsequently been changed
- Column 4 gives known subordinate or superior (if it is not clear from column 7) enterprises, such as design bureau, filial enterprise, otdelenie (branch), main plant etc
- Column 5 gives the main branch of defence production to which the enterprise was identified and coded as follows:

AERO Aerospace (aircraft, missiles and space)

ARMOUR Armoured vehicles

ARMS Armament (artillery, infantry and naval)

ATOM Atomic weapons

AUTO Unarmoured vehicles and components

ELEC Electronics, radio and military electrical items

FUEL Strategically important fuels includes refineries but not coal MUNS Munitions (ammunition, explosives and chemical agents)

RAIL Railway related items

SHIP Naval ship building and repairs

OTHER Other or not known

- Column 6 gives the responsible government department or people's commissariat or ministry. Dates given are those of the relevant documentary evidence. See Glossary (Sheet 2)
- Column 7 has 'Other details' a short history giving products, name and location changes, evacuation and other details
- Column 8 **Director** lists the chief or director and/or chief designer of the enterprise during the period covered in Column 8.
- Column 9 **Date** shows the period over which the enterprise existed under the given name or number and at the stated location that is confirmed by documentary evidence
- Column 10 Source lists the sources of the information given in a code revealed on sheet 3 'Sources'

- Column 11 **Address** gives the addresses in Russian form i.e. Country (if not Russia), Postal code, City, Street name, Number
- Column 12 Type labels the main establishment types:
   kb Design Bureaux: including KB, OKB, PKB, SKB, and TsKB
   nii Scientific Research & Design Institutes: NII, TsNII, and GSPI
   d Subordinated Organisations or Departments: Otdely, Sektory, Groups, Centres, and Laboratories
  - **t** Test Sites includes poligon, stantsiya and NIP (*Nauchno-ispytatel'naya* **co** Companies: NPO, NPP, NTO, Corporations, Concerns, Complexes and the independent Centres created in the 1990s.

**Z** Zavod (factory)

- Column 13 **Subordinated** labels those organisations which are filial or otdelenie or either (fo)
- Column 14 **Subtype** labels subtypes:
  - c centres
  - conc concern, company, complex or corporation
    - g group
  - GAZ State Union Aircraft Factory of the period 1921 to 1927
  - GPI Gos.Proektnyi Institut
    - kb konstruktoskoe byuro
      - 1 laboratory
  - NII Nauchno-issledovatel'skii institut
  - NIP Nauchno-ispytatel'nyi Poligon
  - NPO Nauchno-proizvodstvennoe ob"edinenie
  - NPP Nauchno-proizvodstvennoe predpriyatie
    - o Otdel (department)
  - OKB Opytno-konstruktorskoe byuro
  - PKB Proektno-konstruktorskoe byuro
    - s sektor
  - SKB Spetsial'noe konstruktoskoe byuro
  - TsKB Tsentral'noe konstruktoskoe byuro
  - TsNII Tsentral'nyi nauchno-issledovatel'skii institut
- Column 15 Industries not covered in column 5:
  - am hang-gliders and paraplanes
  - b bearings producer
  - cable cable producer
    - m map producer
    - r aircraft or automotive repair factory
    - rub rubber goods poducer
  - tyres tyre factory
    - v aviation veneer (plywood) factory of NKLes

Factories with no entry in columns 14 or 15 are either a GSZ (*Gosudarstvennyi Soyuznyi zavod*) or have not yet been typed.

• Column 16 **Series, Wartime, Doubt** indicates not only an 'a' where there is some doubt that the factory was a defence-related plant or is still in existence or was begun after 2001 but also now shows an 's' for 'series' (factories) or 'specialized' (establishments) where the enterprise was almost exclusively on military work between the dates quoted in the following columns and 'w' if on military work only during the Great

Patriotic War 1941-5. Please note we use the exact year and the interval 1941-5 if our only information is that the enterprise was involved in military work during the war.

- Columns 17 **Start** and 18 **Finish** give the dates between which the enterprise was on military work
- Columns 19 **Start Again** and 20 **Second Finish** give the dates between which an enterprise was on military work for a second time. 1991 is the last date used
- Column 21 **Double count** shows a 'd' where an establishment has changed its name or location in the same year. Please note both original and double have a 'd'.

The objective in supplying columns 17 to 21 is to allow lists or numbers of enterprises of different types operating on or between dates to be calculated. An example is given below.

We have included all numbered plants on defence work with archival references and many will not be GSZ.

Some of the entries existed in paper plans but may never have been commissioned. Many plants carried a number only during World War II.

We believe that 90 per cent of the numbered plants listed without location are included in the unnumbered list as named factories of a later period. So far, however, we have been unable to match them.

Example: one method of determining the number of TsNII on defence products between 1929 and 1936:

- make a copy of List and use this.
- extract using Sort or AutoFilter on col. 14 all TsNIIs.
- from the above extract, using Sort or AutoFilter on column 16, extract all 's' (specialized) entries.
- on the remnant, sort on column 3 then make a judgement on all entries with 'd' in column 16 and delete any apparent duplicates in the same city.
- on the remnant, sort Column 17 in ascending order and delete anything greater than 1936; then look at the last numbers of lines in each year; on a new sheet fill in two columns, the first the year, the second the number of TsNIIs therein: thus:

1929 1 (note: created 1918 survived till 1929 and later till 1936)
1930 2
1931 6
1932 6
1933 7
1934 7
1935 7
1936 9

• on column 18 of the previous remnant sort what was left in ascending order and fill in the next column of the 'number of TsNIIs sheet' with the number of TsNIIs that have left defence work and deduct column 3 from 2 to arrive at the number of TsNIIs in the given years in column 4 (in bold font):

A similar operation could be applied to any type of enterprise or to all of them for any range of years between 1918 and 2003.

If an enterprise was closed and restarted or transferred to another location, columns 19, 20 and 21 must also be involved.

You should be careful in this analysis to exclude double counting in the cases when an enterprise changed location or name within the same year. These are denoted by a 'd' in column 21 for both original and double.

Please note that some Internet sources may no longer be available.

#### **Communications**

We welcome comments and corrections and suggest that the appropriate form is an email in English addressed to The.Dexters@virgin.net, or, in Russian, to irodiono@mail.ru or irodiono@gmail.ru.

We welcome additional information, which must be fully referenced if we are to incorporate it into future editions.

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http://www.warwick.ac.uk/go/aviaprom, or http://www.airforce.ru/history/chronology, or http://aeroweb.lucia.it/rap/Chronology.

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