

4716

21 FEB 1962

~~CONFIDENTIAL~~

CIA HISTORICAL REVIEW PROGRAM  
RELEASE AS SANITIZED  
1998

MEMORANDUM FOR: Deputy Director (Intelligence)

ATTENTION: Assistant to DD/I (NSC)

SUBJECT: Information on Surface Transportation in the USSR  
for the United States Arms Control and Disarmament Agency

Attached is information requested by Mr. Larry Holmes of the Arms Control and Disarmament Agency on surface transportation in the USSR for use in the preparation of a plan for surveillance associated with disarmament in the USSR. We understand that Mr. Holmes hopes to receive this information by e.o.b. 21 February 1962.

Acting Assistant Director  
Research and Reports

Enclosures:

1. Subject Report
  2. Copy of CIA/HR
- ~~CONFIDENTIAL~~

21 FEB 1962

## I. Introduction

The purpose of this paper is to supply information on surface transportation in the USSR for use in estimating the magnitude of a surface transportation surveillance system associated with disarmament. Some notion of the magnitude of this task of surveillance can be obtained from the following sections which contain information on railroads, highways, maritime and inland water transport. See also CIA/ER RI 61-3, February 1961, Transportation Growth and Trends in the USSR, 1930-65, which is included as Attachment A to this paper.

Surveillance of the transportation system of the USSR as a whole is a vast undertaking. If traffic movements requiring surveillance were restricted only to those moving between rather large designated zones, the number of facilities that would have to be kept under surveillance would be reduced substantially.

## II. Railroad Yards

Major freight classification and terminal yards would be locations at which traffic could be subjected to some surveillance without halting all traffic on major railroad routes. Through trains whose cars do not require classification at intermediate yards, nevertheless, would present special problems in surveillance.

A Soviet article published in 1957 states that the railroad system has approximately 200 major freight yards which handle a total of 400,000 cars daily and make up more than 7,000 trains daily.\* In the following tabulation are listed 205 of the more important freight classification and terminal yards. These yards are listed alphabetically by name of the yard and not necessarily by the name of the location of the yard.

The railroad system on which each yard is located is also listed. Place names on the railroads and the location and extent of each railroad system are indicated on the map, Attachment A, Figure 5.

\* L. Chertkov, "Progressive Working Methods in Transport and their Economic Efficiency", in Sotsialisticheskiy Trud, no 4, April 1957. U.

<u>Yard</u>	<u>Railroad System</u>	<u>Remarks</u>
Alchevskoye (Voroshilovsk) Alex Ata I Altayskaya	Donets Kazakh Tomsk	said in 1959 to process 2,500-3,000 cars daily.
Antratsit Anzherinskaya Arya' Bakal Baku Freight Baldzhary Balashov Bannaya Berezhinsk Burenovichi Barnaul Bibaysk Botviki Bentla Bergovskaya Biryulevo Bogucholovsk Bogaya Brest Tsentral'nyy Brest Vostochnyy Bryansk I'Govskiy Byy Chelyabinsk Glavnyy Cherashchovo Chernogorskiye Kopl Chirehik Chita Chop Chulyskaya Chumkovo Chusovskaya Darnitsa	Donets Tomsk Tashkent South Ural Transcaucasian Azerbaijani Southeastern Volga Gork Northern Tomsk North Caucasus Kuybyshev Ufa Kuybyshev Moscow-Kursk-Donbass Sverdlovsk Moscow Belorussian Belorussian Moscow-Kiev Northern South Ural East Siberian Krasnoyarsk Tashkent Transbaykal L'vov Tomsk Donets Sverdlovsk Southwestern	Probably processes over 3,000 cars daily.
Debal'tsevo Dniep Diyvits Dubrovka Chelyabinskaya Elektrostantsiya Faktor Gomel' Gor'kiy Gor'kiy Freight Gorlovka Goryainovo Grosnyy Gubakha	Donets Kuybyshev Stalin South Ural South Ural Southwestern Belorussian Gor'kiy Gor'kiy Donets Stalin Ordzhonikidze Sverdlovsk	

<u>Yard</u>	<u>Railroad System</u>	<u>Remarks</u>
Gudron	Orenburg	
Ilovayskoye	Donets	
Imeni Mikhaïla Gor'kogo	Volga	
Imeni Tarasa Shevchenko	Odesa	
Inskaya	Tomsk	Soviets claim capability of 4,000 cars daily.
Irkutsk	East Siberia	
Ishimbayev	Ufa	
Ishevsk - II	Kazan'	
Kagan	Ashkhabad	
Kal'mius	Donets	
Kaluzhny	Tomsk	
Kandalap	Tomsk	
Karaganda	Kazakh	Said in 1959 to process 2,500-3,000 cars daily.
Karaganda Ugol'naya	Karaganda	
Kerzhak	South Ural	
Kerzhavskoye	North Caucasus	
Kazan'	Kazan'	
Kavatin	Southwestern	
Kemerovo	Tomsk	
Khabarovsk Vtory	Far Eastern	
Khar'kov Bolshhevskiy	Southern	
Khar'kov Freight	Southern	
Khar'kov North	Southern	
Khovrino	October	
Kinel'	Kybyshev	
Kirov	Gar'kiy	
Kiyev Freight	Southeastern	
Kisal	Sverdlovsk	
Kiyasovka	Volga	
Kochetovka Pervaya	Moscow - Ryazan'	
Kol'mugino	Tomsk	
Konstantinovka	Donets	
Kovel	L'vov	
Krasnovodskaya	Donets	
Krasnodar Novorossiyskiy	North Caucasian	
Krasnodak II	Ashkhabad	
Krasnoyarsk	Krasnoyarsk	
Krasnyy Liman	Donets	Soviets claim capability of 4,000 cars daily.
Kropachevo	South Ural	
Kryash	Kybyshev	
Kupyansk-Uzlovoy	Donets	
Kursk	Moscow-Kursk-	
	Donetsk	
Kushovo	Gar'kiy	
Kybyshev	Kybyshev	
Kybyshovka-Vostochnaya	Amur	

<u>Yard</u>	<u>Railroad System</u>	<u>Remarks</u>
Leningrad Freight Baltic	October	
Leningrad Freight Moscow	October	
Leningrad Freight Vorkhavskiy	October	
Leningrad Navalokhnyy	October	
Leningrad Vitebskiy	October	
Likhaya	Southeastern	
Liski	Southeastern	Said in 1959 to process 2,500-3,000 cars daily.
Lozovaya	Southern	
L'vov	L'vov	
Izvingasovo	Gar'kiy	
Magnitogorsk	South Ural	
Makhsch-Sala Vtoraya-Portovaya	Ordzhonikidze	
Makushino	Donetsk	
Mandrykino	Donetsk	
Metallurgicheskaya	South Ural	
Mikhaylo-Isent'yevskaya	North Caucasian	
Mikhail'ovye Voly	Ordzhonikidze	
Minsk	Belorussian	
Moshalinskiy	Donetsk	
<u>Moscow</u>		
Khovrino	October	
Losinostrovskaya	Northern	Said in 1959 to process 2,500-3,000 cars daily. Soviets claim capability of 4,000 cars daily.
Lyublino	Moscow-Kursk- Donbass	
Parovo	Moscow-Ryazan'	
Pedusokovskaya	Belinia	
Sortirovchnaya	Moscow-Ryazan'	
Freight, Kursk	Moscow-Kursk- Donbass	
I, Freight	Moscow-Ryazan'	
Freight, Pavletskaya	Moscow-Kursk- Donbass	
Moskovka	Donbass	Said in 1959 to process 2,500-3,000 cars daily.
Mudrovskaya	Stalin	
Murmansk	Kirov	
Murza	Stalin'	
Nys Churkin	Far Eastern	
Nedashinski (Serov)	Sverdlovsk	
Nakhichevan' Donakaya Freight	North Caucasian	
Neshin	Southwestern	Probably processes over 2,500 cars daily.
Nikel'	Orenburg	
Nikitovka	Donetsk	
Nizhnedneprovsk Uzel	Stalin	
Novokuznetsk Classification	Tomsk	
Novorossiysk	North Caucasian	
Novosibirsk	Tomsk	

~~SECRET~~

<u>Yard</u>	<u>Railroad System</u>	<u>Remarks</u>
Kovyy Port	October	
Odessa Freight	Odessa	
Odessa Ferryway'	Odessa	
Odessa Port	Odessa	
Omsk	Omsk	
Orel Freight	Moscow-Karak-	
	Donbass	
Orenburg	Orenburg	
Orsk	Orenburg	
Osnoya	Southern	
Penza	Kuybyshev	
Pera	Sverdlovsk	
Perovo	Moscow-Ryazan'	
Petrovskoyevsk	Omsk	
Prizhdy	Moscow-Karak-	
	Donbass	
Rybinsk	Amur	
Ruzh	Kishinev	
Rybinskoye	Southeastern	
Rubtsovskoye	Donets	
Ruzhskoye	Kuybyshev	
Rybinsk (Shcherbakov) Freight	Northern	
Rybnaya	Moscow-Ryazan'	
Saratov	Volga	
Sartana	Stalin	
Saripalatsk	Kazakh	
Sergo Ushakovskoye	South Ural	
Shestakino	Moscow-Karak-	
	Donbass	
Shapovalovsk	Southeastern	
Shkiretsk	Latvian	Bald in 1959 to process 2,500-3,000 cars daily.
Shubary	October	
Shuvakish	Sverdlovsk	
Sokolensk	Kalinin	Estimated in 1958 to be capable of processing 2,500-3,000 cars daily.
Sychinsk	Sverdlovsk	
Stalingrad	Volga	
Stalin	Donets	
Sverdlovsk	Sverdlovsk	
Sverdlovsk Freight	Sverdlovsk	
Tashkent-Freight	Tashkent	
Tatarskaya	Omsk	
Tayga	Tomsk	
Tikhonovskaya	North Caucasus	
Tritskaya (Dneprodzerzhinsk)	Stalin	
Trudovaya	Donets	
Turnout Station 27th Kilometer	North Caucasian	
Uss	South Ural	

<u>Yard</u>	<u>Railroad System</u>	<u>Remarks</u>
Urest'yevskaya	Tashkent	
Urussa	Ufa	
Uyaty, (Prokop'yevak)	Tomsk	
Uyak	Volga	
Uzlovaya Perways	Moscow-Kursk-	
	Dombass	
Vagonosvod	Sverdlovsk	
Valuyki	Southern	
Velikie Luki	Kalinin	
Verkhovskaya	Stalin	
Vilnyus	Lithuanian	
Volkhovstroy	October and Kirov	Said in 1959 to process 2,500-3,000 cars daily.
Volzha	Northern	
Vostresensk	Moscow-Kyazan'	
Vopel'ye	Northern	
Vyabla	Ashkhabad	
Vysshinsk	Moscow-Kyazan'	
Durovskiy' Pristan' (Pier)	Northern	
Yaninovskaya	Donets	
Yasnaya Polyan	Moscow-Kursk-	
	Dombass	
Yelits Glaynyi	Moscow-Kursk-	
	Dombass	
Yemskiyev	Donets	
Yerevan	Transcaucasian	
Yudino	Kazan'	
Yuzovskiy'ye Levoye	Stalin	
Elstovsk	South Ural	
Znamens	Class	

III. Rail Transloading Areas at the USSR-European Satellite Borders

Because USSR railroads are broad gauge (5' feet) while the European Satellite railroads are standard gauge, (4' 8 1/2") transfer of through rail traffic from cars of one gauge to the other is necessary at border crossing points. The performance of this transfer is the function of the transloading areas.

The transloading areas or complexes along the borders extend from ten to twenty five kilometers on either side of the border, and consist of a number of yards or stations all of which have dual gauge parallel tracks. Some of the stations have cranes, overhead ramps for gravity transfer of coal and ore, and pumping facilities for the transfer of petroleum while others contain platforms between dual gauge tracks over which cargo is transferred by manual labor. Some freight transloading stations have hoists where freight cars are lifted and wheel sets are exchanged, thus permitting the railroad car to operate on either gauge, and eliminating the physical transfer of the loading.

There are ten main transloading complexes along the USSR-European Satellite borders. From north to south they are:

Locations of the Transloading Complexes

<u>In the USSR</u>	<u>In Poland</u>
1. Kaliningrad	Krantervo
2. Charyvitchovsk	Sleskum
3. Gredno	Sokolka
4. Berestovista	Karveta
5. Brest	Tarrespol
6. Kovel	Cheln
7. Mostiska	Przemysl
	<u>In Czechoslovakia</u>
8. Chop	Cierna Nad Tisou
	<u>In Hungary</u>
Chop	Ebony
	<u>In Rumania</u>
9. Dornesti	Radauti
10. Ugeeny	Iasi

These complexes vary in importance. The more important ones from the stand point of traffic, however, are numbers 1, 5, 7, 8 and 10. The most modern transloading equipment is located at 5, 7 and 8. The principal complexes used by the



USSR for military traffic to East Germany are numbers 5 and 7. Smaller quantities of military cargoes could be moved surreptitiously, however, at any point along the border where the rail lines of the respective countries meet, and which are not listed among the principal transloading areas mentioned above. For example, a standard gauge railroad crosses the Polish border at Kroecienko, Poland and extends to Sambor in the USSR, a short distance southwest of Lvov. Also, a wide gauge line crosses the USSR border at Uhgorod, and extends to Velke Kapusany in Czechoslovakia where it connects with the Czechoslovakian system.

#### IV. Highways

Since origination and termination of shipments could occur at virtually any industrial or military installation or storage facility on or near a highway without rehandling enroute, it is not possible to maintain effective surveillance of highway traffic at any established highway transportation centers. Check points would, therefore, probably have to be established along key intercity routes and at least some traffic would have to be stopped.

The network of improved roads in the USSR is very limited. At the end of 1960 there were only 77,100 kilometers of paved roads.\* This is about 4 percent of the length of the US system of similar roads.

Soviet paved roads are almost exclusively 2 and 3 lane asphalt roads. A very limited number of unpaved but otherwise improved roads are considered to be all weather. Most unpaved roads are in very poor condition most of the year. The highway network in the USSR is most dense in the more populated areas. Perhaps 80 percent of the roads are located west of the Volga River.

Nearly all major population and industrial centers in European USSR are connected by paved highways. The network is not well developed, these routes are often circuitous. The number of intercity highways in Asian USSR are extremely limited.

Listed below are the principal intercity highway links as they radiate from major populated and industrial centers. Figure 15 of attachment A is a map of selected highways in the USSR; the following list, however, serves to update and revise some information on the map.

#### Principal Paved Roads in the USSR\*\*

Moscow - Minsk - Brest  
Moscow - Khlobin - Brest  
Moscow - Leningrad - Vyborg (Finnish Border)  
Moscow - Yaroslavl' - Kostroma and Valogda  
Moscow - Gor'kiy - Kazan' - Ufa  
Moscow - Ryazan' - Penza - Kuybyshev  
Moscow - Kharkov - Simferopol'

\* A paved road is one that has been graded and surfaced with either a water-resistant material or a material which facilitates drainage--that is, concrete or asphalt.

\*\* Excludes local or short distance roads regardless of quality.

Leningrad - Tallin or Tartar or Pskov - Riga - Kaliningrad  
Leningrad - Pskov - Vitebsk - Kiev - Odessa  
Leningrad - Pskov - Vilnius  
Leningrad - Petrosavodsk  
Kiev - Zhitomir - Lutsk - (Polish Border)  
L'vov - (Czechoslovakia Border)  
Kiev - Kharkov - Rostov - Grozny - Baku  
Kiev - Kursk - Voronezh - Saratov  
L'vov - Lutsk - Ernst (Polish Border)  
L'vov - Ungorod - Chop (Hungarian Border)  
L'vov - Vinnitsa - Dnepropetrovsk - Stalino  
Odessa - Kishinev - (Rumanian Border)  
Odessa - Nikolayev - Kirovgrad - Poltava  
Minsk - Vilnius - Klaipeda  
Minsk - Kaliningrad  
Rostov - Novorossiysk - Sukhumi - Batumi  
Rostov - Volgograd - Saratov - Kazan'  
Tbilisi - Batumi  
Tbilisi - Yerevan  
Tbilisi - Baku  
Yerevan - Batumi  
Tashkent - Stalinabad  
Tashkent - Chirchik - Frunze - Alma Ata  
Tashkent - Osh - Frunze  
Tashkent - Bukhara - Khashka (Afghanistan Border)  
Tashkent - Bukhara - Ashkhabad  
Chelyabinsk - Sverdlovsk - Perm'  
Chelyabinsk - Magnitogorsk  
Chelyabinsk - Kurgan - Omsk - Novosibirsk  
Chelyabinsk - Kustanay - Khabarovsk - Alkalinsk  
Grenburg - Kuybyshev  
Grenburg - Ufa  
Grenburg - Omsk - Turgey - Kyzil Orda - Chirchik  
Vladivostok - Khabarovsk - Blagoveshchensk

#### V. Inland Waterways

The USSR has an impressive navigable inland waterway system. There were about 140,000 kilometers of navigable waterways at the end of 1960. Almost the entire system freezes and becomes unnavigable for periods varying from 6 to 9 months each year. A map of the system is included as figure 17 of attachment A.

Over half of the navigable system is located east of the Volga River in sparsely populated areas. The number of rail served inland ports east of the Volga River and its tributaries in the area of the Urals is about 40. Access to these waterways other than through rail served ports is limited to a few non-rail served ports and landings.

The inland waterway system including the Volga-Kama basin and west is relatively much better developed. There are about 100 rail served inland ports on this portion of the inland waterway system, and a considerable number of non-rail served landings are also available along these waterways. Most of these landings are served by local unpaved roads.

VI. Soviet Rail-Served Seaports

Listed below are 115 ports of the USSR graded in accordance with a system used by the Office of Naval Intelligence. There are three classes of port: 1) 22 principal (P), 2) 25 secondary (S), and 3) 68 minor (M). The ports are graded on the basis of their naval and commercial importance, their military traffic handling capacity, and their piers and cargo handling equipment. In the cases of most of the minor ports there is little or no dockage space and no cargo handling equipment which means that ocean going vessels have to load and offload in the roadstead.

A. Black Sea and Sea of Azov

1. Mariupol'	P
2. Nikolayev	P
3. Novorossiysk	P
4. Odessa	P
5. Poti	P
6. Sevastopol'/Balaklava	P
7. Tuapse	P
8. Batumi	S
9. Berdyansk	S
10. Feodosiya	S
11. Kherson	S
12. Kerch - Kamysh - Burna	S
13. Taganrog	S
14. Yalta	S
15. Yevsk	S
16. Adler	M
17. Anapa	M
18. Azov	M
19. Gagra	M
20. Genuichack	M
21. Gdanty	M
22. Khosta	M
23. Ochachire	M
24. Ovidiopol	M
25. Pitsunda	M
26. Primorsko Akhtarak	M
27. Psirtakha	M
28. Sashi	M
29. Sukhumi	M
30. Tsuman'	M
31. Valok	M
32. Yanikale	M
33. Yevpatoria	M

B. Baltic Sea

1. Baltiysk	P
2. Kaliningrad	P
3. Klaipeda	P
4. Leningrad	P



- |                        |   |
|------------------------|---|
| 11. Kola               | M |
| 12. Mokhnatkins Pakhta | N |
| 13. Pon'gona           | M |
| 14. Raznevolok         | M |

D. Far Eastern Basin

- |                            |   |
|----------------------------|---|
| 1. Kakhodka                | P |
| 2. Vladivostok             | P |
| 3. Sovetskaya Gavan'       | S |
| 4. Bukhta Andreyeva        | M |
| 5. Bukhta Bol'shogo Kamnya | M |
| 6. Bukhta Koz'yushkova     | M |
| 7. Bukhta Perevoznoyaya    | M |
| 8. Bukhta Razboynik        | M |
| 9. Bukhta Sedimi           | M |
| 10. Bukhta Sukhodol        | M |
| 11. Bukhta Troitay         | M |
| 12. Bukhta Vampasuu        | M |
| 13. Khamsan                | M |
| 14. Pos'yot                | M |
| 15. Slavyanskiy Zaliv      | M |

E. Caspian

- |                  |   |
|------------------|---|
| 1. Astrakhan     | P |
| 2. Baku          | P |
| 3. Gur'yev       | S |
| 4. Krasnovodsk   | S |
| 5. Makhsachhala  | S |
| 6. Alyet         | M |
| 7. Astara        | M |
| 8. Lenkoran'     | M |
| 9. Neftchala     | M |
| 10. Port Il'icha | M |
| 11. Sumgait      | M |