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CLASSIFICATION CONFIDENTIAL/SECURITY INFORMATION

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

[redacted]

COUNTRY USSR

SUBJECT USSR Railroads

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PLACE ACQUIRED [redacted]

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THIS IS UNEVALUATED INFORMATION

SOURCE [redacted]

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I. Roadbeds
   A. Rails
      (1) **Type and Weight.**
         a. **Lightest weight. Used for switches, spurs and places where traffic is very light.**
         b. **Average weight for average use.**
         c. **Heaviest; about 30 feet long; could support about 200 tons plus.**
      (2) **Condition.**
         Fair.
      (3) **Replacement rate.**
         Slow due to steel scarcity.
      (4) **Domestic production.**
         a. **Not known. All rails made in USSR.**
         b. **Several rail plants in Don Basin. Two were at Stalino and Makeevka.**
      (5) **Imports.**
         I knew of none.
   B. **Rail Fastenings.**
      (1) **Type.**
         Headed steel spike similar to those used in Germany and the US.
      (2) **Condition.**
         Good.
      (3) **Replacement rate.**
         Average of three years or more.
      (4) **Domestic production.**
         a. **Amount**
            Not known.
         b. **Location of production.**
            Steel manufacturing centers.
      (5) **Imports**
         Not known.

SEE LAST PAGE FOR SUBJECT & AREA CODE

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[redacted]

C. Ties.

(1) Type.

Treated oak or pine.

(2) Condition.

Excellent.

(3) Replacement rate.

Every three years, depending on traffic.

(4) Domestic production

a. Amount

Not known.

b. Sources

Timber regions of USSR.

(5) Imports.

None.

D. Ballast.

(1) Type.

Main lines used crushed stone or gravel. Little used lines used earth or sand.

(2) Source.

Nearest available.

E. Bridges.

(1) Location and type of construction.

Large bridges over large rivers were of steel and concrete (base) construction. Wood, stone or concrete only were used over small ravines and streams. Usually, if the bridges were to be over five meters, steel and concrete would be used.

I recall one bridge over the Volga River at Saratov; one of the largest I ever saw. It is 10 spans long, about one kilometer. It is of steel construction on a concrete base. It carries a double track. I do not know the height above the water.

(2) Source of materials.

All materials were of Soviet manufacture.

F. Tunnels.

(1) In the North Caucasas there were three tunnels in a row on the railroad between Novorossisk and Krasnodar. They were not far from Novorossisk and were between the stations of Lineynaya and Tunelnaya. The longest was about 3/4 of a kilometer in length; the other two about 1/2 a kilometer.

G. Classification Yards.

(1) Location.

Every major railroad center has a classification yard with the more important near the largest cities.

(2) Hump or Flat.

The yards usually used the hump method.

(3) System of Operation.

All lines would center in on a hump and cars would be directed to the proper line from this hump.

(4) Capacity.

The largest yard I ever saw was at Odessa, which could accommodate 100 trains, more or less.

(5) Operation at a Given Date.

I know that Odessa could handle 100 trains a day.

H. Roadbed Maintenance.

(1) Condition.

Poor because of shortages. Quality of material was good, however.

(2) Labor.

There were about 15 to 20 men assigned to divided sections. Each section was about 10 kilometers long. These men took care of rails, ties, ballast, keeping the section in the best possible condition. Major repairs due to accidents, washouts, etc, were handled by special teams and equipment.

(2) Equipment.

The section gang used picks, shovels, hammers, spikes, ties, and jacks.

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I. Specific Railroad Line.
  (1) Termini
    Petropavlovsk to Balkhash

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  (2) Roadbed
    The line was in process of construction. [redacted] [redacted] from 1930 to 1938. The terrain was sandy and flat and sand ballast was used. There was no stone available. Because the project was being carried out in a hurry, good workmanship was sacrificed.
  (3) Single or Double Track
    Single

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  (4) Amount and Type of Traffic
    Construction materials only were carried [redacted] [redacted] However, it was designed to carry oil and coal. Large coal deposits had been located at Karaganda. It was to be used to transport fish and salt from Lake Balkhash.

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  (5) Structures
    a. Bridges.
      All bridges were fairly small and were made of wood.
    b. Tunnels.
      None.
    c. Classification Yards.
      None.
    d. Sidings.
      Akmolinsk, Karaganda, and Balkhash. These were for coal fish and salt. Copper had been discovered in the area between Akmolinsk and Karaganda and smelting plants were being constructed. The whole area was in the process of being developed. I heard that it was rich in various metals. Many railroad side lines and nets were to follow the basic construction.
    e. Stations.
      No permanent structures had been erected [redacted] [redacted]
    f. Warehouses.
      None known.

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    g. Open Storage.
      Coal and ore at Karaganda.
    h. Tank Farms.
      None observed.

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I would like to point out that forced labor was used to construct this line. Thousands of workers died from the severe weather, overwork and lack of proper food.

The construction averaged about two miles per day.

Regular railroad construction equipment was used. Poor management and lack of coordination of effort, however, resulted in poor work. There was constant pressure by the NKVD overseers to hurry up the project. They would make promises of freedom to the prisoners in an attempt to get more work out of them. Physically these men were incapable of more than they did.

II. Electrification.
  Up until [redacted] [1942] there were only a few, short electrified lines. There was one near Leningrad and a few along the Black Sea.

III. Signalling Devices.
  An automatic system was being installed in place of the old telegraphic and manual devices. This new system was not completed by 1940, however, priority of installation was being given to main lines.

IV. Freight Cars
  A. Number and Type
    It is impossible for me to give the number of cars. However, there were two types of box cars; the two-axle, carrying 20 metric tons, and the four-axle, carrying 60 metric tons. These were made of metal or wood.

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[redacted]

Coal and ore cars were made of metal and had four axles. They carried about 70 metric tons.

Flat cars were made with four axles and carried about 80 tons.

There were two types of tank cars. One had two axles and carried about 25 tons and the other had four axles and carried about 60 tons.

B. Freight Car Maintenance.

Capital maintenance was required every three years. Each large classification yard had an inspection team which pulled cars for capital maintenance according to the date marked on the car of the last capital maintenance.

An inspection was made every time the train was made ready to move by a member of the crew. If minor repairs were needed they were usually made then and there. Brakes, bearings, axles and wheels were carefully checked.

Repairs to wooden parts of cars, and painting awaited capital maintenance. This work was not done as it was needed.

I would estimate that every three years a car would travel an average of 50,000 kilometers.

Freight cars were usually mistreated. The railroad industry continuously tries to move all freight possible to establish records. The false Stakhanovite figures are eternally being brought to the attention of the working man. However, no one wants to assume responsibility for anything. There is, then, a general lack of interest. Results are achieved only through the use of drastic methods and misuse of equipment is common.

[redacted] one Balouaoy, was an engineer working out of Makeevka. He received the Order of Lenin for breaking speed records and moving freight quickly. Three months after he received the Order of Lenin he was sentenced to ten years in prison for an accident incurred while speeding.

If one is careful and cautious, one is called a coward and a reactionary. If one is daring and an accident results, one goes to prison. Inefficiency, therefore, is the result.

D. Consumption of Lubricants.

Not known.

E. Retirement Rate of Freight Cars.

Cars are used to the utmost and are retired only when they can no longer be repaired. This averages about 20 years.

F. Repair Shops for Freight Cars.

Each railroad system has its own repair shop. Then, too, there are special shops and the freight car manufacturing plants for major repairs.

G. Source of Freight Cars.

(1) Imports.

There are very few foreign-made cars. These are of German UK, or US manufacture and are of several types; ie, tank, box, flat, coal. Most of them were imported at the beginning of the Soviet system before industry got underway.

(2) Domestic.

Domestic production is concentrated in the Northern Ukraine; Lugansk and Sormovo, [sic]. Some cars are made in Leningrad. The production figures are unknown to me.

V. Passenger Cars

A. Passenger car equipment is very poor. [redacted] passenger line in 1935 south of Kharkov. There is an utter disregard for human comfort and less attention is given to inspections and repairs than is given freight equipment. Signs in various stations used to remind the people that 'travel is a luxury'.

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[redacted]

B. Metal cars were predominant.
C. The average length was 12 to 14 meters. They had no upholstered seats.
D. Passenger cars were repaired at the freight car repair centers
E. Schedules were very poor because of the priority given certain freight trains.

VII. Traffic.

A. Annual Tons Carried.

Classified figures were not available [redacted] carried an average of 1,000 tons, 50 kilometers a day. Certain trains carried as much as 2,5000 tons the same distance.

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B. Composition of Freight Traffic.

I do not know any figures except to point out an average oil train had between 10 and 16 cars and carried an average of 1,500 to 2,000 tons.

C. Flow of Various Types of Traffic.

Raw materials, coal, oil, steel, and farm products all moved to the industrial centers.

D. Density of Freight Traffic by Lines.

Probably the most strategic line was the 'Oktober Line' between Moscow and Leningrad. Foodstuffs, industrial products flow to these towns from all over the USSR. Then, too, there are the railroads of the Don Basin, the Kuz Basin, Magnitogorsk (Urals) Baku, and the Ukrainian System.

E. General Condition of Freight Service.

Generally, freight traffic moves smoothly. However, it moves at a high price in wasted motion, inefficiency, accidents, and a great deal of labor. Those responsible in the key positions know they must move all freight consigned by industry or be purged. They, therefore, use any and all drastic methods to accomplish the job.

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755.42	N	755.42	544N
755.51	N	755.211	N
755.214	N	755.214	317N
755.012	N	755.312	N
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