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CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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COUNTRY USSR

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SUBJECT Aircraft Engine Plant No. 45 in Moscow

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SUPPLEMENT TO 25X1X

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April 1945 to May 1948

1. a. Location: STALINSKI, an eastern suburb of MOSCOW (37°26' East, 55°50' North).

b. Plant area: About 5,000 x 8,200 feet, built up with large workshops.

c. Work force: From 8,000 to 10,000.

d. Production: Cog wheels, traction gear rims, valves of various kinds, and some type of sleeves (about 4.3 feet long and 32 inches in diameter, perhaps of malleable cast iron). The sleeves were tested in the wind tunnel. According to Soviet workers, these sleeves were used for turbo-jet fighters. It often happened that the material of the sleeves did not stand the stress and cracked with a loud noise. There was no information on the rate of production.

e. Power supply: Several factory power plants.

December 1946 to December 1947

2. Aircraft Plant No. 45 had three test plants.

a. Test Plant No.1:

(1) A wooden shed resting on stone foundations, 135x26x 13.5 feet. Sliding sheet-metal roof. The building housed four test stands, with a separate switching room for each in which the measuring instruments were also set up. The

rooms of the individual test stands had large doors on the northern walls of the building. A steel frame about 16.5 feet high and lined with plates was constructed along the northern wall in the fall of 1947; it had the function of diverting into the air the exhaust gases of the running turbines tested on the test stand.

(2) Three turbines, allegedly fighter aircraft turbines, were being tested daily in test plant No.1 in December 1947. Length of turbines: about 16 feet, 28 inches in diameter. Another turbine, according to German engineers a Junkers turbine, of about the same measurements, was being run for comparative tests at another test stand of the building. The tested turbines were said to represent the third series of the Soviet turbine duplicates.

(3) Up to 10 turbines awaiting test runs were regularly stored in a storage shed north of building 1.

(4) Average duration of test runs was 12 hours. According to German engineers and German-speaking Soviet workers, test stands for IL-2 or Douglas engines had been in building 1 until early 1947. **The tested engines were in-line engines, cylinders arranged in dihedral. The test stands, which had allegedly come from Dessau, were converted to the testing of turbines in early 1947.**

b. Test Plant No.2: A yellow brick structure, 100x115x26 feet. Sliding sheet metal roof. Six test stands, each about 55x26 feet, housed in separate compartments, provided with a special switching room equipped with measuring instruments. Brick wall for the diversion of exhaust gases. Four test stands were completed early in 1947, but only one was in operation. Turbines about 17 feet long and 4 feet in diameter were being tested there for 12 hours.

c. Test Plant No.3: A yellow brick structure, about 250x115x 65 feet, with 10 test stands nearing completion. Two test stands of the same measurements as those in building 2 were completed. There was the same device for the diversion of exhaust gases. Unlike building 2, this building had a basement with heating and cooling installations.

25X1A [redacted] Comment:

a. The report essentially confirmed available information on KUSCOW Aircraft Engine Plant No.45

b. It is inferred from the data on the production of the plant that the first turbo-power plant to be built in quantity in the plant was the axial-flow power plant of the size and type of the Jumo-004. However, it seems that preparations were being made for the quantity production of a larger power plant, possibly a development based on the Jumo-012.

c. It can be inferred from the large number of test stands for the testing of turbo-jet power plants, mostly newly constructed, that KUSCOW Plant No.45 is one of the main plants producing turbo-jet power plants.