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CENTRAL INTELLIGENCE AGENCY

REPORT

INFORMATION REPORT

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COUNTRY Germany (Russian Zone)

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50X1-HUM

1. a. Eight Soviet committees from Berlin-Karlshorst visited the Neustadt/Orla (M 51/J 84) plant from 1 to 10 December 1949. During the inspection they found that the mesh, except for a small part, did not meet the technical specifications. The wire weaving firms maintained that they could not manufacture thinner mesh with the available reeds.

b. General Rudenko returned in the middle of December 1949 and again telephoned the Ministry in Moscow from Neustadt, via the former Komendatura (now the Soviet Control Commission). Moscow gave the following instructions by telephone:

1st quality mesh, maximum tolerance of shifted warp threads 90 microns (1/1,000 mm)

2nd quality mesh, maximum tolerance of shifted warp threads 120 microns

3rd quality mesh, maximum tolerance of shifted warp threads over 120 microns

2. From then on mesh was inspected and accepted in continuous sequence. Time pressure became so great that workmen could **sleep only** two hours during some nights.

The third quality mesh (a stock of some 100 meters) was almost entirely rejected, as it had too many defects.

a. A Soviet official by the name of Pavilov, especially authorized by the Ministry in Moscow and producing an appropriate letter in Russian to that effect, came to accept the mesh. According to his instructions, each roll of about 50 to 60 meters of mesh was packed in especially light but strong boxes. The gross weight was 20 to 25 kg.

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50X1

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50X1

3. a. The boxes were loaded on a Soviet Army truck which arrived on 18 December 1949. According to Pavilov the shipment went to Berlin and from there immediately by air to Moscow. Although the Soviet representative promised another check would not be made for some time, additional mesh had to be tested two days later. These stocks were actually part of the January quota and were not supposed to be provided for acceptance before January. Conversations of the Soviets indicated that they were eager to deliver as much as possible before the end of the year.

b. About 1,400 meters above the prescribed annual quota were accepted. Part of the material even had to be cut off the looms. The tests of the weavings had to be done with the greatest possible accuracy. A record (in five copies) had to be kept on each lot which might be up to 1,000 meters. (Translations of two such records are annexed).

c. A special authorization, No 5/57, dated 12 December 1949, of the Reparations Administration of the Soviet Control Commission was submitted during acceptance as all weavings did not correspond to the technical specifications.

4. Negotiations have been under way since 10 December 1949 to determine the 1950 production schedule. The Soviet agencies had obviously not come to an agreement as to whether they should order the old weaving type of 10,000 mesh or a new one of 22,000 mesh per square centimeter. According to a decision made at the end of December 1949 all firms are to produce an improved twill weaving of 10,000 mesh per square centimeter. The tolerance of shifted warp threads may not exceed 90 microns. This decision indicates that the reeds needed for these weavings as well as the lamellate strip steel which was to be delivered [redacted] already exist. Large stocks (about 8 tons) of the required nickel wire are also stored in the Hettstedt (M 52/ D 64) Non-ferrous Metal Rolling Mill. 50X1-HUM

a. The conversion to the production of a 22,000 mesh weaving, which apparently was preferred, would have taken about six months. This would mean that no firm would have produced the first weavings of this kind before May or June 1950.

5. No detailed information is available on the required amount. The Eilhauer Firm in Neustadt/Orla will have to deliver about 25,000 square meters of the improved 10,000 mesh twill weaving. A similar weaving of 7,000 mesh will also be delivered (amount still unknown).

[redacted] Comment:

1. [redacted] the Zonal Metal Weaving Plant in Neustadt/Orla is also the control station for wire meshes manufactured in the Soviet Zone of Germany, which are shipped to the Soviet Union on reparations account. The annexed translations of test records No. 28 and 29 regarding reparations deliveries of the Raguhn and Graefenthal Wire Weaving Plants give a good insight into the methods of testing. 50X1-HUM

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[redacted] 50X1

2. According to para. 4, the wire meshes to be delivered to the Soviet Union on reparations account in 1950 must be an improved twill weaving of 10,000 mesh per square centimeter with warp thread shifts not exceeding 90 microns. The wire diameter must be 0.038 to 0.042 mm. [redacted] the 50X1-HUM Soviets started to have wire weavings produced with 7,000 mesh per square centimeter with stronger wire material (wire diameter 0.050 to 0.055 mm) with a view to filling the quota of 60,000 to 70,000 square meters of wire meshes required for 1950. The managers of the German wire weaving plants, referring to the shortage of machinery and skilled workmen, declared they would be unable to produce such an amount if they have to fulfil the condition of manufacturing weavings with 10,000 mesh per square centimeter and warp thread shifts not exceeding 90 microns.

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50X1-HUM

Test record No 2, dated 29 December 1949, of the Tewa wire weaving plant in Raguhn (M 52/E 15) regarding a lot of nickel twill wire weavings (10,000 mesh per square centimeter) wire diameter 0.038 to 0.042 mm totaling 863.51 square meters. The lot consists of 18 rolls, 100 centimeters wide and 863.51 meters long, totaling 863.51 square meters.

Reparations order: F 52/917 541

Trans No: 238 066.

The wire material used for the weavings was supplied by the Hettstedt (M 52/D 64) Non-ferrous Metal Rolling Mill. The firm submitted a certificate showing that the wire was manufactured according to GOST 2179/43 with less than 0.15 percent manganese. The weavings of this lot were tested in their entire length and width on a special test table with light installation and optical instruments of special design. The firm measured the wire diameter at two points in the woof with five threads each and the wire diameter in the warp at five threads with a micrometer accurate to within two microns. The difference between the woof thread diameter and the warp thread diameter varies within the tolerance of 0.005 mm and thus corresponds to the changed conditions of 26 October 1949.

The maximum width of the weaving was measured and found to be within the tolerance of 1,000 ± 10 mm.

The statements of the Tewa firm regarding cracks in the weaving correspond to those made in the waybill.

The weaving is not clean in some parts.

50X1-HUM

The number of defects found corresponds to the statements made in the waybill. A compilation of the discovered defects such as wire ruptures, knots, holes, woof thread breaks, widened parts in the woof and warp thread shifts are listed in the annexed chart. 50X1-HUM

Soldered joints are also in the weaving. 50X1-HUM

According to the technical specifications, the weaving has to be tested for shifted threads. This is impossible because the Tewa firm has no optical instruments for this. 50X1-HUM

The warp thread shifts, representing the mesh width exceeding the tolerance, were searched out with a magnifying glass by following a line in the entire width and were measured with the ocular micrometer.

To have a survey on shifted threads in the woof the Tewa firm investigated with a magnifying glass (sixfold enlargement) on three different lines at two lateral parts and in the center part

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of a one-meter long section. Ocular micrometer measurements were made on some points of these lines. For the time being it is impossible to make a thorough investigation for shifted threads in the woof with the available optical instruments (magnifying glass and ocular micrometer). These defects can be accurately determined only with a projection instrument which the Tewa firm does not possess.

During the test for shifted threads in the woof it was found in all rolls that there were constantly irregular spots of about 0.5 to 1.5 centimeter length which could not be determined numerically. On these spots the meshes show a plus or minus tolerance. Most of the irregular spots have a + tolerance of 77 to 80 microns. There are also some spots which are below the - tolerance.

The following defects were discovered in all rolls during the woof test:

In the transition from one wire shade to another (always occurring after a knot in a woof thread) there are about 9 to 15 shifted threads causing shifts ("Gassen") in the woof which are below the minus tolerance (mesh width 25 - 35 microns). One square meter of weaving averages 8 to 10 of such wire transitions. More were also occasionally found.

The number of meshes was tested at three different spots. The result was 27 meshes in 2.7 mm.

The representative of the recipient made random tests after I had finished inspection. He could convince himself of the accuracy of the waybill indications.

The weaving does not correspond to the technical specifications according to the test result. In compliance with the wish of the recipient this lot is composed of rolls where shifts in the weaving are not wider than 103 microns.

The boxes of this lot are marked with a diagonal stripe (4 boxes red - 14 boxes green) at the front part as desired by the recipient.

The weavings were accepted on the basis of the authorization of the Reparations Administration of the Soviet Control Commission No. 5/57 dated 12 December 1949. As the weaving does not comply with the technical specifications, the Reparations Administration can make a discretionary price deduction.

[redacted] In reality 50X1-HUM
the material looks better than shown in the waybill compilation.

[redacted] 50X1-HUM

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Declassified in Part - Sanitized Copy Approved for Release 2013/08/28 : CIA-RDP82-00457R004800270004-3

50X1-HUM

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