## HEADQUARTERS U.S. STRATEGIC BOMBING SURVEY (PACIFIC) C/O POSTMASTER, SAN FRANCISCO

INTERROGATION NO.

900 A.M.

DIVISION OF ORIGIN: Equipment and Construction.

SUBJECT:

Interrogation at Mitsubishi Electric Company.

Personnel interrogated and background of each:

HaZaMa, S., Managing Director

UCHIDA, T., English speaking liaison man.

KISO, D., Assistant Managing Director.

SUGIHARA, T., Assistant Managing Director

Where interviewed (office): At Mitsubishi Electric Company.

Interrogator:

Prc. Jacobson

Interpreter:

Lt. Love

None. Allied Officer Present:

Summary:

- 1. Copies of reports sent to GHQ obtained.
- 2. Plant questionaire explained.
- General information about the electrical industry on labor, materials, damage, difficulties, etc. was obtained.

## INTERROGATION

- 1. A plant questionaire ws explained to the officials, and detailed information regarding production, labor, damage, etc. will be available for every plant. The plants in the Tokyo area will report in one week. Those outside Tokyo will be prepared in one month.
- 2. A copy of the report on plant facilities, production etc. which was sent to GHQ was obtained.
- 3. The following information concerning the electrical industry and the Mitsubishi concern was obtained:
- a. Production of the Mitsubishi Electric Co. amounts to about 10% of all electrical equipment manufactured in Japan.
- b. The most important item of electrical equipment for the war effort was wireless. Since hitsubishi specialized in heavy equipment, its main contribution to the war effort was submarine motors and associated marine electrical equipment. The emphasis late in the war shifted to electrical equipment for aircraft.
- c. The list of most important electrical manufacturers given by Mitsubishi include Hitachi, Tokyo-Shibaura, Fuji, Mitsubishi and Sumitomo.
- d. The priority rating for wireless equipment was high. For other equipment it was fairly low.
- e. Obtaining raw materials was a problem. It was found that little or no material could be obtained for low priority orders. High priority allotments of materials were generally cut to 70% of what was requested. The company therefore adopted the device of requesting twice as much material as was needed to fill vital orders.
- f. A shortage of material was evident, especially in the second half of 1944. Copper, sheet iron, and aluminum were very difficult to obtain. Nickel was almost impossible to obtain. Solvents such as turpantine, etc. and insulating material was also very difficult to obtain.
- g. Labor was generally employed on a one shift basis throughout the war, with 2 days off per month. Laborers worked about  $8\frac{1}{2}$  hrs. per day. Exceptions to this general statement were the Osaka, Nagoya, and Robe plants, (3 of 13 plants). These worked 24 hours per day on 2 shifts.

There was no great difficulty in obtaining a labor supply, but the quality of employment decreased. No attempt at draft deferment for key labor was made until the latter half of 1944 when it was obvious that the quality and volume of production had dropped off considerably.

- h. Greatest expansion of the concern occurred in 1943, but the period 1937-1944 was one of continuous expansion of production facilities.
- i. In general no significant conversion of electrical plants to other work occurred. Some plants that used to manufacture silk and textile products were purchased by the Mitsubishi Co. after their plants suspended production in their own field. About one-third of the labor fares remained in the plants and were trained to do semi-skilled work, other workers were obtained through the Welfare Ministry.

- j. The efficiency of labor is stated to have dropped to one-third toward the end of the war. Control of labor began in 1938. Workers were frozen to their jobs in all industries that were deemed essential.
- k. Peak power loads were reduced in the winter. The greatest reduction (an average of 40%) occurred in the winter of 1939. This was due to consolidation of power companies and elimination of some small power plants.

During the war the average reduction of peak load was 20% during the winter due to the cessation of activity by the hydroelectric power stations.

- 1. Branches of the industry that suffered most from air attacks were the wireless manufacturers. Production of vacuum tubes suffered especially. Toward the end of the war it fell to a disastrous level.
- m. Concentration on electric equipment for the ship-building and submarine program switched to aircraft electric equipment about Aug-Sept 1944.
- n. Production increased till Autumn 1944. Then air raids, lack of materials, transportation difficulties and lack of adequate production facilities (eg. electric wire & cable) combined to cause production to fall.
- o. Dispersal of manufacturing began in Nov 1942. Main dispersal in the electrical industry began about Sept. 1944. Dispersal of Aircraft production began about a year earlier.
- p. Hazama (The Hanaging Director) estimates that 5 to 7% of all industrial production was contributed by the electrical industry. This proportion is slightly less for labor, since more machinery is used in this industry than in the average industry. This is true for 1940, the proportion may be lower during the war, due to emphasis on production of commodities essential for war.