

HEADQUARTERS
U. S. STRATEGIC BOMBING SURVEY
(PACIFIC)
APO 234
C/O POSTMASTER, SAN FRANCISCO

INTERROGATION NO: 22
(Obtain from G-2)

PLACE: TOKYO
DATE: 12 Oct 1945
TIME: 1400

Division of Origin: Capital Equipment and Construction.

SUBJECT: Electrical Equipment Control Association.

Personnel interrogated and background of each:

D. YASUKAWA -- President of Ass'n.
A. ISHII -- A Managing Director.
K. SAKAKIBARA -- A Managing Director.

Where interviewed (office): Office of Control Ass'n.

Interrogator: Pfc. Jacobson

Interpreter: None -- Conducted in English.

Allied Officers Present: None.

Summary:

1. Statistics on national production of electrical equipment obtained and analyzed.
2. Details on important manufacturers of electrical equipment.
3. Problems confronting the industry during the war.

The interrogation was conducted in English by Pfc Jacobson.

1. The statistics obtained the previous day were reviewed to determine their value and significance. It was determined that estimates were generally used, since original records were destroyed by fire when the Association's offices burned down on May 25, 1945. Although the best available at the moment, the statistics cannot be accepted as accurate in any instance. All are approximations of the true figures at best. The production figures for 1943 and 1944 are estimates based on the raw materials supplied and 1942 production. Apparently 1942 production figures are the only authentic ones.

When queried regarding the categories used in classifying production it was determined that electrical wire and cable manufacture was not within its control, but is included in the jurisdiction of the Metal Industries Control Ass'n, the president of which is Mr. S. Nakagawa, formerly President of the Furukawa Electric Industries Co. The Association office is located in Tokyo at Sukiji, 3 chome # 10 (the Konwa Keikan Bldg).

When requested to break down production into more detailed categories, Mr Ishii produced statistics on production of broadcast receivers 1941 - 1944. Others will be prepared by Mr. Sakakibara.

Mr. Yasukawa was asked about other statistical sources and suggested the Mitsubishi Statistical Dep't for national figures on electrical and other production. The address of the office and an introduction to one of the officials will be furnished by Mr. Yasukawa tomorrow.

2. When questioned on the relative importance of the Tokyo area and the important plants in electrical equipment manufacture, the following statements were made:

- a. Concentration of manufacture in the Tokyo area
 - (1) Heavy Electrical equipment60 - 70 %
 - (2) Communications equipment90 - 95 %
with no important plant outside the Tokyo area.

- b. Important Concerns in Electrical Equipment Manufacture:

(1) Heavy Electrical Equipment	% of Nat Production
Hitachi Co.	approx 20 %
Tokyo - Shibaura	" 16 %
Mitsubishi	" 10 %
Fuji	" 6 %

(2) Communications Equipment	
Sumitomo Co.	30 %
Tokyo - Shibaura	20 %
Nippon Wireless Co.	10 %
Oki Co.	10 %

(3) Meters of all Kinds	
Yokukawa (in Tokyo area)	5 %
Hokushin (in Tokyo area)	5 %

- (4) For wire and cable we are referred to the Metal Industries Control Ass'n, but the Funikawa & Showa Wire and Cable Works were mentioned as important in the Tokyo area.

3. When queried on labor in the electrical industry, Mr. Yasukawa stated that all plants worked on a one shift basis

before the war, on a 6 day week and 8 hour day. With the advent of warfare, the average work day increased to 10 hours, with 2 days off each month.

About February 1943, the communications industry adopted a 2 shift system, working 12 hour shifts. This was especially true of parts manufacturing for communications equipment. Night shifts, however, were not as efficient. A good many women were employed in this sector of the industry. The quality of labor, rather than the supply of labor was the problem.

According to Yasukawa there was no such thing as deferring skilled labor from service in the armed forces. Some deterioration of quality products is stated to have occurred, with vacuum tubes an outstanding illustration of this: according to Yasukawa, many tubes were rejected for defects.

4. The outstanding difficulty experienced by the electrical industry was in supply of raw materials, especially steel. This shortage was felt in all industry. Copper supplies were generally adequate, but some conversion to the use of aluminum occurred at the beginning of the war; later a growing shortage of aluminum forced the industry to revert to the use of copper in place of the aluminum.

Rare metals such as tungsten and molybdenum were never available in the quantities desired. This and a shortage of mica inhibited maximum possible production of wireless equipment. A substitute for mica was sought but without success.

5. Production of wireless communications equipment was therefore unsatisfactory before bombing attacks began due to a shortage of materials.

In 1945 10% of productive facilities remained because of two factors:

- a. Bomb damage.
- b. Dispersal of some plants to mountainous areas. By March 1945 production of wireless equipment was very seriously disrupted.

6. No outstanding difficulties were evident in the supply of special machinery, since the industry had expanded fairly early and was better able to cope with wartime demands than other industries, such as the aircraft industry for example.

7. No great difficulty was experienced in obtaining electric power, but an adequate supply of fuel was very difficult to obtain especially for those concerns who were farthest away from Kyushu, the main source of coal for Japan.

8. Mr. Yasukawa has promised to write an account of the electrical industry in Japan before the war and during the war, describing its development, difficulties encountered, and attempts made to overcome their problems.

9. Yasukawa also mentioned the fact that he expects the Electrical Control Association will soon be dissolved since its function no longer existed.