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Development Nextonic Estimation Environment of Telecommunications Equipment (including low-cost recorvers for coundbroadcasting and television)

Tienni, 13 - 24 October 1969

STATUS OF MANUFACTURE OF TELECOMMUNICATION EQUIPMENT IN THAILAND 1/

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Thailand is a small country of Southeast Asia which is trying to develop the nation in every way. However the manufacturing of telecommunication equipment is solely lagging.

The first military organization to manufacture telecommunication equipment in Thailand was the Signal Department Royal Thai Army. The first item of signal equipment developed was a C.W. transmitter in 1937. Even though this transmitter was not of the best quality it accomplished the mission of transmitting messages. Due to the lack of funds the manufacturing of this equipment was discontinued in 1944. At the present time most of the signal equipment on hand in the Thai army, Hevy and Air Force has been received from the U.S.A. through the aid programme.

Even though telecommunication has advanced to such a degree to allow conversation and television between the earth and the moon, communication - dvancement in Theiland continued to go slowly. Although we continue to send messages via C.W., we are also using SSB, transceiver, teletypewriter and microwave equipment. ICS is also under consideration.

Because of the lack of demand in the country for telecommunication equipment, manufacturing companies hesitate to invest time and money in Thailand. At this time there are only two manufacturers of signal equipment in Thailand. They are G. Simon Radio Company Ltd. and the That Electronic Industry Noyal Thai Army. G. Simon Radio Company Ltd. assemble the following elements:

- 1. ALLOW transmitter 6 W, 15 20 W, 35 W. (about 500 sets have been sold).
 - 2. SSB. Transceiver 15 25 W. (nan pack) and 150 W.
 - 3. Future plans call for the production of SSB. Transceiver

5 - 6 W. and 100 W. mobile.

The majority of the parts for the above equipment are imported from England and U.S.A.

The Thai Electronic Industry (TEI) of Royal Thai Army originally assembled transistor radio receiver and television.

In June 1969 TEI purchased parts for 50 units of SSB transceiver. The parts for this equipment were imported from RACAL Company, England. The first lot of 50 units was of such a high quality that production will be expended in the future.

In addition to the above two organizations, the Signal Department of the Royal Than army also assembles broadcasting transmitters. Most of the transmitters are 1 and 10 KW. The two major advantages of assembly of the broadcasting transmitters by the Signal Department are that the cost is about one third of the cost if imported from other countries and assembly of the transmitters in Thailand trains Signal personnel. The parts for the transmitters are imported from Japan, England and U.S.A.

In Thailand there are more than 100 radio broadcasting stations which belong to bilitary and non-military organizations. There are only 5 or a high power transmitter (more than 20 KW) which were received from the and programme.

Assembling of Ralie broadcasting receiver and television in Thailand

a) Radio brondens ling receivers

Reduction to the second of the

Thirty years ago, radio broadcasting began in Thailand. At that time only one station existed. Many people used simple receivers composed mainly of crystal and headphones. Very few radio receivers were imported to Thailand. Many Thai people resided in rural treas where there was no electricity. This fact, coupled with the high cost of radio, resulted in only some Thai people having radio. In 1960, owing to the increase of communist

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propaganda and false information, General Sarit, the ex Prime A Minister considered ways to combat this situation. He founded The Thai Electronic Industry (TEI) for the purpose of assembling low cost translator radio receivers which could be made available to the vast majority of the Thei people and government officials. The transistor radio sets had the two major advantages of being lightweight and easy to carry and could be operated from simple flash light batteries as a power source thus enabling people from rural areas to listen to radio broadcasts.

The Thai Electronic Industry (TEI) of Royal Thai army was the first organization in Thailand to assemble transistorized radio receivers. The parts for the radios were imported from Japan and cabinets were manufactured by the cabinet factory of TEL. The initial sets assembled were only four transistors but afterwards improved to six, seven and eight transistors. The eight transistors set is a two band, "moduum wave and short wave" set. Production for the first two years could not meet the demand. Due to the high demand for radios about three additional civilian firms for radio receiver assembly were founded and many companies began importing radio sets from other countries. TEL discontinued assembly of radio sets in 1966. Production from 1960 - 1966 of TEL was 104,000 sets while the production of other firms was not revealed.

b) <u>Television</u>

In 1962 a survey by UNESCO revealed that in Thailand only 3 people in 1000 owned television sets. All television sets had to be imported and the cost was very high. Consequently, in 1963, TEI began the assembly of low cost, 19 inch television receivers. Parts for these sets were imported from Japan. Production was started in May 1963. Due to the small size of the factory, production is limited to a maximum of about 40 sets per day, nowever the average production is about 12 sets per day to meet the demand. From May 1963 until August 1969, the total number of television receivers assembled by TEL is about 12,700 sets, while the production figures of the two other firms were not revealed.

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Although Thailand is lagging behind many countries in development, we are constantly striving towards our improvement in all areas because "moving, however slowly, is better than standing still".

SUMMARY

1. There is very little menufacturing of telecommunication equipment in Thailand, especially since most of the communication equipment being used by the Armed Forces is received from U.S.A. through the aid programme and civilian usuage so little that equipment is purchased from many companies in Thailand as required.

2. The manufacture of telecommunication equipment would require a lot of money for investment; if the demand for the production is low then comparing the price of production in Thailand and purchasing from other countries, the latter method is cheaper.

3. Manufacture of receivers for sound broadcasting and television.

Broadcasting receivers

There are more than 100 broadcasting stations in Thailand. There are many factories which assemble radio receivers in Thailand. The number of radio receivers assembled in Thailand plus the number of radio receivers imported are sufficient for the demand.

Television

At present there are three television stations in Thailand. They are Thai Television station (Channel 4 - black and white), Army Television station (Channel 7 - black and white) and army Television station (Channel 9 or Channel 7 - colour). In the near future there will be two more television stations (one black and white, and one colour).

There are three factories which assemble television sets. The TEI Royal Than Army produces 19 inch low rost television receivers for sale to the people and government officials. The production is about 300 sets per month and the cost is about 20% cheaper than the sets sold on the local market. The TEI will assemble colour television in the near future. The number of sets produced by the factories owned by civilian organizations, was not revealed, but the prices are a little higher compared with the sets produced by TEI.



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