

HEADQUARTERS  
U. S. STRATEGIC BOMBING SURVEY  
(Pacific)

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PLACE: Tokyo  
DATE: 16 Nov 45

INTERROGATION NO 400

Division of Origin: Military Analysis Division

Subject: Electronics

Person interrogated and background:

Dr. YAGI, Hideji — Former president of the Board of Technology and inventor of the YAGI Antenna. At present the President of Tokyo University.

Where interrogated: Meiji Bldg

Interrogator: Col Haller  
Lt Corey  
Dr Pickering

Interpreter: Mr. Nishiyama



SUMMARY:

Dr. Yagi declared that allocation of scientific research as well as allocation of war orders was in a general state of confusion in Japan.

Research was in so poor a condition of planning that many of the research projects that had no connection with the war were continued as television. Japan pursued a policy different from the United States, Yagi declared, by allocating very little research to private laboratories.

University professors influenced the army and navy only in so far as the personnel of the army and navy laboratories were former students. The latter often returned to request advice from their former instructors on their scientific projects.

To eliminate this bottleneck of lack of planning, Yagi, said that he brought about a scientific policy division which had several subsections. The purpose of the group which was composed of both the military and civil was to consider, pass on, and apportion scientific research. This group, however, did not have much power nor very much support from the military. Because of distrust of this committee by the military, a Technical Administrative Committee was created on a higher echelon. Civilians were added to this group to consider the more technical aspects that came before the Board.

An additional sore spot in the committee was the lack of cooperation displayed by both the army and navy. Dr. Yagi declared that an admiral was quoted as saying that he would rather yield to the enemy than to the army. The same statement was attributed to a general as far as the navy was concerned.

To add to the confusion in the production end, Dr. Yagi declared that the Army, Navy, Munitions Ministry (which handled the contracts for bearings for the air forces) and to a very limited extent the civilians were competing without plan for victory for the productive power of the country.

Military scientific personnel, Dr. Yagi felt were too conservative and inclined to fall into army ruts of being overcautious and fearful of reprimination from above. Besides, non-technical army men were in charge of scientific laboratories.

Scientific Projects

During the war, Dr. Yagi pointed out that two infra-red techniques were tried: (1) A self-seeking bomb for ships, (2) Nocturnal vision.

Col Nomura of the Scientific Technical Section was working on the first, and Prof Katonow with the Kyoto University was working on the latter at Tokyo Shibaure factory.

Dr. Yagi did not know of any advice given by Germany on any technical subject save the armor piercing bullet. He did, however say that an electronics committee visited Germany. A Dr. Ito represented the Naval Technical Research Lab; Col Sasaki represented the Tama Research Lab.

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## Interrogation No 400 Contd

The main universities in Japan doing research for the military according to Dr. Yagi were Tokyo Imperial University, Kyoto Imperial, and Sendai Imperial.

Again and again, Dr. Yagi pointed out bitterly that technical personnel in the Jap labs were in a rut afraid to take new steps. The air corps, he however did admit was very progressive. But in the navy for example, the personnel were much more interested in bigger craft and bigger guns.

Dr. Yagi's first introduction to our radar was his being called to the ministry to give an account of American bombing through the fog of Attu. Gen Sugiyama wanted an investigation into the amazing accuracy of bombing through overcast.

Yagi pointed out that there were two naval research laboratories and seven army labs.

He knew of two types of radar absorbing materials. More information could be secured from the Navy at Meguro, and also at Ueda in the Nigano Prefecture.

The only proximity fuse of which Yagi had knowledge was the magnetic torpedo, and the magnetic depth charge.

Yagi pointed out four things in electronics for fulfillment in the future:

1. Ignition killer: This was somewhat successful but frequency must be changed for variable distance of spark plug from the engine. A shield can also defeat the efforts.
2. Death ray: 80cm was used to kill a rabbit in a few minutes, but a guinea pig was heated up and went to sleep. Autopsy on the rabbit indicated that the brain tissue was destroyed by the VHF wave.
3. Detonate stored explosives from a distance: Experiment with high frequencies was made at long distance on dynamite, but latter proved too stable. Yagi suggests the introduction of a neutron.
4. Employ a beam to conduct electric current: Experiment has proved that an ultra violet beam may carry current to a small extent.

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