

CLASSIFICATION RESTRICTED
SECURITY INFORMATION
CENTRAL INTELLIGENCE AGENCY
INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

STAT

COUNTRY Yugoslavia
SUBJECT Scientific - Electronics
HOW PUBLISHED Daily newspaper
WHERE PUBLISHED Belgrade
DATE PUBLISHED 3 Dec 1952
LANGUAGE Serbian

CD NO.
DATE OF INFORMATION 1952
DATE DIST. 22 May 1953
NO. OF PAGES 2
SUPPLEMENT TO REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE Politika.

ELECTRONIC CALCULATING MACHINE
BUILT BY "NIKOLA TESLA" INSTITUTE, YUGOSLAVIA

STAT

The Electric Economy Section of the "Nikola Tesla" Institute of the Serbian Academy of Science (Odeljenje za elektroprivredu, Institut Srpske akademije nauka "Nikola Tesla") has built an electronic differential analyzer (elektronski diferencijalni analizator). Complex equations which ordinarily require days and weeks of work can be solved in fractions of a second by the machine, and ordinary arithmetic problems are solved within millionths of a second. Solutions are received on an opaque glass in the form of curves. The internal apparatus is similar to the interiors of 20 radio sets wired together. The machine has about 200 radio tubes, and is 5 meters long and 2 meters high.

The complex machine will be of especial help in testing electric power plant control equipment. The machine will also be used to establish the best dimensions for individual parts of hydroelectric power plant installations, which will result in savings of labor and material amounting to millions of dinars. Such computations usually require several weeks, and sometimes 6 months. The machine can shorten this time to one or two days.

The young engineers and technicians of the institute, who built and assembled the machine also taught themselves to use it. This will save foreign exchange which otherwise would have been spent in sending them abroad to study.

The electronic machine was built from parts found in surplus materials in Yugoslav enterprises. It required 2 years to build and cost about 5 million dinars. The price of such a machine in the US exceeds 50,000 dollars. The UN technical aid delegate [to Yugoslavia] praised the machine and Dr Engr Ilija Obradovic, who designed it. The UN organization provided an oscillograph for the machine. Doctor Obradovic was called in for consultation by one of the largest firms in Europe, which desires to build a similar machine for its own use. -- A. Dj.

CLASSIFICATION		RESTRICTED		DISTRIBUTION													
STATE	<input checked="" type="checkbox"/> NAVY	<input checked="" type="checkbox"/> NSRB															
ARMY	<input checked="" type="checkbox"/> AIR	<input checked="" type="checkbox"/> FBI															

STAT

Page Denied