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THIRD SCIENTIFIC-TECHNICAL CONFERENCE DEDICATED TO THE MEMORY OF PROF M. I. KANOVSKIY, CORRESPONDING MEMBER OF THE ACADEMY OF SCIENCES USSR

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[Following is the translation of an unsigned article entitled "Tret'ya nauchno-tekhnicheskaya konferentsiya posvyashchennaya pamyati chlena-korrespondenta AN SSSR professora M. I. Yanovskogo" (English version above), in Sudostroyeniye (Shipbuilding), No 8, Leningrad, August 1960, pages 75-76.]

On 10-11 May 1960, the Third Scientific-Technical Conference, dedicated to the memory of Prof M. I. Yanovskiy, Corresponding Member of the Academy of Sciences USSR, was held in Leningrad. The conference was called by the Scientific-Technical Society of the Shipbuilding Industry.

The moderator of the section dealing with the construction of ship machinery, Prof A. G. Kurzon, emphasized the outstanding successes in the development of the national ship-turbine construction and the role of M. I. Yanovskiy, who conducted research and studied a series of difficult and complex problems in this field.

A report on the life and activities of M. I. Yanovskiy was read by Candidate of Technical Sciences G. G. Zharov.

At the conference, chairman of the awards commission, Prof V. L. Survillo, announced the results of the Awards imeni M. I. Yanovskiy.

Awards were bestowed on the following:

First Prize -- the collective of authors (L. V. Sladkova, V. V. Alekseyev, L. N. Kutuzov, M. A. Soshnova, L. P. Yermakov, and N. G. Galkin) headed by Doctor of Technical Sciences B. P. Terskikh, for the work, "Research and Development of a Method of Calculating Torsion Vibration in Ship Diesel Power Plants."

Second Prize -- the authors A. D. Chernov, A. V. Posdiyev, and L. G. Vasil'yev, for the work, "Contemporary Steam Turbine Power Plants on Ocean Transports."

Third Prize -- V. I. Zinchenko, for the work, "Noise of a Ship's Power Plant"; and Yu. I. Mityushkin, for the work, "On the Question of a Design Type of Turbine Without Radial Gradient of Static Pressure in the Inter-crown Clearance."

During the first day of the conference the following reports were read:

"Fundamental Directions of Development of Ship Power Plants for Ocean Transports," speaker A. G. Kurzon.

"Experience in Designing the First Soviet-made Steam Turbine Plants for Transport Vessels," speaker M. I. Vol'fenzon.

"The Results of Testing and First-Period Operation of Steam Turbines of the Tanker "Pekin" and the Dry Cargo Vessel "Leninskiy Komsomol," speaker V. A. Semeka.

"The First Soviet-made Gas Turbine Plants for Ocean Transport Vessels," speaker G. A. Ogloblin.

In these reports, the basic tasks of ship turbine construction were brought out and the feasibility and prospects of developing gas- and steam-turbine engines as compared to other types of ship power plants was analyzed. Specific data were presented from the experience of designing, building, and operating the best Soviet models of gas and steam turbines.

The reports also contained information on the results of the work in equipping ocean transport vessels with power-plant equipment for the period from 1957, when the scientific-technical conference on questions of designing and constructing ocean transport vessels, which was called by the Ministry of Maritime Fleet and the Ministry of Shipbuilding Industry, was held.

At the conference dedicated to the memory of M. I. Yanovskiy it was noted that the construction and placing in operation of the dry cargo vessels "Leninskiy Komsomol" and "Akademik Vavilov," the large tanker "Pekin," and the icebreaker "Lenin" demonstrated that the many years of experience in research and designing ship's steam-turbine power plants garnered by Soviet industry, the production might of Soviet plants issuing this equipment, can successfully ensure the demands of shipbuilding for power-plant equipment. The steam-turbine plants of the ships mentioned above, by their technical characteristics stand on the same level as the best contemporary foreign models.

The broad scope of construction of ocean transport vessels, which was set down in the decisions of the 21st Party Congress on the development of the national economy, is impossible without the maximum utilization of the existing machine-building base and its further broadening.

While developing the production of slow-RPM internal combustion engines, it is necessary at the same time to develop widely the production of equipment for turbine power plants, which at the present time have still not received sufficiently wide development in vessels of the cargo fleet. With the aid of power plants of more than 12-15,000 horsepower, turbines have a sufficiently high economy factor in comparison with other types of units, since, beginning with the given range of power (and even at greater power), it is possible to obtain greater effeciency value in these units and simultaneously to ensure performance with low-grade fuels -- high viscosity oils.

The development of maritime turbine construction is the basis for ensuring the transition in the future to the wide use of ship gas turbines and atomic-energy power plants.

The conference unanimously supported the theses stated above, expressed by those making reports, and appearing in the discussions.

At the close of the first day's work the conference examined and adopted a decision which, in part, directs attention to the necessity of reducing the number of types of ships which are to be constructed, as regards selection of a type of main engines, in order to ensure that newly constructed ships will have internal-combustion and steam and gas turbine engines built at home. This decision was based on the realistic possibilities, interests, and tasks of the further development of the Soviet transport fleet and ship-power plant construction.

A series of important questions was raised in the decision of the conference, which concern the specialization of the production base of ship machine construction; ensuring work orders to the plants making equipment for ship turbine plants; and speeding up the production of slow-RPM internal combustion engines of 5,000-9,000 horsepower for vessels of the maritime fleet.

Also indicated in the decisions of the conference were the most important directions of scientific research, design, and organization work in improving ship steam and gas turbine plants.

The second day's work of the conference consisted of reports, as follows:

"Investigating the Breaking Point of a Turbine Operating at Supercritical Temperature Drops," by G. A. Matveyev.

"The Accustic Method of Measuring Dynamic Stress in the Blades of an Operating Turbine," by K. A. Prokof'yev.

"Analysis of the Phenomena Connected with the Condensation of Steam and the Movement of Moisture in the Flow Section of a Turbine," by A. A. Promyslov.

"On the Optimum Pressure of Separation in the Intermediate Steam Separators of Maritime Steam Turbines," by A. G. Kurzon, A. I. Levzner, and V. Yu. Tikhoplav.

"On the Criteria for the Rational Utilization of Regeneration of Intermediate Heating of Gas and Intermediate Cooling of Air in Cycles in Marine Gas Turbine Plants," by L. A. Maslov.

In accordance with the decision of the Central Board of the Scientific Technical Society of the Shipbuilding Industry, all of the reports encompassed by the plan of work of the conference will be published in the works (Trudy) of the conference.

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