

Design Of National Hydraulic Laboratory Copies Of Plans Estimates Of Cost And Memoranda Relating To The National Hydra At The United Dc Document 71st Congress 1st Session

Vols. 29-30 contain papers of the International Engineering Congress, Chicago, 1893; v. 54, pts. A-F, papers of the International Engineering Congress, St. Louis, 1904.

Including Contributions from Canadian Laboratories

Commercial Standards Monthly

Hydraulic Research in the United States 1959

Hearing Before the Subcommittee of House Committee on Appropriations ... in Charge of Deficiency Appropriations, Seventy-first Congress, Second Session

... Annual Convention

To meet the increased payload capacities demanded by present-day tasks, manipulator designers have turned to hydraulics as a means of actuation. Hydraulics have always been the actuator of choice when designing heavy-life construction and mining equipment such as bulldozers, backhoes, and tunneling devices. In order to successfully design, build, and deploy a new hydraulic manipulator (or subsystem) sophisticated modeling, analysis, and control experiments are usually needed. To support the development and deployment of new hydraulic manipulators Oak Ridge National Laboratory (ORNL) has outfitted a significant experimental laboratory and has developed the software capability for research into hydraulic manipulators, hydraulic actuators, hydraulic systems, modeling of hydraulic systems, and hydraulic controls. The hydraulics laboratory at ORNL has three different manipulators. First is a 6-Degree-of-Freedom (6-DoF), multi-planer, teleoperated, flexible controls test bed used for the development of waste tank clean-up manipulator controls, thermal studies, system characterization, and manipulator tracking. Finally, is a human amplifier test bed used for the development of an entire new class of teleoperated systems. To compliment the hardware in the hydraulics laboratory, ORNL has developed a hydraulics simulation capability including a custom package to model the hydraulic systems and manipulators for performance studies and control development. This paper outlines the history of hydraulic manipulator developments at ORNL, describes the hydraulics laboratory, discusses the use of the equipment within the laboratory, and presents some of the initial results from experiments and modeling associated with these hydraulic manipulators. Included are some of the results from the development of the human amplifier/de-amplifier concepts, the characterization of the thermal sensitivity of hydraulic systems, and end-point tracking accuracy studies. Experimental and analytical results are included.

Proceedings of the American Society of Civil Engineers

Proceedings of the National Association of State Universities and Land-Grant Colleges

Manual of Design Data for Truck Tank Discharge Systems

Transactions of the American Society of Civil Engineers

The Kenya Gazette is an official publication of the government of the Republic of Kenya. It contains notices of new legislation, notices required to be published by law or policy as well as other announcements that are published for general public information. It is published every week, usually on Friday, with occasional releases of special or supplementary editions within the week.

Hydraulic Research in the United States and Canada

Miscellaneous Publication - National Bureau of Standards

Proceedings and Debates of the ... Congress

Second Deficiency Appropriation Bill for 1930

Hydraulic Research in the United States

Includes book reviews.

Design of National Hydraulic Laboratory

National Hydraulic Laboratory

Hearings Before the Committee on Rivers And Harbors, House of Representatives, Seventieth Congress, First[-second] Session, on S. 1710, an Act Authorizing the Establishment of a National Hydraulic Laboratory in the Bureau of Standards of the Department of Commerce and the Construction of a Building Therefor. April 26, 27, 1928

The National Importance of Scientific and Industrial Research

A General Outline of the Design of the First National River Hydraulic Laboratory of China

The Congressional Record is the official record of the proceedings and debates of the United States Congress. It is published daily when Congress is in session. The Congressional Record began publication in 1873. Debates for sessions prior to 1873 are recorded in The Debates and Proceedings in the Congress of the United States (1789-1824), the Register of Debates in Congress (1824-1837), and the Congressional Globe (1833-1873)

Research Laboratory Record

Catalogue of the Public Documents of the ... Congress and of All Departments of the Government of the United States for the Period from ... to ...

Kenya Gazette

Thesis for the Degree B.E. (Honours), Hydraulics Laboratory, National School of Engineering, Canterbury University College, New Zealand

... Paper Presented at The National Physical Laboratory Symposium on Cavitation in Hydrodynamics, Teddington, Middlesex, England, September 14-17, 1955

Laboratory physical models are a valuable tool for coastal engineers. Physical models help us to understand the complex hydrodynamic processes occurring in the nearshore zone and they provide reliable and economic engineering design solutions. This book is about the art and science of physical modeling as applied in coastal engineering. The aim of the book is to consolidate and synthesize into a single text much of the knowledge about physical modeling that has been developed worldwide. This book was written to serve as a graduate-level text for a course in physical modeling or as a reference text for engineers and researchers engaged in physical modeling and laboratory experimentation. The first three chapters serve as an introduction to similitude and physical models, covering topics such as advantages and disadvantages of physical models, systems of units, dimensional analysis, types of similitude and various hydraulic similitude criteria applicable to coastal engineering models. Practical application of similitude principles to coastal engineering studies is covered in Chapter 4 (Hydrodynamic Models), Chapter 5 (Coastal Structure Models) and Chapter 6 (Sediment Transport Models). These chapters develop the appropriate similitude criteria, discuss inherent laboratory and scale effects and overview the technical literature pertaining to these types of models. The final two chapters focus on the related subjects of laboratory wave generation (Chapter 7) and measurement and analysis techniques (Chapter 8).

Congressional Record

Purchase of the Cape Cod Canal

Hearings Before a Subcommittee of the Committee on Commerce, United States Senate, Sixty-Eighth Congress, First Session, on S.J. Res. 42, a Resolution to Establish a National Hydraulic Laboratory, May 21, 1924

Hearings ... Sixty-eighth Congress, Second Session, on H.R. 3933, an Act for the Purchase of the Cape Cod Cannal

National Bureau of Standards Miscellaneous Publication

Design of National Hydraulic Laboratory Copies of Plans, Estimates of Cost, and Memoranda Relating to The National Hydraulic Laboratory at the United States Bureau of Standards, Washington Design of National Hydraulic Laboratory Design of National Hydraulic Laboratory. Copies of Plans, Estimates of Cost, and Memoranda Relating to the National Hydraulic Laboratory at the United States Bureau of Standards, Washington, D.C., Prepared by John R. Freeman, Consulting Engineer, Providence, R.I. Presented by Mr. Hebert. June 28, 1930. -- Ordered to be Printed with Illustrations National Hydraulic Laboratory Hearings Before the Committee on Rivers And Harbors, House of Representatives, Seventieth Congress, First[-second] Session, on S. 1710, an Act Authorizing the Establishment of a National Hydraulic Laboratory in the Bureau of Standards of the Department of Commerce and the Construction of a Building Therefor. April 26, 27, 1928 Design, Estimates of Cost and Comparisons of Designs Relating to the National Hydraulic Laboratory at the United States Bureau of Standards, Wahsington National Hydraulic Laboratory Hearings Before a Subcommittee of the Committee on Commerce, United States Senate, Sixty-Eighth Congress, First Session, on S.J. Res. 42, a Resolution to Establish a National Hydraulic Laboratory, May 21, 1924 To Establish a National Hydraulic Laboratory Hearing Before a Subcommittee of the Committee on Commerce, United States Senate, Sixty-Seventh Congress, Second [and Fourth] Session, Pursuant to S.J. Res. 209, to Establish a National Hydraulic Laboratory A General Outline of the Design of the First National River Hydraulic Laboratory of China National Hydraulic Laboratory Current Hydraulic Laboratory Research in the United States Research Laboratory Record The Pioneer Magazine Devoted to Research and Industrial Laboratories

Design of Small Dams

The Six-inch Water Tunnel at the St. Anthony Falls Hydraulic Laboratory and Its Experimental Use in Cavitation Design Studies

Bulletin of the National Research Council

The Pioneer Magazine Devoted to Research and Industrial Laboratories

Hydraulic Manipulator Design, Analysis, and Control at Oak Ridge National Laboratory