1. Record Nr. UNINA9910438115903321 Autore Hagler Gina Titolo Modeling ships and space craft: the science and art of mastering the oceans and sky / / Gina Hagler New York, : Springer, 2013 Pubbl/distr/stampa **ISBN** 1-283-69716-5 1-4614-4596-5 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (249 p.) Disciplina 623.8201 Soggetti Fluid dynamics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto pt. I. Fluid dynamics in action -- pt. II. Evolution of theory -- pt. III. Scale model testing begins -- pt. IV. Model testing today. Sommario/riassunto Modeling Ships and Space Craft: The Science and Art of Mastering the Oceans and Sky begins with the theories of Aristotle and Archimedes, moving on to examine the work of Froude and Taylor, the early aviators and the Wright Brothers, Goddard and the other rocket men, and the computational fluid dynamic models of our time. It examines the ways each used fluid dynamic principles in the design of their vessels. In the process, this book covers the history of hydrodynamic (aero and fluid) theory and its progression - with some very accessible science examples - including seminal theories. Hydrodynamic principles in action are also explored with examples from nature and the works of

today.

man. This is a book for anyone interested in the history of technology – specifically the methods and science behind the use of scale models and hydrodynamic principles in the marine and aeronautical designs of