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[Review] The Marine Chronometer: It's History & Development

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The Marine Chronometer: Its history and development By Rupert T Gould Edited by Susanna Hecht Forward by Jonathan Betts Antique Collectors' Club Old Martlesham, Woodbridge, Suffolk, UK 1 Volume ISBN 978 1 85149 365 4 (Hardbound) Keywords: Longitude, Marine Chronometer, Rupert Gould, John Harrison, Marine Navigation

In the 3rd century BCE, the first system of latitude and longitude was devised. About 100 years later, Hipparchus proposed a system of comparing local time with a fixed standard time. The modern concepts of longitude and time however were not developed until Al-Biruni in the 11th century. The use of a chronometer was first suggested by Dutch scientist Gemma Frisius in 1530. That began over 200 years of mankind's quest to develop an accurate marine timekeeper that could withstand the changes in temperature, humidity, magnetic field and pitching of a ship on a long ocean voyage in the age of sail.

Search Google for Marine Chronometer and two names will invariably come to the top of the list... Rupert T. Gould and John Harrison. These were two extraordinary men, both self-taught, and both relentless in their quest. Neither was an horologist or watchmaker, but both were obsessed with the Marine Chronometer, and Gould wrote the definitive work on the subject in 1923. According to the forward to this book, upon publication, Gould immediately requested a copy bound interleaved with blank sheets so he could begin his notes for a 2nd edition. This edition finally came to culmination over 90 years later, with the publication of this volume.

No book is a more complete history of the Marine Chronometer, even after nearly a century, and many, Jonathan Betts and Rudyard Kippling among them, consider this the finest horological work of the 20th century. This book is really an incredible story, not only of the marine chronometer, but also the final definitive means of discovering one's longitude (a navigational technique that did not change from the 1700s until radio beacons began operating in the 20th century. It also tells the story of John Harrison and the other amazing men who worked on developing the clock mechanisms, as well as the story of Rupert Gould himself, told through his own notes.

The accuracy of Gould's information about marine chronometers is beyond question. He himself spent many years refurbishing Harrison's original timekeepers, and his knowledge of the workings and mechanisms was second to none. His assessment of Harrison's contribution to the chronometer is generally recognized as wrong, with more credit here going to Pierre Le Roy (another horologist), while Harrison is generally recognized as the true father of chronometry. The editorial notes however, explain this disagreement, and set it aside in the interest of the work as a whole, which is truly second to none in its definitive nature.

The arrangement could have been a great challenge for any editor, but the technique they have used to lay this book out is both simple and daring. Gould's original text has several issues with sometimes eccentric page numbering, and frequent mislabeling of plates. However, to remove these errors would change the fundamental character of the book, as would have editing any of the original text. And so, the publishers produced an exact and complete facsimile of the original, with Gould's notes in the margins in a distinguishing font. The publisher has put a

detailed note at the start of the volume explaining what everything is, how Gould's annotations and sketches have been included. As Gould annotated 2 separate copies of the manuscript, all notes are included and labeled A or B to indicate which manuscript the notes came from. In situations where Gould wanted to edit the original wording, the original has been stricken through and the edited wording inserted. Other notes or sketches too large to fit in the margins have been duplicated whole on the reverse of plates. Gould also indicates in the notes that he wished to number his footnotes, but to avoid confusion they have been left intact with their original demarcation symbols and new footnotes added with numbers. While this may seem complicated, it's very simple to navigate and to see at any moment, what text is original, what is notes from Gould and what is notes from the editor.

For anyone with an interest in marine or maritime history, collectors of marine memorabilia, timepieces or just the average history buff, this is a fantastic addition to their collection. In addition to being a quite extraordinary work, the book itself is beautiful, bound in very heavy, glossy stock, immaculately printed and filled with beautiful plates and illustrations. While not an inexpensive volume, this book would look equally at home in a private library or the collection of any history department, historical society or academic library.