

## Spanning the ages—the words of Rickover live today

Review by Will Davis

***The Never-Ending Challenge of Engineering: Admiral H.G. Rickover in His Own Words***, compiled by Paul E. Cantonwine. La Grange Park, Ill.: American Nuclear Society (2013). 273 pp. \$34.95.

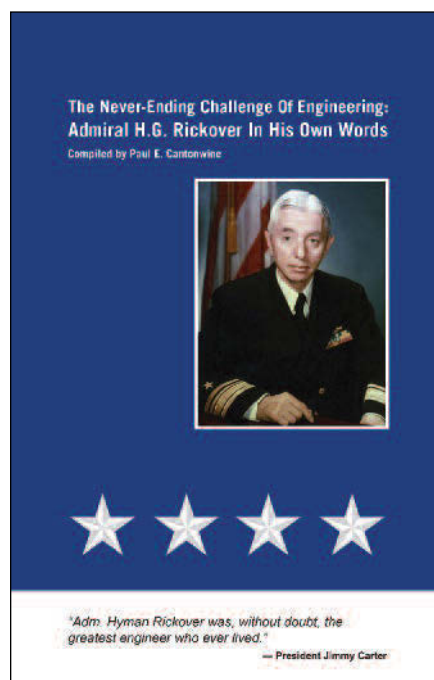
“Any plant you haven’t built yet is always more efficient than one you have built. That is obvious. They are all efficient when you haven’t done anything on them. They are in the talking stage. Then, they are all efficient. They are all cheap. They are all easy to build, and none have any problems.”

Those are the words of Adm. Hyman Rickover, spoken in testimony presented to the Joint Committee on Atomic Energy on March 7, 1957, during hearings on the Naval Reactors Program and the Shippingport Atomic Power Station. I have in my collection the U.S. Government Printing Office’s publication of these hearings—a document that I have long prized for its depiction of Rickover just as he was: frank, candid, abrupt when required, and unwavering in his devotion to safety, quality, and excellence. Even those of us who never served under him know of his legendary qualities from the many stories that have been passed down, and from articles published over the years and a few books that have appeared from time to time.

So imagine my exceeding pleasure when I was asked to review a new book titled *The Never-Ending Challenge of Engineering: Admiral H.G. Rickover in His Own Words*, which is a significant and weighty—but not inaccessible—collection of Rickover’s speeches and papers compiled by Paul E. Cantonwine and published by the American Nuclear Society. In my opinion, there is no better window into Rickover’s thoughts and motivations than this care-

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*This collection of writings from the father of the nuclear Navy offers insight into the history and principles of nuclear power and engineering.*



fully researched work.

In his preface, Cantonwine makes apparent the echoes of Rickover’s influence that reverberate even today, not just in the Naval Nuclear Propulsion Program, but also in the commercial nuclear power industry.

Cantonwine has arranged the selections from Rickover’s writings into four sections: “Becoming an Innovator,” “Three American Innovators,” “Engineering in Practice,” and “Technology’s Impact on Society.” The fifth and final section includes a speech titled “Thoughts on Man’s Purpose in Life,” which Rickover wrote near the end of his life and delivered on a number of occasions.

The book contains excerpts from a number of Rickover’s writings, including one of his books in which he profiles each of the historical figures after whom were named the U.S. Navy’s first 41 ballistic missile sub-

marines, which were referred to at the time as the “41 for Freedom.” The material from these documents provides a deep historical context and detailed explanations, as well as revelatory insight into the man himself.

Historians will note Rickover’s frequent inclusion of then-current themes in his speeches and writings. For example, there are undertones of the beginning of environmentalism, as well as of the long post-war decline of the United States as a forceful international power. Dedicated nuclear engineers will enjoy the chapter devoted solely to zirconium and will appreciate the preservation of a section of early reactor-related metallurgy in the literature.

Worthy of standing on its own, separate from the works of Rickover, is Cantonwine’s brief yet comprehensive and insightful biography of the admiral—an absolute necessity given the distance in time from which we now view Rickover—which serves as the introduction to the book.

What will someone who has never experienced the Naval Nuclear Propulsion Program gain from this book? Among other things, motivation, direction, and perhaps some surprises. In one speech, Rickover decries deforestation and the overfishing of the oceans and laments the current—early 1960s—condition of the United States. Quite the studied and well-read man, Rickover is quoted in another paper as saying, “Familiarity with classical thought not only enriches life but is distinctly useful to any professional man.” This was no ordinary sailor.

For those interested in Rickover and/or the Naval Reactors Program, this book is essential. For those who have wondered just how and why Rickover had such an influence on both the Navy’s nuclear program and the commercial nuclear power industry, the book will certainly be enlightening. I am proud to have it in my library. **NU**