

# William J. LeVeque (1923–2007)

*James W. Maxwell*

William J. “Bill” LeVeque, who retired as executive director of the American Mathematical Society in 1988, died of a lingering illness on December 1, 2007, at the age of eighty-four. LeVeque had spent most of the past decade on Bainbridge Island, Washington, with his wife Ann and in close proximity to his son Randall, daughter-in-law Loyce, and grandson Benjamin.

LeVeque was no stranger to Society operations when he assumed the executive director position in 1977. His first experience as a Society employee was during 1961 when he came to Providence to work for the summer on the *Mathematical Reviews* backlog of papers that needed to be assigned to reviewers. In 1965 he assumed the position of executive editor of MR with the express charge of relocating MR operations from Providence to Ann Arbor, Michigan. With MR’s operations up and running in Ann Arbor, he returned to his position as professor of mathematics at the University of Michigan in the fall of 1966. But over the next eleven years, LeVeque continued his close association with MR, serving on several key MR-related AMS committees. He was also the editor for the six-volume set *Reviews in Number Theory*, published by the AMS in 1973.

LeVeque was active in the broader mathematical policy arena. He chaired the Advisory Panel of the Mathematical Sciences Section of the National Science Foundation, 1971–1972, chaired the Conference Board of the Mathematical Sciences, 1973–1975, and was a member of the U.S. National Committee for the International Mathematical Union of the National Academy of Sciences, 1969–1975. He was a U.S. delegate to the International Mathematical Union in 1970 and 1974.

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Society operations grew enormously during LeVeque’s tenure as executive director. The Society reported total revenues of US\$5 million for 1977 and US\$14.9 million for 1988. Nonetheless, the period from 1977 to 1988 was a roller coaster ride in terms of the financial fortunes of the Society. The Society needed to make significant investments in its operational infrastructure to support its growing membership, programmatic, and publishing operations.

Furthermore, during the first half of this period, the U.S. economy experienced unusually high inflation, and the Society’s operations were not immune from its effects. These two factors contributed to significant annual operating deficits between 1981 and 1983. On the other hand, the investments made during this period secured the foundation for what would become MathSciNet and for numerous advances in operational efficiencies. While the practical challenges of operating at what was then the “bleeding edge” of technology caused considerable anxiety for LeVeque (and the Society trustees), he supported these investments throughout his term as executive director. By the time of his retirement, Society operations had achieved four consecutive years of strong operating surpluses.

LeVeque championed the delivery of *Mathematical Reviews* to its users via the dial-up database services typical of the time, such as Lockheed Dialogue and BRS. The only option for this service at the time was through university library subscriptions to these services. Anyone who has used this



Photograph from the AMS archives.

**William J. LeVeque**

William LeVeque earned his doctorate in mathematics from Cornell University. He was an instructor at Harvard before joining the University of Michigan as the first number theorist on the mathematics faculty.

LeVeque's research areas included transcendental numbers, uniform distribution and Diophantine approximation. His two-volume 1956 monograph *Topics in Number Theory* was highly influential in the development of number theory in the United States, as was the MAA monograph he edited called *Studies in Number Theory*.

In 1960 he conceived the idea of updating L. E. Dickson's *History of the Theory of Numbers* that covered the subject from antiquity to 1910. In 1974 he accomplished part of his goal by publishing a six-volume collection *Reviews in Number Theory* containing all reviews in number theory that appeared in *Mathematical Reviews* (MR) from 1940–72 assembled by topic, for easy reference and for ease in seeing historical developments. The Special Libraries Association gave him an award for this effort.

—From the University of Michigan

service is in a position to appreciate the enormous advance in accessibility and usability reflected in today's MathSciNet. The production of MathSci for these early online services was a critical step in the development of the current MathSciNet.

LeVeque valued the role the AMS staff played in carrying out the mission of the AMS, and he was committed to providing the tools necessary for them to carry out their work. During the first year of his term as executive director, the Society began placing computer terminals on the desks of the majority of its staff in Providence. Many of the staff were struggling to become proficient in the software tools that this system required. Central among these was the text editor known then (and now) as Emacs. Seeing the challenge that many staff faced in learning Emacs, LeVeque wrote a manual for users of Emacs and used it to conduct a series of classes for staff. This example typifies his hands-on approach to meeting whatever challenges he encountered in moving the Society forward.

The *Notices* published an article about LeVeque's pending retirement in the July/August 1988 issue, pages 783–784. This article provides a more complete description of his mathematical biography along with two personal reflections on his service from two AMS presidents serving during the final years of his term as executive director: Presidents Daniel Mostow and Irving Kaplansky. (The full article can be viewed at [www.ams.org/ams/lev1](http://www.ams.org/ams/lev1).

pdf.) Two brief excerpts highlight the contributions that LeVeque made to the Society and to the broader U.S. mathematical sciences community.

From President Mostow: "Very often, in scientific societies, there is a divergence of viewpoints among the staff and the scholars. Fortunately for the AMS, Bill has never drifted far from the moorings of his distinguished academic career as a mathematician. His great vigor has consistently been directed at the right target: the advancement of mathematics."

From President Kaplansky: "What was it like to work with Bill? In a word: great. I remember with pleasure his courtesy, his wit, and his untiring efforts to get everybody to do their jobs right. When needed, there was also a hint of steel inside the velvet glove. Many times, when a tricky discussion was bogging down, he would wait till the right moment and then firmly point to the nub of the matter."

The same issue of *Notices* contains an article by LeVeque based on a talk he gave at the spring sectional meeting of the Society in Las Cruces, New Mexico, in April of 1988. The article, titled "The AMS—Then, now, and soon", pages 785–789, provides considerable insights into the AMS's development during the period from 1960 to 1988, as seen by one of its volunteer and staff leaders during this period. It is available at [www.ams.org/ams/lev2.pdf](http://www.ams.org/ams/lev2.pdf).