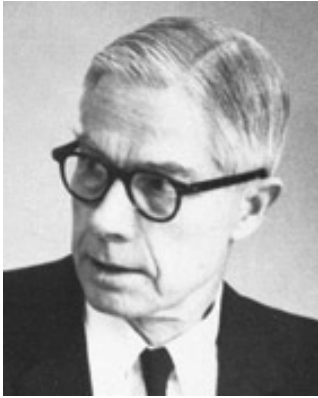


## Wallace J. Eckert

*Born June 19, 1902, Pittsburgh, Pa.; died August 24, 1971, Englewood, N.J.; prewar pioneer with his "Punched-card Methods in Scientific Computation" who was instrumental in the postwar construction of IBM's SSEC and the NORC for the Navy.*



*Education:* AB, Oberlin College, 1925; MA, Amherst College, 1926; PhD, astronomy, Yale University, 1931.

*Professional Experience:* assistant instructor, Department of Astronomy, Columbia University, 1926-1940; director, US Nautical Almanac Office, 1940-1945; head, IBM Pure Science Department, and director, Watson Scientific Computing Laboratory, 1945-1967; professor, celestial mechanics, Columbia University, 1967-1970.

The Columbia University Statistical Bureau was founded in 1928 with punched-card equipment donated by T. J. Watson, Sr. Here Eckert had his first encounter with large calculating devices to complete his own work in astronomy. Eckert's success in convincing Watson to contribute further equipment led to the establishment of the T. J. Watson Astronomical Computing Bureau at Columbia, a unit which was jointly sponsored by the university, IBM, and the American Astronomical Society. During World War II, Eckert headed the US Nautical Almanac Office in Washington, D.C., and introduced mechanical methods of computation to the Office and to the Naval Observatory. This work led to his being appointed to the directorship of the Astronomical Computing Bureau at Columbia, and the concurrent appointment as head of the Pure Science Division of IBM. In the latter capacity Eckert was extremely influential in the development of the Selective Sequence Electronic Calculator (SSEC in 1949, which was IBM's response to their rejection from recognition for the co-invention of the Harvard Mark I<sup>1</sup> The NORC (Naval Ordnance Research Calculator) was also developed under Eckert's auspices.

Eckert continued to work in astronomy, and in the early days of US space flight provided many of the coordinates and orbital parameters of heavenly bodies for use by NASA.

Tropp (1976) has described Eckert's computer contributions to astronomy as being as important as the introduction of the telescope and the use of photography.

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<sup>1</sup> See biography of Howard Aiken.

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- Eckert, W. J., and Rebecca Jones, *Faster, Faster, Simple Description of a Giant Electronic Calculator<sup>2</sup> and the Problems It Solves*, IBM, New York, 1955.

## UPDATES

Portrait added (MRW, 2012)

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<sup>1</sup> See Tropp 1976 for a list of publications including those in the field of astronomy. the NORG

<sup>2</sup> The NORC