

# A BARD OF SCIENCE

*Gear Technology's bimonthly aberration — gear trivia, humor, weirdness and oddments for the edification and amusement of our readers. Contributions are welcome.*

**O**liver E. Saari was an engineer with two great professional loves in his life—writing and gear design, and he was devoted to each in their turn. The same original thinking that informed his fiction, giving life to tales of space exploration, the evolution of man, and many other topics, led him to become one of the great pioneers in gear design.

### Oliver Saari: Gear Designer

Oliver E. Saari was born in Helsinki, Finland, on March 22, 1918. His family immigrated to the United States in 1927. After graduating from high school in 1935, Saari went to work for the Civilian Conservation Corps and attended a vocational school where he learned tool and die making. After that, he entered the University of Minnesota to study mechanical engineering. He graduated in 1943 and went to work for the Buick Motor Division of General Motors, where his interest in gears developed. According to Saari, gear design was the most mathematical field in mechanical engineering. "He once told me that he might have been a physicist," said Heidi Leeson, Saari's daughter, "but engineering seemed a safer bet when it came time to get a job."

In 1945, he went to work for Illinois Tool Works (ITW) and earned a master's degree in mechanics from the Illinois Institute of Technology. Saari's career at the Illinois Tool Works was one of prolific invention and innovation, including Spiracon Roller Screws, Planoid Gears, Endicon, Helicon, Concurve and Spiroid Gears, all of which are trademarks of Illinois Tool Works. According to Dr. Faydor Litvin, Director of the Gear Research Laboratory at the University of Illinois at Chicago, "Saari's inventions bear the features of an unorthodox way of thinking, which resulted in original ideas

that have already been applied in industry and will be widely used in the future."

### Oliver Saari: Writer

Poul Anderson, a close friend of Saari's, described the relationship between science fiction writers and science eloquently when he said, "Our writers are bards of science."

Saari was such a bard, a voice in a choir of friends and role models that included Poul Anderson, Robert Heinlein, C.D. Simak, Gordy Dickson, Arthur C. Clarke and others who speculated on the future, the universe, and the role of science in human endeavor.

Saari's stories deal with artificial intelligence, electromagnetism, astronomy and flight, nuclear energy and space travel. He saw space stations launching missions to other worlds ("The Space Man," 1952), reliable nuclear power ("Stellar Exodus," 1936), artificial intelligence ("Dog," 1950), and the mutative effects of radiation on life ("Two Sane Men," 1937).

Saari's work first saw print in *Astounding Science Fiction*. The story, "Stellar Exodus," sold for \$35.00.

After "Stellar Exodus," his by-line was seen again in *Astounding Science Fiction*, as well as in *Startling Stories* and *The Magazine of Fantasy and Science Fiction* among others. Out of 30 stories written between 1935 and 1953, when he quit writing and turned his attention entirely to gear design, Saari saw 19 of his stories in print.

As for why Saari quit writing, the evidence points to Saari making a choice between writing and gear design, between what he felt he could do well and what he felt he could do brilliantly. "I think he got a charge out of having his stories published and actually getting paid money for them, but there is no question that his engineering work meant



Oliver E. Saari, Science Fiction Writer.

more to him," said Leeson. "He knew he could write and even bragged about getting stories back with no editorial changes whatsoever, but felt his own lack of skill in character development. From the early 1950s on, he poured all his creativity into his [gear design] work."

### Saari's Last Chapter

Oliver Saari died on January 25, 2000, at the age of 81. Unlike many who don't live to see the future they write about, Saari was able to see that many of the things he and his contemporaries wrote about decades ago were, indeed, becoming real. This, perhaps, speaks less about his longevity than it does about the influence science fiction has over science fact. What will the lives of our descendants be like? We must listen to the bards of science as they sing and remember that once upon a time, they sang about us. 

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