



COURTESY OF EARL SHORES AND RODDY GARCIA

Norman Sas, far right, in 1971 with electric football fans, including Pete Rozelle, second from left.

Norman SAS, 87, Inventor of Electric Football

By WILLIAM YARDLEY

Norman Sas, a toymaker who transformed a vibrating sheet of metal a vibrating and sometimes exasperating tabletop game called electric football, sinning the devotion of boys from the late 1940's until simulated onfield action arrived in video screens in the late 1980's, died on June 28, at his home in Vero Beach, Fla. He was 87.

His daughter Wendy Jones confirmed his death.

In the 1930's, an employee at a New York metal products company run by Mr. Sas's father, developed a device that propelled figures across a metal surface using vibrations created by a small motor. The company Tudor Metal Products, first used the technology for car and horse racing games. But

when Norman Sas bought the company with a partner shortly after World War II, he saw potential in applying the technology to football, which had become increasingly popular and was beginning to be televised in the New York region.

"He was looking for something to pick the company up because it was struggling" said Earl Shores, a writer who interviewed Mr. Sas several times for a book he and a colleague, Roddy Garcia, are writing about electric football, titled "The Unforgettable Buzz."

Mr. Shores said Mr. Sas may also have been drawn to football because of one of the frustrations of the technology: the vibrations tended to steer figures unpredictably, often into clumps that resembled a pileup at the end

of a football play. The unpredictability - and the effort to mitigate it - came to define electric football as much as its tiny felt footballs, which were easily lost between sofa cushions.

I'm sure there were many of the tiny little guys thrown against the wall." Irene Sas, Mr. Sas's wife, said in an interview On Tuesday. The little figures had their own lives. Getting them so they'd run faster or turn, it was all the techniques of the player. It wasn't just something you turned on and it vibrated, it was something you did with your little men.

Early versions of the game included figures that bore little resemblance to real players. But in the 1960's, Mr. Sas began working with an industrial designer, Lee Payne, who had played a year of

college football at the University of Georgia. Mr. Payne helped him improve the aesthetics of the game, making the figures more lifelike, with specific team colors; giving the players some degree of directional control and adding a cardboard stadium, that was mounted to the side of the frame.

The National Football League began licensing the product in 1967 and it became a fixture in the toy section in the Sears catalog.

The company which Mr. Sas renamed Tudor Games, thrived into the 1980's until new handheld games, made it seem quaint to a new generation of children.

"Norman predicted that," Mrs. Sas said. "He said: 'Listen, this is it now. We're naking a killing on it, and it's going to end as soon as soon as the electronic versions come out.'"

Mr. Sas sold the company to Miggle Toys in 1988. Miggle was acquired this year by Ballpark Classics, a Seattle company, which makes tabletop baseball games licensed by Major League Baseball; it recently renamed

itself Tudor Games.

Norman Anders Sas was born in Manhattan on March 29, 1923. He attended the Bronx High School of Science and earned a degree in mechanical engineering at the Massachusetts Institute of technology as part of a Navy Program. He later became a commissioned officer and served full time in the Navy before returning to M.I.T. and earning a second bachelor's degree in

*A game that
frustrated, but
thrilled, for decades.*

business administration. He became president of Tudpr Metal Products in 1948. for more than 30 years he lived in Alpine, N.J., where he served on the borough council. In addition to his wife and daughter Ms. Jones, he is survived by another daughter, Martha O'Connor, and seven grandchildren. A son, Wayne

died in 1994 and an infant son died shortly after birth.

Next month Mr. Sas will be inducted into the Miniature Football Coaches Association Hall of Fame, said Lynn Schmidt, a board member of the hobbyist group. Mr. Schmidt (who is familiar to many football fans as Weird Wolf for leading cheers in the stands at Kansas City Chiefs games) said the association, based in Parkville, Mo., has about 300 core members who are devoted to playing electric football. Many now make their own vibrating fields and customized figures, which they say move more reliably than the old ones.

"You were so thrilled that the men moved, but you were so aggravated that the guy would be running down the field toward the end zone and suddenly run out of bound," said Mr. Schmidt, 51, recalling the game he knew as a child. That's a rule we haven't changed: if your man is running sown the field for an easy touchdown and suddenly runs out of bounds, he's still out of bounds.

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