# New Jersey Firsts

**The Famous, Infamous, and Quirky of the Garden State**

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## From the Introduction

New Jersey Firsts is about success and winning. It's
about the creativity, hard work, and risk-taking
that have led to monumental (and sometimes mundane, but nonetheless intriguing) achievements within our state.

New Jersey has played a dramatic role in the evolution of our country in so many respects—from agriculture to medicine, technology to recreation. Legends like Thomas Edison and the great minds at Bell Labs made New Jersey a worldwide leader in enterprise and innovation; they played a big part in putting the "high" in high technology. And where would commerce be today without the bar code system...cooks without Teflon-coated frying pans, canned soup, and frozen vegetables...golfers without tees? And where would we all be without the adhesive bandage, the succulent blueberry, air conditioning, and the touch-tone telephone? All are New Jersey firsts.

## *DRIVE-IN MOVIE THEATER*

As the story goes, Richard Hollingshead's mother was a large woman. So large, in fact, that she couldn't fit comfortably into the seats used in the single-screen, downtown movie theaters so popular in the 1930s. She apparently mentioned in passing that it would be wonderful if she could watch a movie from the plush comfort of her automobile. Like any good son, Richard acted on his mother's comment and launched the drive-in movie industry.

In June 1933, Hollingshead used a 16-millimeter film projector, the white wall of his automotive parts machine shop, and its parking lot on what is

now Admiral Wilson Boulevard (formerly Bridge Boulevard), near the border of Camden and Pennsauken, to effectively create the world's first drive-in movie theater. (One building is still standing; it is part of what is now Zinman Furs.

Hollingshead formed Park-In Theatres Inc. to show family-oriented movies on the back wall of the machine shop, charging one dollar per family or 75 cents for two people. The term "drive-in" came later when the industry reached its popularity peak in the 1950s, with nearly 4,000 theaters across the country. At its birth, Hollingshead's creation was known as the automobile movie theater.

Traditional movie theater operators immediately recognized the threat of drive-in movies and made it difficult for drive-ins to get first-run features in a timely manner. The movies shown were often edited for length and the earliest sound systems were merely outside loudspeakers shared by all patrons. Ultimately, the loudspeakers were replaced by single speakers for each car; today's remaining drive-ins (only about 800 survive) can pipe stereo sound to their guests through an automobile's FM radio channels.

Hollingshead's first automobile movie theater was more than just a solution to a personal seating problem. This entrepreneur actually obtained a patent on the ramp parking system that allowed unobstructed views for all cars. When that patent was overturned in 1949, drive-in movie theaters hit their stride and reached the height of their popularity in the late 1950s, often using leased land in wide-open rural areas. But as residents migrated from cities to suburbs, that same land often became prime residential or retail building property and thus increased in value to the point that it was economically illogical for use as a drive-in theater.

## *THE FIRST TRANSISTOR*

Some 50 years ago, William B. Shockley sent an understated note to some colleagues at Bell Telephone Laboratories in Murray Hill, Union County,

inviting them to observe the demonstration of "some effects. I hope you can come."

The December 23, 1947, demonstration centered around an odd-looking device that resembled a piece of abstract sculpture or the insides of a light bulb, with an inverted triangle and pieces of metal from an old coat hanger jutting out at crooked angles. In reality, the contraption consisted of gold strips, insulators, wires, and germanium. Shockley, along with fellow physicists John Bardeen and Walter H. Brattain, would be demonstrating their invention of the transistor, a solid-state device for amplifying, controlling, and generating electrical signals.

The demonstration was simple and took less than 30 minutes; the transistor was used to amplify a voice signal over a loudspeaker. The implications were huge. The transistor and its descendants would render the vacuum tube--used to power early computers and television sets—obsolete. For example, the University of Pennsylvania's ENIAC computer, considered state of the art at the time, used 18,000 vacuum tubes, filled several large rooms, and consumed enough power to light 10 homes. The transistor would increase a computer's power while decreasing its size. The impact of the transistor was not evident at first glance. A half century later, that impact is unmistakable.