# Oct. 18th

## First Transistor Radio

### Oct. 18, 1954

Texas Instruments (TI) and Industrial Development Engineering Associates (I.D.E.A.) announced the Regency TR-1, the world's first commercial transistor radio. After it went on sale in Nov. for $49.95 ($480 in 2020), about 150,000 units were sold despite the radio's less than stellar sound quality. The problem was that TI's design had required six transistors but I.D.E.A's Dick Koch had reduced this to just four, which meant that the company made a small profit on each radio. Another issue was that the radio's 22 ½ volt battery only provided 20 to 30 hours of useful life.

The TR-1's space-age exterior was designed by the company, Painter, Teague and Petertil; it won an Industrial Design Society award and the radio was exhibited at the Museum of Modern Art in 1955. The design influenced many later devices, including the Apple iPod [Oct 23].

The first TR-1 off the production line was presented to Patrick Eugene Haggerty, TI's vice president, along with a certificate acknowledging him for his "vision, judgment and untiring efforts."

Although the TR-1 was the first commercial transistor radio, it wasn't the first to be transistorized, which was probably a prototype demonstrated at the 1953 Düsseldorf Radio Fair, built around the 'transistron' [Aug 18].

## Anyone for Tennis

### Oct. 18, 1958

William Higinbotham and Robert V. Dvorak, Sr. showed off a tennis simulator game they called "Tennis for Two" during the Brookhaven National Lab's annual visitor's day (actually spread over 3 days) in Upton, New York.

Hundreds of visitors lined up to play, and Higinbotham remembered later that "the high schoolers liked it best, you couldn't pull them away from it."

The game ran on a Donner Model 30 analog computer, that he and technician Dvorak had spent three weeks hard wiring.


Tennis For Two on an Oscilloscope. Photo by BNL.

The game used an oscilloscope to depict a tennis court viewed from the side as a green line. The players adjusted the angle of their shots via knobs on boxy controllers, with the aim of hitting a ball over the net (a short vertical line). The game implemented simple physics for the ball, and generated a sound when it was hit.

The game was mostly forgotten until Higinbotham was called in during the 1970's to testify in the patent disputes between Magnavox and Ralph Baer [March 8].

Higinbotham had served as the head of the electronics division of the Manhattan Project from 1943 to 1945, and later became a leading member of the non-proliferation movement.

"Tennis for Two" is often said to be the first electronic game to use a graphical display, but that honor likely belongs to Goldsmith and Mann's "Cathode Ray Tube amusement device," patented on [Jan 25] 1947.

The first computer game was probably the Nimatron [Sept 24] at the New York's World's Fair in April 1940.

## First (Detected) Computer Crime

### Oct. 18, 1966

Milo Arthur Bennett was the first person brought to justice for a computer related crime. On this day, he was convicted on two counts of altering bank records.

Bennett worked for an insurance company which was reconciling checks for the National City Bank of Minneapolis. Bennett had installed the computer system and occasionally helped to operate it. He also arranged for it to automatically clear all his cheques and ignore his overdraft.

The crime was discovered when hardware failure forced bank officials to check accounts by hand. They discovered an overdraft of $1,357.33 in Bennett's account which was not being reported by the machine.

## Micropad

### Oct. 18, 1979

UK company Quest Automation released the first commercially successful character recognition device, the Micropad. It was derived from the Datapad, which in turn was based on work carried out at the National Physical Lab [Oct 1].

The main advantages of the Micropad over the older Datapad was its (comparatively) low cost—£1725 compared to £21,000, and small size (akin to that of a desktop calculator). Internally it used the TMS9900 [June 00].

Input was via a form preprinted with blank boxes which was placed on a pressure-sensitive

pad. The device could recognize the English alphabet, numbers, and a few special characters.

## MicroVAX

### Oct. 18, 1984

DEC announced its MicroVAX system, a low-cost desktop version of the VAX [Oct 25] with the same instruction set. It was DEC's first machine to use VLSI technology, based around two custom chips for the ALU and FPU. It was developed at the DECWest lab in Bellevue, Washington, by a team led by Dave Cutler [March 13].

The MicroVAX family proved popular throughout the 1980's, so much so that the 3500 and 3600, introduced in Sept. 1987, included a message inscribed on the top layer of the silicon. It said in Russian "VAX, when you care enough to steal the very best."

## NES

### Oct. 18, 1985

Nintendo released the Nintendo Entertainment System (NES) in New York, a redesigned Famicom (Family Computer) dating from 1983 in Japan.

It came with some great games, including Super Mario Bros [Sept 13], Metroid [Aug 15], and Legend of Zelda [Feb 21]. Nintendo had also introduced a rigorous quality control procedure for third-party developers.

NES with controller. Photo by Evan-Amos.

The marketing slogan used in North America was "Now You're Playing With Power!"

The device employed the cheap 8-bit 6502 [Sept 16], but a good five-channel sound chip. Another new feature was a VCR-like front-loading cartridge system, which proved to be somewhat unreliable. The well-known "blinkies" problem, an annoying, flashing screen, occurred when the NES had trouble reading a cartridge.

Nevertheless, the system would turn Nintendo into the premier video gaming company of the late 1980's. Then in the early 1990's, it conquered the 16-bit game market with the SNES [Nov 21].

## Security First Network Bank

### Oct. 18, 1995

Security First Network Bank (SFNB) was the first bank authorized by the US government to provide banking services only via the Internet. Although online banking had been around since the 1980's [Oct 9], it had always been associated with bricks-and-mortar institutions. SFNB had no physical branches at all.

SFNB was founded in Kentucky by James (Chip) S. Mahan III, and by the end of its first year had amassed $41 billion in assets from Internet customers located in all fifty states. It's IPO in May 1996 saw its stock price double on the first day of trading.

Other Internet-only banks of the 1990's included NetBank (1996), Compubank (1998), and the First Internet Bank of Indiana (1999).

## Who owns Sex.com?

### Oct. 18, 1995

"Sex.com" was the focus of a much publicized legal action over the ownership of the domain name.

Upstanding entrepreneur Gary Kremen registered the name with Network Solutions [Sept 14] on this day, but decided against erecting a web site while he concentrated on enlarging his Match.com membership.

Coming later in 1995, Network Solutions transferred the domain to Stephen M. Cohen without Kremen permission. Cohen had been watching Sex.com for some time, and soon began milking the site vigorously, reportedly making $50,000 to $500,000 per month from click-throughs and other advertising.

A five-year, stiffly fought, legal battle ensued, led by cyber-lawyer Charles Carreon. Kremen ended up on top in Nov. 2000, when Network Solutions was ordered to return the domain. Exhausted, but happy, Kremen finally held Sex.com firmly in his own two hands.

Journalist Kieren McCarthy had kept abreast of the many in-and-outs of the fight, and wrote the definitive expose, "Sex.com: One Domain, Two Men, Twelve Years and the Brutal Battle for the Jewel in the Internet's Crown" (2007). Its penetrating analysis got to the bottom of the case.

## Shadow of the Colossus

### Oct. 18, 2005

"Shadow of the Colossus", released in Japan as "Wander and the Colossus", was an action-adventure game published by Sony for the PlayStation 2 [March 4]. The creative director was Fumito Ueda.

A young man named Wander must travel across a forbidden land on horseback and defeat sixteen massive beings, known as colossi, in order to bring the girl Mono back to life. The unique weakness of each colossus must be identified before it can be defeated.

The game was unusual in that there were no towns or dungeons to explore, no characters to talk to, and no enemies to defeat other than the colossi.

The game is often cited as an example of “video game as art” due to its minimalist landscape designs, immersive gameplay, and emotional journey. The soundtrack is also quite distinctive.