Dec. 12th

First Transatlantic Wireless Transmission

Dec. 12, 1901

Guglielmo Marconi and his assistant, George Kemp, heard the faint clicks of Morse code [Oct 19] for the letter "s" transmitted across the Atlantic Ocean from Poldhu, England to Signal Hill, Newfoundland. Or did they?

The problem is that Marconi's equipment was probably transmitting in the medium-wave band, between 500 and 850 KHz, which can only travel long distances (such as the 2000 miles between England and Newfoundland) at night. However, it was 4.30 pm in Poldhu and just past noon in Signal Hill.

The consensus is that Marconi and Kemp didn't fake their results, but were instead lucky. Their primitive equipment may have been inadvertently generating higher frequencies in the short-wave band, which would have made the transmission possible.

Marconi's diary contains the simple entry, "Sigs. at 12:30, 1:10 and 2:20". Eleven more signals were received the next day, Friday the 13th. On Monday, Marconi released the news to the press.

The first two-way transatlantic message between South Wellfleet, Massachusetts and Poldhu occurred on [Jan 18] 1903.

Robert Norton Noyce

Born: Dec. 12, 1927;

Burlington, Iowa
Died: June 3, 1990

Noyce was the co-inventor of the microchip with Jack Kilby [Nov 8], helped start Fairchild Semiconductor, co-founded Intel with Gordon Moore [Jan 3], and was nicknamed "the Mayor of Silicon Valley."

Robert Noyce (1959). Intel Free Press. CC BY-SA 2.0.

In 1956, he joined Shockley Semiconductor Labs [Feb 13], but a year later became a member of the so-called "traitorous eight" [Sept 18] due to William Shockley's [Feb 13] somewhat strident management style; the group left to found Fairchild Semiconductor on [Oct 1] 1957. Seven of Noyce's 17 patents, including his most important for the integrated circuit [April 25], date from the 18 months after the company was launched.

In the early 1960's, Fairchild gained a reputation for producing affordable chips in volume, due in no small part to a process developed by Noyce, a technique that has remained basically unchanged to this day.

Noyce's leadership of Intel in the 1970's – six years as president, five as board chair, and nine as a director – helped create a company that was roughly twice as profitable as its competitors at its peak.

Jack Kilby [Nov 8] was awarded the 2000 Nobel Prize in Physics for "his part in the invention of the integrated circuit", and many historians identify Noyce, Kurt Lehovec [June 12], and Jean Hoerni [Sept 26] as his co-inventors. Sadly, Noyce had died in 1990 and so couldn't be nominated.

Tom Wolfe, author of the book, "The Tinkerings of Robert Noyce: How the Sun Rose on the Silicon Valley" wrote: "With his strong face, his athlete's build, and the Gary Cooper manner, Bob Noyce projected what psychologists call the halo effect."

Before all of these achievements, Noyce was almost expelled from college in his 20's when he freed a 25-pound pig from servitude at the mayor's farm, as part of his fraternity's initiation ritual.

Seymour Ginsburg

Born: Dec. 12, 1927;

USA
Died: Dec. 5, 2004

At System Development Corporation (SDC [Dec 12]), Ginsburg formed an influential research team in the late 1950's dedicated to formal language theory.

Jeffrey Ullman [Nov 22] spent a summer working for Ginsburg, and Alfred Aho [Aug 9] recalled that after Ullman returned to Stanford, he "essentially taught John Hopcroft [Oct 7], and me, formal language theory".

Ginsburg work on ALGOL [Jan 11] applied formal language ideas to guide the design of its compiler. In particular, this led to his joint work with Sheila Greibach on the grouping of languages into abstract families, such as regular and context-free.

Stephen John Linford

Born: Dec. 12, 1956;

London, England

Linford founded "The Spamhaus Project" in 1998 to track email spammers and spam-related activities. Spamhaus' blocklists have been responsible for catching many hundreds of millions of Internet spam posts and malware [March 18].

Linford is also a musician, having worked on film scores with Ennio Morricone, and served as production manager for artists such as Pink Floyd and Michael Jackson when they toured Italy in the 1980's. Linford can be heard singing on the soundtrack for ''Copkiller,'' a 1983 Italian film starring Harvey Keitel.

OSCAR in Orbit

Dec. 12, 1961

When OSCAR I ("Orbiting Satellite Carrying Amateur Radio") was launched on this day, it became the first satellite built by private citizens, a mere four years after the blast-off of Sputnik-1 [Oct 4].

OSCAR 1. Smithsonian Institution.

Once in orbit, the 10 kg box-sized (30 x 25 x 12 cm) satellite set about transmitting the message "HI" in Morse code [Oct 19] in the two meter band, ten times a minute, for nearly three weeks ("HI" denotes laughter in amateur telegraphy). The satellite reentered the atmosphere on Jan. 31, after 312 orbits.

OSCAR was designed and built by the TRW Radio Club of Redondo Beach, California, most of whose members worked for electronics companies in the area. Fabrication costs totaled $63.

GPSS Described

Dec. 12 - 14, 1961

"General Purpose Simulation System" (GPSS) is a discrete-event simulation language which models a problem in terms of transactions passed between services. It was the most widely used simulation language of the 1960's and 70's, although it was perhaps a little less flexible than Simula [Jan 5] or SIMSCRIPT [July 17].

GPSS was developed by Geoffrey Gordon at IBM, and first described on this day in the paper "A general purpose systems simulation program", at the Eastern Joint Computer Conference (EJCC) in Washington, D.C.

GPSS originally stood for "Gordon's Programmable Simulation System" but the name was made more 'presentable' when IBM decided to release the software as a product.

GPSS was probably the first discrete simulation language, although some historians prefer to bestow that honor upon GPS (General Simulation Programme) by K.D. Tocher and D.G. Owen even though there's some debate over whether it was a fully fledged language.

There's also different types of simulation languages – while GPSS is (probably) the first discrete-event simulation language, DYNAMO [March 21] was the first continuous-event language, appearing in 1959.

The Music School

Dec. 12, 1964

The short story, "The Music School," by John Updike was published in *The New Yorker*.

While Alfred Schweigen waits for the end of his eight-year-old daughter's piano lesson, he recalls the murder of a computer expert he once interviewed for a planned novel. The book, "N + 1," would have featured a programmer as its hero because Schweigen thought the job represented "the most poetic and romantic occupation I could think of."

"The Music School"s narrative was informed by the true-life story of Benjamin Gurley (1926 - 1963), who designed the display for the TX-0 [Nov 20] and the PDP-1 [Nov 00]. Gurley died of a gunshot fired through a window of his home while he was eating dinner with his family.

A former co-worker from DEC was eventually convicted of the crime after being tracked down by a private detective hired by two friends of Gurley's, Edward Fredkin [Oct 2] and Edmund Berkeley [Feb 22]. At the time of his murder, Gurley had left DEC and was working for Triple-I, founded by Fredkin.

Computer Software Act

Dec. 12, 1980

The US Congress passed the "Computer Software Copyright Act" which extended federal copyright protection to include programs. Software was now considered an invention and could be patented.

The act wasn't all bad news. For instance, it also stated that it wasn't a copyright infringement for the owner of a copy of a program to make further copies

or adaptations for archival purposes. This protection was extended by the subsequent "Digital Millennium Copyright Act" [Oct 28] to cover people who copy a program for maintenance, repair, or backup reasons, as long as those copies were "destroyed in the event that continued possession of the computer program should cease to be rightful."

Apple's IPO

Dec. 12, 1980

Apple had its Initial Public Offering (IPO) on the NASDAQ [Feb 8] under the stock symbol "AAPL". Originally priced at $14 a share, the stock opened at $22 and the 4.6 million shares were sold almost immediately. The stock rose almost 32% that day, to close at $29, giving the company a market evaluation of $1.778 billion, and making this IPO the most successful since the 1956 launch of Ford Motor.

At the day's close, the stock held by Steve Jobs [Feb 24] was worth $217 million, Steve Wozniak's [Aug 11] was valued at $116 million, and Mike Markkula [Feb 11] sat on some $203 million. In total, about 300 millionaires, 40 of whom were Apple employees and investors, had been created.

Through the lean years of the early 1990's, Apple's share value hardly changed, but since the 2000's, the stock has been split four times, including three 2-for-1 splits and one 7-for-1 split in 2014. That means that 100 of the original shares would have multiplied into 5,600, and in Dec. 2020, were trading at around $120 each.

A SLAC Launch

Dec. 12 (or 13), 1991

Paul Kunz at the Stanford Linear Accelerator Center (SLAC) created the first website outside of Europe. More importantly, it introduced a novel way to let people browse pre-publication papers via its SPIRES-HEP (Stanford Public Information Retrieval System – High Energy Physics) database. It was a radical improvement over the old system which involved submitting requests and waiting for a fax or email. Tim Berners-Lee [June 8] called it a "killer app" [Sept 8] which showed what the Web could offer.

Kunz had read the USENET Web announcement by Berners-Lee [Aug 6], but it was only when he visited CERN in September that he saw its potential. Berners-Lee jury-rigged a link to Kunz's NeXT machine at SLAC so it could be viewed with a browser. Kunz recalled, "We were both shocked at how well it worked."

Back at SLAC, Kunz worked with Terry Hung and SPIRES guru George Crane to put the database online. Subsequently, Tony Johnson wrote Midas, a graphical browser, for the community which could display Postscript documents. By then there were two other UNIX-based graphical browsers to choose from: ViolaWWW [March 9] and Erwise [April 15].

TI Prayers

Dec. 12, 1995

Buddhist monks in Thailand held a ceremony to pray for the success of the new Texas Instruments (TI) processor manufacturing plant.

TI had signed a contract worth $1 billion with the locally based Alphatec Group to produce 16- and 64-megabit memory chips at a plant in Chachoengsao province, 25 miles east of Bangkok.

Two years later (May 1997), TI pulled out of the venture, citing the inability of its local partner to obtain financial backing during Thailand's monetary crisis.

PSP Released

Dec. 12, 2004

Sony released the PlayStation Portable (PSP-1000), essentially a portable PS2 [March 4], with added Wi-Fi to support local multiplayer and internet games. Its GPU also brought high-end graphics to a handheld for the first time, and it was the only one to use an optical disc as its primary storage.

It launched just after the Nintendo DS [Nov 21], and became the first real competitor to Nintendo's then-domination of handheld gaming. The initial shipment of 200,000 units sold out in two days.

A PSP-1000. Photo by Evan-Amos.

One of the UK posters used the slogan "Take a running jump here". A copy placed on a Manchester tram platform was removed due to concerns that it might encourage suicides.

w00t

Dec. 12, 2007

The publishing company Merriam-Webster announced that it had chosen "w00t" as the word of the year."w00t," first coined by Internet gamers, and spelt with two zeroes, is apparently an expression of joy. It just beat out "Facebook" [Feb 4] in a ten-word list that Merriam-Webster has published each year since 2003.

The words are selected by visitors to the Merriam-Webster website from a list of twenty culled from the site's most searched-for words and phrases.

Other computer-related words in the lists have included blog

(1st in 2004) [Jan 23], google (2nd in 2006) [June 15], and meme (10th in 2012) [Nov 15].