Robert Haig Weitbrecht
Born: April 11, 1920;
Orange, California
Died: May 19, 1983

Weitbrecht was born deaf, but his fascination with ham radio led him to buy a radio-based teletypewriter (aka a radiotelegraph) to transmit and receive Morse code messages [Oct 19].

James C. Marsters, who was also deaf, read about Weitbrecht's expertise, and sent him a Teletype Model 32ASR [April 00], and asked him to modify it so they could communicate via a regular telephone line. As a result, Weitbrecht invented the first acoustic coupler, later dubbed the Weitbrecht modem [June 26].

Weitbrecht first succeeded in using the device to make a long-distance telephone call to Marsters in 1964, although it took a few tries. The message ended: "Are you printing me now? Let's quit for now and gloat over the success."

Weitbrecht, Marsters, and Andrew Sacs started the Applied Communication Corporation in 1965 to build teletypewriters for the deaf. This required them to fight restrictive telecommunication laws which prohibited the attachment of non-phone devices to the AT&T telephone network, but they successfully overturned that restriction in 1968.

While a student, Weitbrecht was a contributing engineer in the Manhattan Project, where he helped develop the modern Geiger counter. He was also an avid mountain climber, a pilot, and an astronomer.

Zuse Filed a Patent
April 11, 1936

Konrad Zuse [June 22] filed a patent for the automatic execution of calculations, a process he invented in the living room of his parents' apartment in Berlin. He was working on what would become the Z1, the first ever programmable, binary-based calculating machine.

The full title of the patent was "Verfahren zur selbsttätigen Durchführung von Rechnungen mit Hilfe von Rechenmaschinen", patent application Z23139, 11.4.1936, HNF 005/021; ZIA 0230. Incredibly, it was rejected.

When the Z1 was completed in 1938, it weighed about 1,000 kg, and consisted of some 20,000 parts, most of them thin metal sheet pieces cut out using a jig-saw.

It included a high-performance adder, was capable of floating-point arithmetic, employed a central control unit, and was programmable by instructions supplied on paper tape.

Unfortunately, it was destroyed during the war, and today's patent application is the only surviving documentation of Zuse's first work on computers. The application contains the first ever discussion of programmable memory (which he called "combination memory") based on representing a programs as bit combinations in the store. The document also shows that Zuse had developed a form of symbolic logic to help with circuit design, independently of similar work by Claude Shannon [April 30].

Despite WWII, Zuse continued developing his ideas, producing the Z2, Z3 [May 12], and Z4 [July 11]. The Z4, the most sophisticated of Zuse's creations, did survive the war.

Lawrence A. Rowe
Born: April 11, 1948;
USA

Rowe headed the research group that produced the Berkeley MPEG-1 tools, the Open Mash streaming media toolkit, and the Berkeley Lecture Webcasting system which produced courses that at their peak were viewed by over 500,000 people per month [Sept 15].

Earlier in his career he worked on database systems and development tools that were commercialized by the Ingres Corporation (1980-1990), which he co-founded with Michael Stonebraker [Oct 11] and Eugene Wong.

Rowe and his wife also produce award-winning premium wines using Napa Valley grapes.

Maze War
April 11, 1974

Maze War was probably the first multiuser 3D first person shooter (FPS) (although the developer of Spasim [March 1] probably disagrees).

Maze Wars running on an Imlac. Photo by Bruce Damer. CC BY 2.5.

Players wander around a maze, and are awarded points for shooting each other. Ducks may also pop up occasionally, and can be targeted as well.

Maze (as it was first called) was written by Steve Colley in 1972-1973 on an Imlac PDS-1 [March 00] at NASA Ames. Back then, it

only allowed a single user to explore the maze.

Howard Palmer or Greg Thompson had the idea of adding more players, but that meant interconnecting several Imlacs and they initially implemented software to allow two machines to transmit locations back and forth through their serial ports.

In 1974, Greg Thompson took the game with him to J. C. R. Licklider's [March 11] Dynamic Modeling Lab at MIT, where he and Dave Lebling extended it into a client-server system. The clients ran on Imlacs with 56 Kbit/s serial connections, communicating with a PDP-10 running ITS [July 00]. The server on that machine could manage up to eight users playing against each other.

The development of terminal servers allowed Imlacs at other colleges connected to the ARPANET [Oct 29] to communicate with the MIT server, and so the maze could now contain players from across the entire US.

At some point (probably at Xerox, on an Alto [March 1]), the other players in the game started to be drawn as large floating eyeballs.

Maze War became so popular between MIT and Stanford that legend has it that the game was banned by DARPA [Feb 7] for a while since half of all the ARPANET's data packets examined during one month were for Maze War.

In 1986, Christopher Kent modified the game to use the TCP/IP protocol [Sept 9] via UDP port 1111, which made it playable by anyone on the Internet.

First IOCCC Held
April 11-12, 1984

The International Obfuscated C Code Contest (IOCCC; http://www.ioccc.org/) awards the most creatively disguised C program. The event describes itself as "celebrating [C's] syntactical opaqueness".

There are various categories, including the "Worst Abuse of the C preprocessor" and "Most Erratic Behavior". Within the competition's size limit of a few kilobytes, contestants have managed to implement some stellar software: a 2004 winner was an OS, a 1988 entry calculated pi by examining its own area, and a flight simulator submitted in 1998 was formatted in the shape of a plane.

Landon Curt Noll and Larry Bassel began IOCCC in 1984 while employed at National Semiconductor [Feb 0; May 6] after they'd been comparing notes about poorly written C code that they'd had to fix.

Here's a very simple example of obfuscated C:

```
int i;main(){for(i=0;i["]<i;
++i){--i;}"]; read('-'-'-'
,i++"hello,world!\n",'/'/'/')
);}read(j,i,p){write(j/p+p,
i---j,i/i);}
```

If this appeals, you should also look at [June 12].

Goodbye Clippy
April 11, 2001

Microsoft announced that it would no longer include Clippy with Microsoft Office [Aug 1]. Clippy (official name, Clippit) was an "intelligent" interactive animated paperclip, which interfaced with Office's help. It used technology borrowed from Microsoft Bob [March 11] and Microsoft Agent, to offer advice. It's most famous saying was: "It looks like you're writing a letter. Would you like help?"
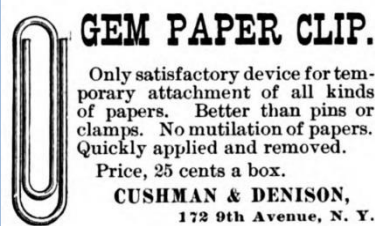
A most useful contrivance from 1893.

The program was widely reviled, and criticized even within Microsoft. Steven Sinofsky revealed in an article that Microsoft's codename for Clippy was TFC. The "C" stood for "clown", and Sinofsky encouraged his readers to guess what "TF" might signify.

Smithsonian Magazine called Clippy "one of the worst software design blunders in the annals of computing". *Time* magazine included Clippit in a 2010 article listing the fifty worst inventions.

Many other Office assistants were available aside from Clippy, including the Genius (a caricature of Albert Einstein), Will (William Shakespeare). Bosgrove (a butler), Merlin (a wizard), Rover (a dog, who also featured in Windows XP's Search tool [Oct 25]), and the Monkey King (in East Asian editions of Office only).

In the ninth episode of Season 3 of "Silicon Valley" [April 6], an animated character called "Pipey" was developed to provide help to users of the fictitious PiedPiper app.

Pebble Kickstarted
April 11, 2012

Eric Migicovsky, founder of Pebble Technology, launched a Kickstarter campaign [April 28] to fund production of Pebble smartwatches. The aim was to create a watch that could display messages from an Android smartphone and other devices. He hoped to raise $100,000, but ended up receiving over $10 million, along with orders for 85,000 watches.

This level of interest lead to a resurgence in the building of smartwatches by companies such as Samsung, Sony, and Qualcomm, who launched their own in 2013. The Apple Watch was speedily released on [April 24], 2015.

The first version of the Pebble had a 144 × 168 pixel LCD, a backlight, vibrating motor, magnetometer, ambient light

sensors, a three-axis accelerometer, and could communicate with an Android or iOS device using Bluetooth. There was also a Pebble app store which by Feb. 2014 showcased over 1,000 programs.

Nevertheless, on Dec. 7, 2016, the company filed for bankruptcy, and eventually a competitor, Fitbit, acquired much of the technology. Although Pebble had sold three million smartwatches in three years. Apple had shifted nearly 12 million in its first nine months in the business.

The first commercial wrist wearable computer predates the Pebble by almost 30 years: the Seiko UC-2000 was released on [Jan 00] 1984.