# Oct. 30th

### Enigma Again Oct. 30, 1942

On Feb. 1, 1942, the Germans ordered that vessels operating in the Atlantic and Mediterranean should insert a fourth rotor into their Enigma machines [Feb 23]. This meant that the previously cracked Enigma code [May 9] had to be cracked all over again [March 18], and in the meantime hundreds of thousands of tons of allied shipping was sunk. The gloom lifted with the seizing of a U-boat, U-559, on this day. The German captain had ordered that the sub be scuttled, but its Enigma machine and codebooks were recovered by a team from the HMS Petard.

On being informed, Winston Churchill wrote: "Congratulate your splendid hens." He liked to refer to codebreakers as "the hens who laid golden eggs and never cackled".

#### **Ken Williams**

#### Born: Oct. 30, 1954;

Evansville, Indiana

Williams and his wife, Roberta, founded On-Line Systems, which later became Sierra On-Line, and then Sierra Entertainment. The company produced many top-quality games such as "King's Quest" [Aug 16], the Realm Online [Dec 31], Ultima II [Aug 24], and "Leisure Suit Larry" [July 5].

Williams helped code many of Sierra's first products, and was the sole programmer of Sierra's very first game "Mystery House" ([May 5] 1980), which also happened to be the first adventure game to utilize graphics. Roberta wrote the script for the game.

At its peak in mid 1990's, Sierra employed nearly 1000 people, and was the market leader in PC games.

Williams' was known for his fine mustache and generously coiffured hair, which made several cameos in the company's games. For example, it can be seen attached to Chief Keneewauwau and on Williams, the annoying joke teller, in "Leisure Suit Larry".

Before starting Sierra, Williams had worked at Groman Mortuaries and the lingerie store, Fredericks of Hollywood (but not concurrently).

#### Viewtron

Oct. 30, 1983

AT&T and Knight-Ridder launched the first US videotex services, Viewtron, based in south Florida, in collaboration with the Associated Press and the *Miami Herald* newspaper.

The service offered banking, shopping, news, and ads delivered over a custom terminal, the AT&T Sceptre which had color graphics capabilities well beyond those of the typical PC of the time.



The Viewtron opening menu screen. (c) Viewtron.

The system employed a vector-based graphical protocol called the North American Presentation Level Protocol Syntax (NAPLPS), a product of the Teletext era, which was later adopted by the Prodigy online service [Feb 13].

Unfortunately, all this innovation meant that the Sceptre was an expensive machine -- \$900, although the price was later dropped to \$600. By the time management had decided to port Viewtron to a

standard PC and add a decoder box, videotex's moment had passed.

Viewtron attracted just 20,000 subscribers, and it was cancelled on March 31, 1986, after costing Knight-Ridder an estimated \$50 million. In 2008, *PC World* magazine named Viewtron one of the biggest project failures in IT history, which seems a bit harsh, since the very similar Prestel [June 8] and Ceefax [Sept 23] systems were a success in the UK. In France, Minitel was an even bigger hit [May 10].

# Pentium FDIV Bug

Oct. 30, 1994

The FDIV bug affected the floating point unit (FPU) of early Intel Pentium chips [March 22]. It was discovered by Thomas Nicely on Oct. 19, 1994 and reported to Intel five days later. On this day, Nicely sent an email about the bug to a number of other people, and the 'panic' began.

The bug caused the FPU to occasionally made mistakes when dividing floating-point numbers within a specific range. For example, 4195835.0/3145727.0 yielded 1.33374 instead of 1.33382, an error of some 0.006%. The problem was caused by missing entries in the lookup table used

by the floating-point division

circuitry.

The problem was unlikely to affect most ordinary users since there was only a 1-in-360 billion chance that an error could reach as high as the fourth decimal place in a result. Also, the bug was fixed promptly in the next regular production revision of the chip. Nevertheless, with an estimated 5 million 'defective' chips in circulation, FDIV became the first hardware problem to make headlines worldwide.

Aside from newspaper fearmongering, it didn't help that Intel's initial response was rather slow, which turned the occasion into a public relations nightmare. Only on Dec. 20 did Intel finally offer to replace the affected chips, but only for consumers who could prove that they needed high mathematical accuracy. This hair-splitting didn't go down too well, and eventually Intel threw in the towel, and offered to replace the chips of anyone who contacted them.

The financial hit became clear on Jan. 17, 1995, when Intel announced a pre-tax charge of \$475 million against earnings.

The bug wasn't all bad though – Intel turned some of the defective chips into key rings and sold them as souvenirs.

Some jokes of the time:

Q: How many Pentium designers does it take to screw in a light bulb? A: 1.99904274017, but that's close enough for nontechnical people.

Q: Why didn't Intel call the Pentium the 586? A: Because they added 486 and 100 on the first Pentium and got 585.999983605.

For more Intel bugs, see [Nov 14] and [Jan 3].

# Microsoft Judgement Day Oct. 30, 1995

"Microsoft Judgment Day" [July 3; Aug 29] held in Seattle was a combination trade show and kickoff party for 75 new games and accessories for Windows 95 [Aug 24].

A circus tent offered beer and barbecue snacks, there was a Ferris wheel, and a three-story-tall artificial volcano bubbling with red lights. But the real action was in an underground garage that had been converted into a Haunted Mansion, where a deathmatch Doom [Dec 10] competition was about to start. 24 elite gamers had been flown in and the event was being televised on a giant screen so an audience could watch.

As the lights fell, the crowd cheered as a short video began playing, showing Doom's familiar corridors. However, it wasn't the usual soldier chasing the demons, it was ... Bill Gates [Oct 28]. Microsoft's fearless leader was inserted into the game, wearing a long black trench coat and brandishing a shotgun.

Gates addressed the crowd about the wonders of Windows 95 as a gaming platform, only stopping once when a monster jumped out and asked for an autograph. Gates responded by raising his shotgun and blowing the beast into gory chunks. "Don't interrupt me while I'm speaking," he said. At the end, the familiar Microsoft logo appeared, but with the tag line "Who Do You Want to Execute Today?"

Other displays in the Haunted Mansion included one by Activision [April 25] promoting an adventure game called Pitfall Harry with a jungle set where people could swing on vines. In another room, a company called Zombie had a metal sphere that shot blue electric bolts through the air. Things were a bit more risqué with the cosplaying staff, including scantily clad, bludgeon-wielding she-devils, and hooded monks guiding guests to a row of guillotines.

But the installation created by id Software [Feb 1] was perhaps the real shocker: an eight-foottall model of a vagina as a stage set for the heavy metal band Gwar. It was lined with dozens of dildos to look like teeth, and a fake severed head hung from the rafters.

The Microsoft impresario responsible for the Haunted Mansion was Alex St. John, one of the co-inventors of DirectX [Sept 30], who was roaming the garage dressed as Satan. He was fully expecting to be sacked after the event, but a round of good press about the show (by journalists who didn't comment on Gwar's contribution) meant that he remained at the company until 1997.

# IBM 1401, A User's Manual

Oct. 30, 2006

Icelandic avant-garde musician Jóhann Jóhannsson released his fourth album, "IBM 1401, A User's Manual." It was so-named because his composition used sounds produced from the electromagnetic emissions of the machine.

The first four tracks are named after IBM components:

- Part 1 / IBM 1401 Processing Unit [Oct 5];
- Part 2 / IBM 1403 Printer [Oct 5];
- Part 3 / IBM 1402 Card Read-Punch;
- Part 4 / IBM 729 II Magnetic Tape Unit (with vocals by Erna Ómarsdóttir).

Jóhannsson's father was an IBM engineer, and one of Iceland's first programmers, who used to compose melodies on computers during breaks at work.

Jóhannsson was inspired by a 30 year old recording his father had made just before the 1401 was taken out of service in 1971.



Jóhann Jóhannsson. Photo by SpectreVision Mgmt. CC BY 4.0.

## First GovHack Oct. 30-31, 2009

GovHack is Australia's largest open government data hackathon, attracting over 3000 participants who take part in over 400 projects. It began as a small Canberra-based event, but quickly expanded into a national competition. New Zealand joined the event in 2015.

The event encourages small teams to produce any kind of "hack" using government data. However, they only have from Friday evening to Sunday afternoon to complete the work. Participating government departments typically release special datasets for the competition, and fund prizes.