August 1st

NORAD

Aug. 1, 1957

Canada and the US jointly announced the creation of the North American Aerospace Defense Command (NORAD), to monitor and defend the two countries' airspaces.

One significant outcome was creation of the Semi-Automatic Ground Environment (SAGE [June 26]), a system of networked computers that coordinated the data coming from NORAD's radar sites. The command and control center was housed in Cheyenne Mountain in Colorado, and became operational in the mid 1960s.

The Cheyenne facility was the setting for the 1983 motion picture WarGames [June 3], and also the inspiration for the earlier movie, "Colossus: The Forbin Project" [April 8].

In 2008 NORAD headquarters shifted to Peterson Air Force Base in Colorado Springs, but the Cheyenne Mountain installation was kept as an alternate command center and training site.

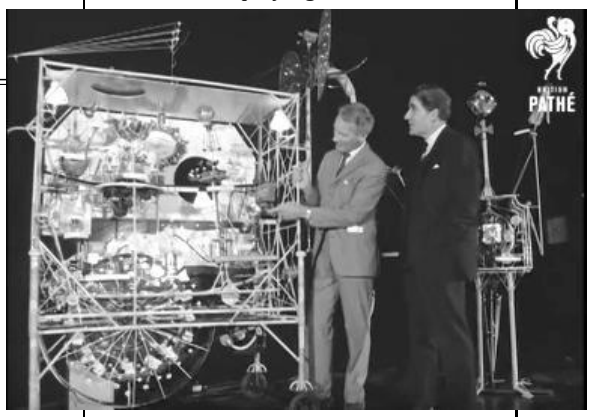
Cybernetic Serendipity

Aug. 1 – Oct. 20, 1968

"Cybernetic Serendipity" was the first exhibition of computer-aided contemporary art, held at the Institute of Contemporary Arts (ICA) in London, and curated by Jasia Reichardt. There were over 300 participants, it occupied nearly 600 square meters, and attracted an estimated 60,000 visitors. The exhibition later toured the US, including a stop at the Exploratorium in San Francisco.

Some of the highlights of the show:

- Gordon Pask's [June 28] Musicolour software controlling an interactive installation called the "Colloquy of Mobiles".
- Bill Fetter's [March 14] "Boeing Man" animation.
- Robert W. Mallary's [Dec 2] Quad II and Quad III, now considered to be the first computer generated sculptures.
- Bruce Lacey's radio-controlled robots and a light-sensitive owl automaton.
- Wen-Ying Tsai's interactive sculptures made from vibrating stainless-steel rods, controlled by audio feedback.
- Cartoonist Rowland Emett's "The Forget-Me-Not (Pheripheral Pachyderm) Computer", commissioned by Honeywell (see below). One part of the contraption sent small balls revolving around china doll heads, another section repeatedly lowered a currant bun into a feeding bowl, and another had mechanical birds punching holes in playing cards.



A still from "The Computer - By Emett" (1966) by British Pathé.

One section of the exhibition explored the computer's ability to produce text. Different programs generated Haiku, children's stories [next entry], and essays.

There were several computer generated movies shown, including John Whitney's [April 8] "Permutations" and Bell Labs movies [Jan 1] of tesseracts rotating in four dimensions, a satellite orbiting the earth, and an animated data structure.

The exhibition triggered the formation of the British Computer Arts Society which hosted "Event One" at the Royal College of Art [March 29] in 1969. However, the second computer art exhibition was probably "The Machine as Seen at the End of the Mechanical Age" [Nov 27] held later in 1968.

Little Grey Rabbit

Aug. 1, 1968

Low temperature physicist Eric Mendoza was perhaps the first person to get a computer to write children's stories (and also bogus physics essays). His "Little Grey Rabbit" stories were created using an extensive words list, linked together via probability matrices, and were first described in an article inclluded in the 1968 catalogue for the "Cybernetic Serendipity" art show [previous entry].

The first story begins:

"The breeze drifted by. Across the fields softly moved the clouds; and then the breeze, which calmly touched the treetops, drifted across the fields. Quietly the sun shone over the woods. The sky calmly shone across the fields."

Mendoza explained in the article that he had been inspired to create the software "about ten years ago" in order to generate fake physics essays after talking with other staff in the Physics Department at Manchester University. This means that his work may predate SAGA II [Oct 26], the computer-generated screenplay writer from 1960.

His Little Grey Rabbit stories imitate the classic children's stories of the same name by Alison Uttley, first published in

1929. However, Mendoza's efforts weren't nearly as successful. He noted, "I tested these stories out on my very small children; but after some minutes they grew irritable, because nothing actually happened. This shows that even small children of three can measure entropy."

For more literary shenanigans with computers, see [Feb 1; Aug 22; Sept 9, Sept 11; Oct 26; Dec 25].

CRT Cataracts

Aug. 1, 1977

Computerworld reported that two copy editors at the *New York Times* had complained that working with monitors using cathode ray tubes (CRTs) had caused cataracts in their eyes. They were both in their 30s, while the average age of cataract victims is nearer 60. As a result, the Newspaper Guild asked the National Institute of Occupational Safety and Health to carry out a study of the matter; the subsequent report found little or no radiation emanated from CRTs.

This was the first of many disputes linking eye irritation and CRTs. For example, in March 1979, 250 United Nations typists and translators walked out in protest over the UN's recent introduction of CRTs. They returned to work after being allowed to choose whether to use CRTs or typewriters.

CRTs were actually the source of several different types of complaint over the years, including the presence in the devices of toxic substances, such as cadmium, the effects of screen flicker, high-frequency noise, electric shock, and screen implosion.

CRTs (and their problems) began to disappear from the workplace in 2007 as LCD flat screens became more affordable.

DEC's Retail Store

Aug. 1, 1978

DEC [Aug 23] opened a retail store in the "Mall of New Hampshire" in Manchester (close to the DEC plant in Merrimack), to sell small systems priced at a very reasonable $10,000 or more. The store was aimed at small businesses, not hobbyists, and computer components weren't on sale. The first customer was Beaver Builders, who built the store.

One event held at the store after Thanksgiving in 1978, could have been seen as an indication of the future for personal computers. Three floppy disk-based DEC WT/78 word processors with printers were set up outside the entrance to generate Christmas shopping lists. A shopper could key in four criteria, and the printer would output up to 20 gift suggestions, each with a price and the name of the store that carried the product. Very long lines of shoppers soon formed waiting to get their lists.

A DEC WT/78. Computer History Museum. Catalog Number 102711012.

However, DEC CEO Ken Olsen [Feb 20] was openly skeptical of desktop machines, saying "the personal computer will fall flat on its face in business". As you might expect, DEC's fortunes declined after missing out on this seismic market shift, and the DEC board forced Olsen to resign in July 1992.

Multiplan Shipped

Aug. 1, 1982

Multiplan was an early spreadsheet program developed at Microsoft. Known initially by the code name "EP" (for "Electronic Paper"), it was introduced in 1982 as a competitor for VisiCalc [Oct 19].

Multiplan was written by Douglas Klunder under the direction of Charles Simonyi [Sept 10], the head of Microsoft's new application software group. It was developed using the Microsoft p-code C compiler which made it easy to port the code to multiple systems such as CP/M [June 22], MS-DOS [Aug 12], Xenix [Aug 25], the Commodore 64 [Jan 7], and the Apple II [April 16]. Simonyi estimated that Multiplan at one time was available on nearly 100 platforms.

Nevertheless, Multiplan was outsold by Lotus 1-2-3 [Jan 26], and the consensus within Microsoft was that this was due to Multiplan having to work across too many platforms, particularly 8-bit machines.

Multiplan was eventually replaced by Microsoft Excel [May 2] (also by Simonyi and Klunder), and Lotus was finally overwhelmed. Incidentally, Excel ran on just three platforms: the Macintosh [Jan 24], MS Windows [Dec 9], and OS/2 [Dec 4].

GW-BASIC Released

Aug. 1, 1983

GW-BASIC was a dialect of BASIC developed by Microsoft originally for Compaq [Feb 14]. It was included with most versions of MS-DOS [Aug 12], making it a low-cost, simple way for aspiring programmers to learn the fundamentals.

Greg Whitten, who developed the company's BASIC compiler line, said that "GW" stood for "Gee-Whiz", and the name was

chosen by Bill Gates [Oct 28] himself. Of course, then the question becomes "Why Gee-Whiz?"

Perhaps it was due to the large number of built-in graphics commands, which might mean that GW actually stood for “Graphics and Windows”. Other possibilities include: “Gates, William”, and “Gates-Whitten”.

With the release of MS-DOS 5.0, GW-BASIC was phased out, replaced by QBasic (Q for "Quick") [Aug 18].

Microsoft Office

Aug. 1, 1989

Microsoft Office was announced by Bill Gates [Oct 28] at COMDEX [Dec 3] in Las Vegas. The first version contained Word [Sept 29], Excel [May 2], PowerPoint [April 20], and Mail, and only ran on the Mac. The MS Windows version only came out a year later, and still lacked Mail. Later additions to the package included Access [Nov 13], Outlook, OneNote, Publisher, Skype [Aug 29] for Business, Project, and Visio.

Scott McNealy [Nov 13], CEO of Sun Microsystems said: “When the anthropologists dust off the 1980s and 1990s and look at the productivity dip, they’re going to blame Office.”

The strongest technical criticism of Office was its use of proprietary file formats. However, on Feb. 15, 2008, Microsoft made documentation for the binary Office formats freely available. Also, Office Open XML [Feb 10], the current document format, has been standardized.

Claudia Schiffer's Palm

Aug. 1, 2000

Palm [March 10] announced the release of a “Claudia Schiffer Edition” (CSE) of the Palm Vx. It was the first handheld computer named after a supermodel. The Palm Vx CSE featured a blue brushed-metal finish instead of the usual silver, and came pre-loaded with the HealtheTec diet, exercise, and weight management software, and Abroad!, a travel organizer. The device was sold exclusively through the supermodel’s website.

Schiffer holds the Guinness world record for the model with the most magazine covers (over 1000). She originally hoped to become a lawyer and used to work in her father's law firm.

For more celebrity Palms, see [June 18].

MySpace Founded

Aug. 1, 2003

Chris DeWolfe and Tom Anderson developed MySpace inspired by the features in Friendster [March 22], but with extras such as file storage and games. Between 2005 and 2008 it was the largest social networking site in the world, and was bought by News Corporation in 2006 for $580 million.

However, competition from fresh-faced new kids on the block, Facebook [Feb 4] and Twitter [March 21], led to MySpace losing much of its market share and value. Such was it's fall that News Corporation sold it to advertising network Specific Media in June 2011 for just $35 million.

The Dark Knight

Aug. 1, 2012

Knight Capital Group (KCG) had a sterling reputation in the financial services market until it was brought low by badly behaving software.

Between 9:30am and 10am EST on this day, the company’s trading algorithms bought and sold over 150 different stocks, resulting in a loss of $440 million. (Other versions of the story report KCG losing $460m in 45 minutes.)

KCG’s trading software, Power Peg, had been decommissioned in 2003 (nine years before) but was still installed on its servers. At 8:00am that morning, staff started receiving cryptic messages reading “Power Peg disabled”. Unknown to everyone, a repurposed software flag had inadvertently brought Power Peg back to life with its safety checks disabled. It was this "Zombie Power Peg" that initiated the disastrous series of trades.

The Security Exchange Commission’s report on the incident highlighted the lack of any QA process for KCG's software, or even a simple check on automated trading, such as a kill switch, that would trigger automatically if losses exceeded some amount.

For more numerical errors, see [Feb 10], [Feb 25], [June 4], [Sept 23], [Oct 24].