

Computer horror stories

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This file contains information on the following subjects. Numbers in column 1 count distinct messages with the corresponding subject.

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From: Hank Nussbacher <HANK@BARILVM.BITNET>
Organization: Bar-Ilan University Computing Center, Israel
Date: Monday, 16 Mar 1992 11:58:46 IST
Subject: SEN "horror stories"

I would like to know if there is any update to the file appended below? The one below is quite old and misses some of the more "notable" screw-ups (like the time Swift shutdown due to Ecuador connecting - figure out why; when a test missile system locked onto a bathroom exhaust fan and the entire building had to be evacuated, etc.).

The following was extracted from VMshare and was contributed by Dan Galender of Amdahl Corp:

Software Engineering Notes (SEN), a journal of the Association for Computer Machinery, regularly publishes lists of computer horror stories. Some of these are well-known, while others have never been independently verified. This summary gives the SEN volume/issue, and the date of the event, if known. (SEN also reports computer break-ins, embezzlements, etc. Such malicious events are omitted here.)

SEN References	Description	Date of Event
4/4	Bug in brake computer system caused recall of all El Dorado automobiles	
5/1	Arthritis-therapy microwaves set patient's heart pacemaker to 214, resulting in fatal coronary	
5/2	Mariner 18 lost due to missing NOT in program	
5/2	F16 autopilot flipped plane upside down whenever it crossed the equator	
5/3	50 false alerts from NORAD defense system	1979
6/1	Many computer system outages at FAA Air Traffic Control	
6/3	Air New Zealand crash in Antartica when computer data error detected but crew was not informed	Nov 1979
6/5	Backup computer synchronization problem delayed first Shuttle launch	
8/3	NORAD defense radar system mistook the Moon for a hostile incoming missile	
8/3	Computer bug showed ghost train near Embarcadero	May 1983

	station on San Francisco Muni	
8/3	Software bug caused F14 to fly off the end of an aircraft carrier into the North Sea	
8/3	HMS Sheffield radar system identified incoming Argentinian Exocet missile as non-Soviet & thus friendly; no alarm was raised and the ship sank	
8/5	F18 computer opened missile retention clamp, fired missile and re-closed clamp before missile had had enough time to move away from aircraft	
8/5	San Francisco BART doors opened while train was at full speed; control system's inter-station delay time was too short for TransBay Tunnel	
8/5	United Airlines 767 iced up because fuel-saving computer was over-efficient, causing engines to cool down too much on approach to Denver	Aug 1983
8/5	Mariner 1 launch failed due to period instead of comma in FORTRAN program DO statement	1962
8/5	Computer error caused US naval vessel to open fire 180 degrees off target, in the direction of Mexican merchant ship	Jul 1983
9/1	Gemini V splashed down 100 miles off target when program used 360 degrees for Earth's rotation in 1 day, i.e. ignoring its movement around the Sun	
9/1	Vancouver Stock Exchange Index rose by 50% when 2 years of round-off errors in computer program were corrected	1983
9/5	Viking spacecraft had misaligned antenna due to faulty code patch	
9/5	F16 computer deadlocked, confusing left & right while plane was inverted	
10/1	Faulty computer modelling of weather led to ill-advised damming of Colorado River, resulting in severe flooding during spring thaws	1983
10/2	"Compatible" teller machines of 2 British banks handled leap years differently, withholding cash and confiscating cards during New Year holiday	Jan 1985
10/2	180 degree heading error caused Soviet test missile to aim for Hamburg instead of the Arctic	Dec 1984
10/2	Faulty automatic dialup on Coke machines tied up phone system in North Carolina municipal offices	Jan 1985
10/2	Department store anti-theft microwave device reprogrammed heart pacemaker, killing its user	Jul 1981
10/2	Autopilot error caused China Airlines 747 to stall near San Francisco	Feb 1985
10/3	Robot killed Japanese auto worker attempting to	Jul 1981

	repair another robot	
10/3	AT&T software bug knocked out all long-distance phone service to Greece	1979
10/3	Shuttle laser experiment failed because computer data was in nautical miles instead of feet	Jun 1985
10/3	Woman killed daughter & tried suicide after computer incorrectly diagnosed incurable disease	
10/3	Federal Reserve inter-bank transaction amounts multiplied by 1000 because data input procedures were inconsistent between client banks	
10/3	Computer error caused nuclear reactor in Florida to overheat	Feb 1980
10/3	KAL flight 007 strayed, shot down due to heading being mistyped into autopilot	Sep 1983
10/3	14000 Ford Lincolns recalled because computer in air suspension system had overheating problem, causing automobile to burst into flames	

From: bowen@prg.ox.ac.uk (Jonathan Bowen)
Subject: Bugs and bytes bedevil those paying by plastic
Date: 13 Aug 92 09:13:02 GMT
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Software bugs can nowadays very easily affect millions of people as more and more activities associated with our everyday lives are computerized. For example, a large number of people now own credit cards that are processed by a relatively small number of computer centres. Changing these systems can cause unforeseen errors, and this has recently happened in the UK. Most of yesterday's UK newspapers covered this story and I enclose some extracts below. In fact, it appears that not many of those how could potentially have been affected have actually been inconvenienced in this case, but who knows next time?

The above subject title was enough to tempt me to ask one of our secretaries (she wasn't busy - she was reading "news" at the time! :-)) to type in some of the following article on page 6 of the August 12 1992 edition of the UK Financial Times:

Bugs and bytes bedevil those paying by plastic

David Barchard, Andrew Jack and Alan Cane on the damage done to the credit card industry by a software glitch

WHEN first Data Resources introduced new computer software systems on July 17, it could not have foreseen that a consequence would be to attract unwelcome publicity to the credit card processing industry.

The company handles the payment card operations of National Westminster, Midland and Lloyds banks [three of the largest banks in the UK], as well as Royal Bank of Scotland. The result is that the change in software affected some 10m accounts. A glitch caused mistakes in some card statements and yesterday the banks were having to reassure customers that the bugs had been resolved with only a few accounts affected.

Credit card processing is a low-profile industry, and until recently it was not even a market in which participants competed for business.

The eyes of FDR and several other companies are now on the European card market, which is expected to grow steadily as card usage increases and transaction volumes approach levels in the mature US market.

FDR's computer system, introduced from its parent in the US, was intended to enhance its card processing operations at Southend and Basildon in Essex [southern England]. The operations, bought from the Access banks last year, made FDR, a subsidiary of the American Express group, the largest credit card processor in Europe.

NatWest refused to discuss the technology involved, saying it was matter between the bank and FDR. The troubles seem to lie, however, in the accounting and reconciliation ("back office") software, which is used to manage the card transactions and pass information to the banks' main computers.

Mr Gary Tobin, a senior vice-president of First Data Corporation, the parent of FDR, emphasised that errors unrelated to the company's equipment might be responsible for some of the complaints over credit cards. He said only a few hundred errors had been recorded, a small total when converting some 10m customer records from one computer system to another.

He said the conversion was necessary because Signet, the card processing company acquired by FDR last year, which had been responsible for card processing in Southend, was using 20-year-old software that lacked up-to-date facilities or security. The new software was developed in the US and "anglicised" for UK use. Preparation took a year and involved 100,000 programming hours.

The entire customer list was transferred to the new system over one weekend in July, he said. It would not have been possible to run the old and new systems in parallel because of the cost of providing duplicate hardware.

Old computer systems are notoriously difficult to manage and maintain because they will have been patched and modified over the years.

The Independent (a UK "quality" newspaper) put it more boringly on page 4:

Customers urged to check credit bills

by Maria Scott

THE CONSUMERS' Association yester urged customers of some of the country's largest credit card issuers to check their statements carefully and refuse to pay incorrect bills after it emerged that there had been difficulties with one of the major computer systems processing card transactions.

National Westminster [one of the "big four" banks in the UK] said that the main errors affecting the bank's 4.75 million Visa and Access card holders involved incorrect dates being attributed to debits on statements.

The August 11 ITN (Independent Television News) 10 o'clock main evening news was rather more sensationalist, showing a short clip of someone on the phone complaining about an unexplained debit of over 4000 pounds sterling (c \$7,500) entry on his account. Surely this must have been a set-up!

The extracts above are reproduced without permission. My in-line comments are in square brackets.

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