# Bowie Seniors Computer Club Minutes for April 1, 2010

Carl Bulger presided.

We had one new member, Vince Barnaba, which brought our membership to 74.

Carl described how he finally defeated the virus that had thoroughly and persistently infected his computer. Last meeting he described the symptoms and the first steps at elimination. Multiple windows opened claiming that the computer was infested with twenty or more malware programs. Carl called Smart Computing Magazine. Their tech support person said that this virus starts in the Windows kernel, C:\Windows\System 32 and can disable all security programs.

Carl called the Geek Squad who cleaned his computer. They scanned the computer with MalwareByte's Anti-Malware. Afterward, Carl ran a scan with his paid version of AVG Antivirus. It found no malware. But the next morning when Mrs. Bulger went online to Yahoo, the problem returned.

Carl called the Geek Squad back. They ran MalwareByte's Anti--Malware again. It did no better the second time. The next morning the virus was still there. He tried MalwareBytes himself – No Luck!

Carl called the Geek Squad back a third time. This time they ran a powerful cleanup tool called ComboFix. The next morning, the virus was back, but ComboFix had erased all of Carl's TurboTax returns (which he had just completed and printed out, but not filed) and TurboTax software for 2010 and previous years.

Carl bought, installed, and ran Kaspersky Internet Security. Initially it didn't eliminate the virus, but after a Kaspersky update the next day, it gave him a choice of Repair? Delete? Or Quarantine? He chose Delete, which took care of it.

The subject of anti-virus software prompted Dan Lee to complain that it took 35 minutes to install Norton Anti-Virus 2010 with Anti-spyware.

One of Ted Tuck's computers wouldn't boot. He couldn't input anything with his USB-connected mouse and keyboard. He had to use an old keyboard and mouse with PS2 connectors.

Nancy Lewis requested information related to partitions. She is receiving an error message that her HP Recovery drive D, partitioned off the C drive, is low on disk space. She has compressed the D drive and still has no space remaining. Defragging the disk may have increased the size of the D drive. Instructions suggest that she delete files from the D drive. Since this drive contains 27 VISTA recovery files, and system warnings indicate that tampering with files could affect recovery, she is uncertain of how to proceed. Her ultimate goal is to be able to backup her computer

first using the VISTA protocols and then to image the entire contents to an external hard drive. How to get rid of the partition on the C drive. without damaging the recovery files, is the present problem.

On his old, seldom used computer, Ezio Cerrelli gets the message "CMOS Checksum Error" during bootup. Further bootup is prevented. He can enter the BIOS and everything seems normal. He has replaced the battery with no effect.

Ezio's problem is a common one. CMOS is an acronym for Complementary (or Ceramic) Metal-Oxide Semiconductor, which is used to contain the BIOS (Binary Input-Output System) which contains the instructions for bootup and other basic computer operations. When the BIOS has been corrupted by a virus, power failure, or malfunction, the computer will detect a change and will report a "CMOS Checksum Error".

If Ezio unplugs his computer for long periods of time, the CMOS lithium battery's charge will run down causing a error. Some BIOS es will continue bootup but revert to default settings. Others will give the option of hitting the F1 key to continue bootup. It's a good idea to record the BIOS settings so that you can see if any settings have really been altered. If so, you can change them back. If you don't have them recorded, you could try downloading the latest version of the BIOS from

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the manufacturer's site and reflash it.  If you can get the computer to run, you could scan it for malware.  If not, you could remove the hard drive and attach it to another computer and scan it there.  Another common cause is a failing power supply. Another cause of Checksum errors are malfunctioning motherboards.  There are procedures for troubleshooting motherboards.  When someone had the same or a related problem, Bob Blum recommended changing the jumper on the motherboard near the battery from positions 1-2 to 2-3 and back.  Dell tech support had me do that 10 to 20 different times during a three-day period when they were troubleshooting my computer, which turned out to have a motherboard defect six months after I bought the computer.

If you Google "CMOS Checksum Error" you'll get lots of hits. Here's a good one:  http://www.p-cguide.com/ts/x/sys/booter-rGBER08-c.html

Presentation:

Ted Tuck demonstrated one of his robots.  He apologized for not bringing the "Little Man" robot he demonstrated last year.  He's still working on getting more than 180 degrees of arm motion.

The robot he demonstrated looks like a little car with an LED readout, a few controls, and five sensors arrayed in a row under the front bumper.

Ted had laid out a curved, closed loop track on a white 4' x 4' poster board with black electrical tape.  The robot could follow the loop until it came to where two portions of the loop passed so close to one another that the robot's sensors became confused.  Sometimes the robot switched to the adjoining track.  The wheels had difficulty following tight turns smoothly because it had no differential gears between opposite rear wheels.  Ted flashed in another algorithm to slow down the robot to minimize the jerky motion of the wheels when turning.

On another white board, Ted had constructed a maze with black tape.  Straight sections of track were joined at 90 degree angles.

Ted stated that you can always get out of a maze by always making a left turn whenever you can make a left turn, or vice-versa.  He had programmed the robot to always make a left turn whenever it came to a place where it could make a left turn, and to turn in the opposite direction whenever it came to a dead end.  The robot traveled the entire maze until it reached the exit.  Then Ted had it repeat the maze but, this time, it only remembered the successful turns and went directly for the exit.

The robot is powered by NiMH batteries.  It is manufactured by Pololu and cost about $100 plus the cost of a programming cable. Its 328K memory is programmed using C++ language AVR programmer.  The algorithms control motor speed, speakers, LED readout, daughter boards, and sensors.