

NOV 2004

Volume 15, Issue 11

## Fun stuff for your fun toys

At our next meeting,  
Microsoft will roll out  
its portfolio of new  
and cool applications  
that will keep you  
glued to your PC,  
your PDA, or  
whatever  
digital  
device  
that  
pleases  
you.



# President's File



## PRESIDENTIAL RAMBLINGS VERSION 2.5

**D**ID YOU make it to the October general meeting? The three people who won the door prizes were certainly glad they did. Lisa Leifels took home a copy of Microsoft Office Pro 2003. Tim Purdy chose the ViewSonic Pocket PC (yes, really!) and Richard Castonguay got a copy of Microsoft FrontPage 2003. I can't promise that we'll always have door prizes like these, but sure can pay to attend the meetings.

How are you doing with Service Pack 2 (SP2) for Windows XP? The industry predictions of doom don't seem to have materialized. I've applied SP2 to three machines all without any problems, so far. How's your mileage?

### Do your digital rights need managing?

I just love the terminology here. If you have the right to fair use of copyrighted material, then why do those rights need managing? The trend seems to be toward systems that restrict your ability to use digital material but offer to sell those privileges back to you for a fee. If you buy a song on Apple iTunes should you be able to listen to that song

on any computer or just on your iPod? If you buy a DVD should you be able to make a backup of that disk before it falls on the floor and the kids walk on it? What if you buy a DVD and then want to copy it to your hard drive so you can watch the movie on your next plane flight.

### Security versus Trust – Privacy versus Anonymity

Some food for thought: If your computer is secure, does that mean that you can trust it? When you visit your bank's web site, how do you know that you're actually connecting to the bank's computers and not someone pretending to be the bank? On the other hand, how does that bank know that it's you on the other end throughout a series of transactions? If it's so difficult to maintain our privacy online, then why is it so difficult to be anonymous?

Microsoft, Intel and others are working very hard on technology – software and hardware – to make computers trustworthy. The next question of course is, trustworthy by whom? My guess is that the goal is to make your computer trustworthy to the movie industry. Will this make it any easier to copy a movie from a DVD to your Pocket PC? Well... maybe for a fee.

### The general election

This newsletter should arrive just before Election Day (and our November general meeting). This election is perhaps the most critical election ever for our country. I've been told I can't endorse specific candidates here and we are a computer club after all. So I will just suggest that you look at the record of each candidate in protecting your privacy, your civil liberties and your digital rights. Then vote for the candidate who will best support and defend your freedoms – digital and otherwise.

### DACS Elections

One last thing, remember that the DACS elections are coming in December, just a month after the general elections. So far, one person has offered to be a candidate for the DACS Board of Directors. We don't have a formal nominating committee. If you are interested in this club and would like to help move it forward, please contact me or any director.

—JIM SCHEEF  
[DACSPREZ@DACS.ORG](mailto:DACSPREZ@DACS.ORG)

## Membership Information

*dacs.doc*, ISSN 1084-6573, is published monthly by the Danbury Area Computer Society, 4 Gregory Street, Danbury, CT 06810-4430. Annual subscription rates: \$25 to regular members, \$20 to students (included in dues).

### Postmaster

Send address changes to Danbury Area Computer Society, Inc., 4 Gregory Street, Danbury, CT 06810-4430.

### Editorial Committee

Managing Editor:	Allan Ostergren
Associate Editor:	Ted Rowland
Production Editor:	Marc Cohen
Technical Editor:	Bruce Preston
Public Relations:	Marlene Gaberel
Editor-at-large:	Mike Kaltschnee

### Contributors

Charles Bovaird	Larry Buoy
Richard Corzo	Marlene Gaberel
Jim Scheef	Frank Powers
Richard Ten Dyke	

DACS, its officers and directors assume no liability for damages arising out of the publication or non-publication of any article, advertisement, or other item in this newsletter.

The editors welcome submissions from DACS members. Contact Allan Ostergren at 860-210-0047 ([dacseditor@dacs.org](mailto:dacseditor@dacs.org)). Advertisers, contact Charles Bovaird at (203) 792-7881 ([aam@mags.net](mailto:aam@mags.net))

Nonprofit groups may request permission to reprint articles from *dacs.doc* or <http://dacs.org> by sending e-mail to [reprints@dacs.org](mailto:reprints@dacs.org). Reprinted articles shall credit the copyright holder and a copy of the final publication shall be mailed to:

Danbury Area Computer Society, Inc.  
4 Gregory Street  
Danbury CT 06811-4403  
Attn. Reprints

Links to articles reprinted on the web can be sent to: [reprints@dacs.org](mailto:reprints@dacs.org)

### Technical Support

*dacs.doc* is prepared using an AMSYS Pentium 733 and HP LaserJet 4 Plus printer. Software packages used to publish *dacs.doc* include: Microsoft Windows 98, Office XP, TrueType fonts, Adobe PageMaker 7.0, CorelDRAW 8.0, Calendar Creator+ for Windows. *dacs.doc* file transfer security provided by AVP. Internet access provided by Mags.net

**Applications & Hardware to  
enhance *dacs.doc* are welcome.**



Don Neary  
APCUG Liaison  
203-746-5538

## Officers

**PRESIDENT:** Jim Scheef (860) 355-0034 ([dacsprez@dacs.org](mailto:dacsprez@dacs.org))

**VPS:** Gene Minasi • Marlène Gaberel • Jeff Setaro

**SECRETARY:** Larry Buoy • **TREASURER:** Charles Bovaird

## Directors

[dacsboard@dacs.org](mailto:dacsboard@dacs.org)

Charles Bovaird	(203) 792-7881	cbovaird@dacs.org
Howard Berger	(860) 355-9837	hberger@dacs.org
Marc Cohen	(203) 775-1102	mcohen@dacs.org
Anna Collens	(203) 746-5922	acollens@dacs.org
Marlène Gaberel	(203) 426-4846	mgaberel@dacs.org
John Gallichotte	(203) 426-0394	jgallichotte@dacs.org
Bill Keane	(203) 438-8032	bkeane@dacs.org
Frank Powers	(203) 791-1140	fpowers@dacs.org
Bruce Preston	(203) 438-4263	bpreston@dacs.org
Jim Scheef	(860) 355-0034	dacsprez@dacs.org
Jeff Setaro	(203) 748-6748	jasetaro@dacs.org

## Committees

**NEWSLETTER:** Allan Ostergren: (860) 210-0047 ([dacseditor@dacs.org](mailto:dacseditor@dacs.org))

**PROGRAM / WEB MASTER:** Jeff Setaro (203) 748-6748

**APCUG LIAISON:** Don Neary (203) 746-5538

**RESOURCE CENTER:** (203) 748-4330 **WEB SITE:** <http://www.dacs.org>

## HelpLine

Volunteers have offered to field member questions by phone. Please limit calls to the hours indicated below. Days means 9 a.m. to 5 p.m.; evening means 6 to 9:30 p.m. Please be considerate of the volunteer you are calling. HelpLine is a free service. If you are asked to pay for help or are solicited for sales, please contact the dacs.doc editor; the person requesting payment will be deleted from the listing. Can we add your name to the volunteer listing?

**d** = day    **e** = evening

Program	Name	Phone #
Alpha Four	Dick Gingras	(203) 775-1102 (d e)
APL	Charles Bovaird	(203) 792-7881 ( e)
AutoCAD	Peter Hylenski	(203) 797-1042 ( e)
C/UNIX/ObjC	Kenneth Lerman	(203) 426-4430 (d e)
Clipper	Dick Gingras	(203) 426-0484 ( e)
COBOL	Charles Godfrey	(203) 775-3543 ( e)
Dbase/DOS	Alan Boba	(203) 264-1753 ( e)
DOS	John Gallichotte	(203) 426-0394 (d e)
Electronics	Andrew Woodruff	(203) 798-2000 (d e)
Focus	Jim Scheef	(860) 355-0034 ( e)
Hardware	John Gallichotte	(203) 426-0394 (d e)
Interface-Instrumentation	Andrew Woodruff	(203) 798-2000 (d e)
Macintosh OS	Matthew Greger	(203) 748-2919 (d e)
Microsoft Access	Dick Gingras	(203) 426-0484 ( e)
Multimedia	Ed Fitzgerald	(203) 222-9253 (d e)
Newdeal	Marc Cohen	(203) 775-1102 (d e)
Paradox	Alan Boba	(203) 264-1753 ( e)
PASCAL	Duane Moser	(203) 797-2716 (d )
PhotoShop/Dreamweaver	Anna Collens	(203) 746-5922 ( e)
Q&A ver 3/4	Anthony Telesha	(203) 748-4478 (d e)
QuickBooks	Bill Sears	(203) 743-3367 ( e)
Statistics/Data Analysis	Charles Bovaird	(203) 792-7881 (d e)
SQL Server	Chuck Fizer	(203) 798-9996 (d )
Viruses	Jeff Setaro	(203) 748-6748 (d )
Visual Basic	Chuck Fizer	(203) 798-9996 (d )
HTML/Java	James Costello	(203) 426-0097 ( e)
Windows	Nick Strother	(203) 743-5667 ( e)

## Directors' Notes

DUUE TO lack of a quorum, the Regular Meeting of your Board of Directors scheduled for Monday, October 11, 2004, could take no official action. However, those present (Marc Cohen, Bill Keane, Bruce Preston, Jim Scheef and Jeff Setaro, plus Secretary Larry Buoy) indulged in a discussion of future programs for General Meetings.

The present General Meeting presentation schedule now consists of Microsoft on its Media Center PC configuration for November, John Patrick on the state of the Internet for December, and that, for January, Howie Berger had a representative of Verizon lined up for January on Broadband access for cell phones and alternative technologies. Mike Kaltschnees' presentation on blogging would be deferred to February.

Jim Scheef also announced that he had another response to his "DACS wants you" ad in the newsletter, again involving a possible addition to the newsletter staff. Jim also mentioned, followed by a discussion, the possibility of DACS assisting other local non-profit organizations with computer problems.

—LARRY BUOY



## Next Meeting

### Microsoft Uncovers Its Apps

By Marlene Gaberel

THIS IS YOUR agenda for November 2nd: Get up earlier than usual and clear your conscience at the voting booth—for with the polarized issues of the time you probably know that every vote is important. And after voting go to work and try to get out early enough to make it to the other important event of the day, the DACS November general meeting.

This November as in previous years, Microsoft is coming to DACS to unveil its newest software toys. If past Microsoft events are any guidance, this one will be lively and enthusiastic,

with interesting content, on time delivery and excellent door prizes.

On November 2nd, Whitney Vondergeest will talk about having more fun, learn and explore, keep in contact and increase productivity with your computer. She will talk about discovering how to "experience more of the photos, music, television, movies, and games with Windows XP Media Center Edition 2005". She will also talk about an important topic

of the day, on keeping safe and secure with Microsoft Windows XP Service Pack 2.



According to Microsoft: "Windows® XP Media Center Edition 2005 is making it easier to experience the broad range of digital entertainment including TV, music, photos, music and games." And "When connected to a home network, Windows XP Media Center Edition 2005 can become a hub for entertainment, providing you with access through connected devices in any room in the home, or through portable players on the go."

November 2nd, 2004 will be a busy day. Try to fit in all activities of the day and if you have any energy left, you might even want to attend the best kept secret at DACS: the meeting after the meeting, the PIG SIG. I know I will try but I'm not sure about the PIG SIG since it takes place way past my bed time.

The meeting will be held at Danbury Hospital auditorium as usual at 7.00 p.m., and is open to the public. Following Random Access and club announcements, the Microsoft presentation will start promptly at 8.00 p.m.

**MARLENE GABEREL** is a DACS board member and VP for Publicity.

## Meeting Review

### Computer application improves employee problem solving at IBM

By Charles Bovaird

THE MAIN presentation was given by William C. Sweeney, IBM Program Director of Internet Technology. Bill manages a team with a mission to accelerate the adoption of Internet technologies inside IBM by identifying promising new technologies, establishing prototypes and moving these prototypes into production.

After a quick review of his department's projects, Bill went in depth on a project that used instant text messaging to hand held devices as well as computers. The system was a grid computing application distributed worldwide on a web of computers programmed to collaborate with each other across the world-wide-web. The computers were dedicated to the project by collaborating departments within IBM.

The project objective was to facilitate solutions to problems by posing them to

collaborating individual employees via this system and getting quality responses in a timely fashion. Success for the project required a large mass of collaborating individuals willing to participate at a moment's notice. The system, which has been in operation for some time, has exceeded expectations.

The system allowed selecting from, and defining subjects of interest, geographic bounds, organizational bounds (like all development labs, division HQ, a manager's staff, etc). Persons posing questions as well as persons acting as recipient candidates could choose the depth of their participation. Persons posing a question could also chose a general broadcast or a heuristic capability designed into the system. Activity tracking data is used by the system to provide the heuristic capability is

to improve the turnaround time obtaining valid answers.

Recipient candidates had no requirement to respond to specific messages beyond their desire to help a fellow IBMer and consideration for the local situation at the time of message receipt. There was strong audience participation both during and after Bill's presentation. We are looking forward to a return visit next year.

**CHARLIE BOVAIRD** is DACS treasurer and a former IBM-er.

## New Members

from 9/22/04 to 10/20/04

Dylan Carl

### THIS IS YOUR LAST NEWSLETTER

If the membership date on your mailing label reads

**EXP 08/2004  
or earlier**

You need to renew your  
DACS membership  
**NOW**

## Book Review

### A History of Modern Computing, Second Edition, by Paul E. Ceruzzi

Book review by Jim Scheef

I FIND THE HISTORY of the computer industry fascinating. Understanding how we got here is the key to figuring out why we are going wherever it is that technology will take us next. Paul Ceruzzi's book *A History of Modern Computing* is the most academic work of this type I have ever read. Fortunately that doesn't mean that it's dry reading, but it does mean that there are many, many footnotes per page. In fact reading the footnotes (actually printed as endnotes in a section before the Bibliography and the Index) can be interesting, even addictive, if you find a topic where you want more details.

Who first proposed online transaction processing and interactive databases? Would you believe J. Presper Eckert, co-inventor of the ENIAC, in the late 1940s? There were no computers as we know them now yet Eckert had the vision to see that ENIAC, which was really a calculator not a computer, would lead to far more useful tools in business. After covering the development of ENIAC and the UNIVAC Corporation and how Eckert and his partner John Mauchly were inventors who lost control of their company and the industry they spawned, the book proceeds to cover computing history in chunks that follow the major technical breakthroughs like the transistor, magnetic core memory, integrated circuits and microprocessors to name just a few.

The book also notes trends and where and how those trends affect the industry and users. Some were obvious from the beginning, like miniaturization. We moved from vacuum tubes to transistors to integrated circuits to microprocessors. If you don't think we're in the age of microprocessors, consider that the latest IBM mainframes run on bunch of PowerPC microprocessors. Along the way, Ceruzzi also notes the roots of technology and how some things have influenced how things still work today. Many basic concepts of interactive computing are directly traceable back to the Digital Equipment Corp. DECsystem 10, the first widely available timesharing machine. One of these links comes from the time from Bill Gates "tested" the DECsystem 10 (PDP-10) installed by a Seattle-based service bureau. Later it was a PDP-10 that Gates and Paul

Allen used at Harvard to write the BASIC they sold to Ed Roberts for the Altair 8800 – the first widely available personal computer. Thruout the book it's amazing how many people were influenced by the PDP-10 and its TOPS-10 operating system.

I first picked up this book at the public library and after starting to read it, found it so interesting that I actually bought my own copy. If that's not a recommendation, I don't know what is. Like all books that are a little outside the mainstream, this one can be difficult to find. I did some searching on a variety of book store web sites before I found it at a good discount.

*A History of Modern Computing, Second Edition, by Paul E. Ceruzzi, 2003, The MIT Press, 350 pages plus 95 pages of notes, bibliography and index.*

JIM SCHEEF is DACS president.

### Let DACS Promote your Business

DACS is offering members free space to advertise their small businesses in the business card section of the colored insert in dacs.doc. This offer is being made subject to space available, and cards will be rotated each month to guarantee equal access.

Please send your cards to DACS at 4 Gregory Street, Danbury, CT 06810-4430, give to any board member, or e-mail graphic image to *dacseditor@dacs.org*.

Sorry, but postal regulations require that ads be computer related, and specifically forbid ads for Credit, Insurance or Travel Services.

## Popularity of the WEB for DACS members

by Charles Bovaird

The rapid growth of the internet has felt its impact upon DACS members.

The following table illustrates the popularity of ISP's as a percentage of valid DACS member e-mail addresses:

	6/10/00	9/26/04
% members with email addresses	80%	70%
aol.com	17%	11%
att (snet,world)	12%	16%
earthlink	2%	11%
charter	0%	5%
hotmail.com	2%	4%
mags.net	6%	4%
msn.com	2%	3%
yahoo	0%	2%
comcast	0%	2%
compuserve.com	5%	2%
juno.com	3%	2%
others (=<2%)	51%	38%

C. Bovaird 10/1/2004

# Navigation

## GPS Units

By Joe Schmitt, Tampa Bay Computer Society

[This is the second of a three article series on the Global Positioning System. The first discussed what the system is and how it works. The second and third articles will delve into receivers and uses to civilians.]

**I**N MY LAST ARTICLE I discussed how the Global Positioning System (GPS) works and how it has changed navigation. GPS utilizes a set of 24 or more orbiting satellites broadcasting a coded signal that is used by a ground receiver to pinpoint location, speed, and distance while moving. I would like to delve into the numerous receivers available on the market to the civilian user. Essentially there are four types of receivers available.

The first is the military model. This operates on entirely different frequency than their civilian counterparts. The very accurate military units are on what is known as the P-code and Y-code and should be accurate within a foot or so. They include mapping features similar to consumer models.

The second type is surveying/Geographic Information System (GIS) models. Quite a bit larger than consumer models, they can easily be the size of a small briefcase. They are accurate to within one centimeter. This accuracy is obtained after being in the field through post-processing. The data gathered is stored and analyzed in a lab to compensate for atmospheric errors from the satellites.

The third type, for commercial transportation, is used to navigate ships at sea and aircraft. Often these units are tied into an autopilot system used to maneuver the vehicle. The units are quite large and permanently installed in the control panels of the vehicle.

The fourth type, consumer models, will be the focus of this discussion. The consumer model GPS unit can be permanently installed in a car or be handheld. There are units designed for joggers and bikers, those specifically for boating, and hiking models as well.

There are literally hundreds of different models available for you to choose from. The very basic models start at approximately \$100 and go up from there. Some characteristics are common to almost all GPS receivers. They are able to store a *waypoint*, which is a location defined by its latitude and lon-

gitude marked in the unit's memory. All have a display screen that may contain a digital map and a back light. They also are able to tell you the time, location in coordinates, speed, and distance from waypoints. Some are able to connect to a computer to transfer data, and some display altitude.

Beyond these basic functions is where choosing a receiver can be a mind-boggling mess. The activity you want a GPS for will determine which features to look for. There are three major manufacturers of GPS receivers: Garmin ([www.garmin.com](http://www.garmin.com)), Magellan ([www.magellangps.com](http://www.magellangps.com)), and Lowrance ([www.lowrance.com](http://www.lowrance.com)). All three of these companies make good products. Garmin has the largest market share with Magellan in second place. Often the brand loyalty of the owners is akin to the IBM and Macintosh debate. But regardless of the differences, all the units operate in much the same manner and it comes down to personal preference more than anything else. The manufacturers have similar products to each other and are reliable and rugged. Most of these models that are designed for outdoor use are, as a result of their intended use, built very well. Most handheld models are waterproof and shock proof.

My receiver is made by Garmin. The model is GPSMAP 60c ([www.garmin.com/products/gpsmap60c](http://www.garmin.com/products/gpsmap60c)). It is a bit larger than a cell phone and has a color display. This model runs on 2 AA batteries – you'll find that most handheld models run on 2 or 4 AA batteries. With normal usage, I can get about 30 hours of use with my recharge-

able batteries. The unit has an external power cord that can be plugged into a cigarette lighter socket to save on those batteries. This model is a mapping unit, so I can upload maps to it and display my location on that map. Additionally, this unit supports auto-routing, which is a feature that allows

the unit to give you turn-by-turn directions on the road.

With most units there are some basic features that you should be aware of. First the display screen has several different modes for display. The most common is a satellite page. This displays the satellites in graphical format. As you can see, the satellites are numbered and the ones brightly colored are those the unit is currently receiving a signal from. The bars below show signal strength and status. The higher the bar is the better the signal. The bars that are solidly colored indicate that the unit has locked onto the satellite. The outlined bars indicate the unit is receiving the signal but has not locked onto it yet. This screen in particular displays the latitude and longitude coordinates. Just to left of those coordinates, the accuracy of the unit is displayed. The gray sphere with a red center shows the direction the unit is currently moving.

The next screen shown is also in most models. It is the waypoint management screen. Waypoints are a location in the real world stored

in the unit as latitude and longitude, thus allowing you to locate a place to go or show distance from. This image shows the names of some waypoints I have stored in my unit. They can be listed either alphabetically or by proximity. As you can see by the highlighted point, the unit also displays its direction and distance to the selected point.

After selecting the name and hitting enter, the details of the waypoint are displayed. It shows its coordinates and elevation. The highlighted "CAR" point is located in Grand Canyon National park just as I was beginning a hike. Click on this [link](#) to see a map. This screen displays the sym-



bol I have selected as well as the direction and distance from the current location. I have options to delete, display it on the map, and navigate to it.

If I were to navigate to it, I would get this screen. The giant arrow points to the destination and of course the distance is displayed. The new item we see here is the speed. If I was moving when this picture was taken, you would also see the time it would take to reach the waypoint.

Across the top are several icons. These items are from left to right, the battery strength, 3D navigation status, USB connection status, and back-light status.

The 3D navigation is particular to this model. It indicates that the receiver is getting a strong enough signal to find altitude as well as latitude and longitude. The arrow and compass move as the unit moves. As it is now, you would have to change your direction to the left a bit to head directly to the CAR waypoint. If you were to be moving away from the waypoint, the arrow would point down and the 12 would be at the top showing your heading as 120°.

The next screen displayed is the map screen. This is showing the current location of the unit with a white arrow. The pink line going in the NW direction is the direction to the waypoint, and the line to the waypoint is a

little to the left of where the arrow is pointing. The red line is a track or trail. The track displays where the unit has moved. In this case it came down the street to my home. As you can see, it looks like I was driving in my neighbors' yards. The black lines are the streets and in this case the black blotches are ponds. The accuracy of unit displayed me off the street when in actuality I never left the road until I pulled in my driveway. In the lower left is the scale of the map. Above the map is data that was shown on the previous screen. The data above the map can be hidden as to provide a bigger map area on the display.

The GPS is also able to keep a travel log. As you look at the next screen, you can really get an idea of what kind of data the unit gathers. It has a trip meter and odometer. Also it keeps track of moving data. The max speed the unit has read is displayed. The moving average and overall average speed are great features. Before I had the GPS I would often occupy my mind while driving trying to figure out these very same averages. I doubt I ever got this precise. Elevation is also displayed.

Another useful feature of most GPS receivers is routing. Routing is the ability to string together waypoints to form a path. For example look at the next screen shot. In this route are several points within a preplanned trip. From here in Tampa Bay we are going to St. Louis, Missouri. Each point defines a leg of the trip. When you navigate this route, the first point that the GPS directs you to is Atlanta. When you get to Atlanta, it changes the destination to Chattanooga. This continues until you have arrived at your destination. This is a great feature for driving as it allows you to keep updating the GPS with the correct directions but frees you from having to manipulate the GPS while driving. Most receivers show you destinations in a straight line, "as the crow flies." A few of the more expensive units, such as this one, can auto-route. Auto-routing is a feature that navigates along roads loaded into the map as opposed to an as-

the-crow-flies path. It displays turn-by-turn directions to your destination so that all you have to do is input the final destination. The unit then tells you which highways to get on and where to go off.

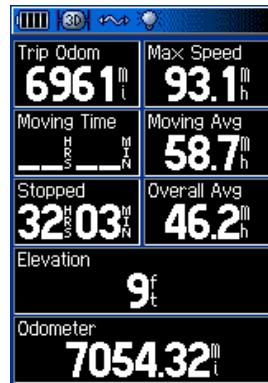
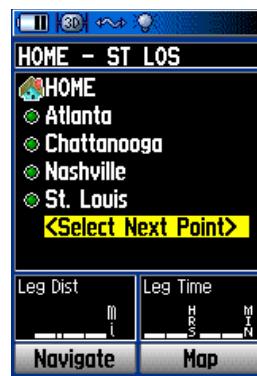
So how do you know what unit to buy? There are literally hundreds of different models to choose from. The unit that is right for you depends entirely on what you're going to use it for. If you primarily want it to navigate a boat, airplane, or car there are large screen models that run off the vehicle's electrical system and permanently mount to the console. If you want it to go hiking there are handheld models that can load topographic maps. The models range from very simple receivers that just stream data to large display models that can talk and direct you to the next exit verbally. Additionally there are other features like removable memory cards that map information can be loaded on. For a good place to find models available take a look to Joe Mehaffey, Jack Yeazel, and Dale Depriest's [www.gpsinformation.net](http://www.gpsinformation.net) site.

If you would like to try a GPS without purchasing a unit, go to Lowrance's [www.lowrance.com/software/pcsoftware/demos.asp](http://www.lowrance.com/software/pcsoftware/demos.asp) site for a GPS simulator. They are listed by model and will install software on your machine. Although this will not actually lock onto satellites, it offers a great way to get a feel for their features and how they work.

So now you're interested, right? But what would need one these things for? Just to give you an idea of the many uses:

- Find your exact location on a map
- Find where you left the car
- Use to find your way back after getting lost in the woods
- Tie it to the dog and see where he goes at night
- Mark that great fishing spot
- Find out where the cruise ship or airplane you're on is
- Calibrate your speedometer
- Tell exactly how long to you get there
- Use it a trip meter
- Use it as a compass (when moving)
- It's fun to use

As you see there are tons of ways to amuse yourself. One of my favorite pas-



# Special Interest Groups

## SIG NOTES: November 2004

**Access.** Designs and implements solutions using Microsoft Access database management software.  
**Contact:** Bruce Preston, 203 431-2920 ([bpreston@mags.net](mailto:bpreston@mags.net)).  
Meets on 2nd Tuesday, 7p.m., at the DACS Resource Center.  
**Next meeting:** NOV 9

**Advanced Operating Systems.** Explores OS/2, Linux, and NT operating systems. For info, follow link to Don's site on [dacs.org](http://dacs.org).  
**Contact:** Bill Keane ([wbk@mags.net](mailto:wbk@mags.net)) 203-438-8032.  
Meets 2nd Wednesday, 7:30 p.m., at the DACS Resource Center.  
**Next meeting:** NOV 10

**dotNET.** Programs for Web site/server.  
**Contact:** Chuck Fizer ([cfizer@snet.net](mailto:cfizer@snet.net)).  
Meets 1st Wednesday, 4-6 p.m., at the DACS Resource Center.  
**Next Meeting:** NOV 3

**Digital Imaging.** All about digital cameras, retouching and printing.  
**Contact:** Ken Graff at 203 775-6667 ([graffic@bigfoot.com](mailto:graffic@bigfoot.com)).  
Meets last Wednesday, 7 p.m. at the DACS Resource Center.  
**Next Meeting:** NOV 24

**Investment Strategies.** Discusses various investment strategies to maximize profits and limit risk.  
**Contact:** Paul Gehrett, 203 426-8436, ([pgehr4402@aol.com](mailto:pgehr4402@aol.com)).  
Meets 3rd Thursday, 7:30 p.m., Edmond Town Hall, Newtown.  
**Next Meeting:** NOV 18

**Linux.** Helps in installing and maintaining the Linux operating system. OCT also be of interest to Apple owners using OS X.  
**Contact:** Bill Keane ([wbk@mags.net](mailto:wbk@mags.net)) 203-438-8032  
Meets 3rd Wednesday, 7:30 pm at the DACS Resource Center.  
**Next Meeting:** NOV 17

**Macintosh.** Focuses on all aspects of the Mac operating system.  
**Contact:** Richard Corzo ([macsig@dacs.org](mailto:macsig@dacs.org))  
Meets 1st Thursday at DACS Resource Center at 7 p.m.  
**Next Meeting:** NOV 4

**Microcontroller.** Investigates microcontroller applications from theory to hands-on implementation and member projects.  
**Contact:** John Gallichotte, 203 426-0394, ([tlclotus@ieee.org](mailto:tlclotus@ieee.org)).  
Meets on 4th Tuesday, 7:00 p.m., at the DACS Resource Center.  
**Next Meeting:** NOV 23

**Server.** Explores Back Office server and client applications, including Win NT Servers and MS Outlook.  
**Contact:** Jim Scheef ([jscheef@teleAUGksys.com](mailto:jscheef@teleAUGksys.com))  
Meets 2nd Thursday, 7 p.m., at the DACS Resource Center.  
**Next meeting:** NOV 11

**Visual Basic.** Develops Windows apps with Visual Basic.  
**Contact:** Chuck Fizer, 203 798-9996 ([cfizer@snet.net](mailto:cfizer@snet.net)) or Jim Scheef, 860 355-8001 ([JScheef@TeleAUGksys.com](mailto:JScheef@TeleAUGksys.com)).  
Meets 1st Wednesday, 7p.m., at the DACS Resource Center.  
**Next Meeting:** NOV 3

**Wall Street.** Examines Windows stock Market software.  
**Contact:** Phil Dillaway, 203 367-1202 ([dillaway@ntplx.net](mailto:dillaway@ntplx.net)).  
Meets on last Monday, 7p.m., at the DACS Resource Center.  
**Next Meeting:** NOV 29

**Web Design.** Explores popular applications for designing and creating Web sites.  
**Contact:** Anna Collens, 203-746-5922 ([acvo@annagraphics.com](mailto:acvo@annagraphics.com)).  
Meets 3rd Tuesday, 7-9 p.m. at the DACS Resource Center.  
**Next Meeting:** NOV 16

## SIG News & Other Events

**dotNet.** The SIG has a rather large attendance for both sessions. The first session 4pm-6pm of the dotNet-SIG started with an important question regarding security. Security is a broad topic worthy of much discussion and we spend nearly 50% of the first session pondering the issues. The question presented concerned security for web applications, a topic centering on one of our recent software developments, RoleFramework and UserRoles application. The questioner's concern focused on web page command line arguments, eg: that part of the web address after the domain and page spec which begins with the ?.....=.....&.... etc. Is this a safe place to be calling or referring to other pages in the application's environment. There were a variety of attendant responses that coalesce into a general statement regarding the nature of the application. If the application is the presentation of static, or query only pages for the eyes of anyone, what a programmer puts on the command line is largely immaterial. The IIS server essentially only allows the anonymous web user the ability to READ the pages. The user is not allowed to change a page via HTTP. So in that sense the pages are secure. However, if the web page program, when executed is itself able to modify something else on the server then we have a security issue. The user's ability to execute the web program is now at stake. That's where a user login in is applicable. Jim Scheef pointed out that a web site and all sub folders should have an index.htm or default.htm or default.aspx page. This is to protect the web site folder from revealing a folder's contents should the user's access to only refer to the web site, for example [www.sports-regisrty.com](http://www.sports-regisrty.com). If there is no default.htm or such, IIS will provide a folder listing to the user. In effect IIS will be revealing something to the user which may or could result in a vulnerability at the web site. Now there may be an IIS option to prohibit this facility, but this was not explored. Next and subsequent question was almost as challenging. Is there an easy way to develop web page graphics. This was really a two pronged question, because it also concerned a standardize web page layout scenario. How does a application programmer, write the application while someone else develops the graphical content. We talked this one to a stand still, covering graphical development tools like Dreamweaver, Ulead, Adobe, etc. The interesting piece of knowledge that emerged from this discussion is, tools like Dreamweaver, code the web page inline. What this means is that the program code that a traditional .Net developer would put in the CodeBehind file is spread throughout the web page by Dreamweaver. That's the way old ASP pages had to be written in the past. We are now in the twenty first century, and the tool makers haven't caught up yet!

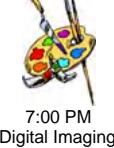
As the first dotNet session ended, Jim Scheef called in our pizza order and we then indulged ourselves prior to the next session of the dotNet SIG. Anyone attending the meeting can partake in the pizza. In fact where else can you eat so inexpensively, five bucks, and learn all this information about web page programming.

The second session of dotNet-SIG 7pm-9pm began with more attendance and more questions. Our earlier question about graphics was further expounded upon by the brief demonstration of a political web site, that of course, asked for donations. The interesting aspect of this site is the nature of the donation collection method. We are generally familiar with the credit card approach. The approach I'm referring to is the Amazon.com method where by Amazon bills your credit card for your purchase. You give them your credit information on the expectation it is a private no-eyes only type of transaction. Amazon ships the merchandise and charges your credit card account. But the credit card method revealed at the meeting

**SIG NOTES, Continued on page 15**

# November 2004

## Danbury Area Computer Society

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday																																																																																																	
	<b>1</b>	<b>2</b>  7:00 P.M. GENERAL MTG  Election Day	<b>3</b>  4 PM Internet Prog. 7 PM Visual Basic Chuck Fizer 203 798-9996	<b>4</b>  Macintosh 7:00 PM Richard Corzo macsig@dacs.org	<b>5</b>	<b>6</b>																																																																																																	
<b>7</b>	<b>8</b>  7:00 PM Board of Directors	<b>9</b>  7:00 PM Access Bruce Preston 203 431-2920	<b>10</b>  7:30 PM Advanced OS Bill Keane 203 438-8032	<b>11</b> 7:00 PM SERVER Jim Scheef 860 355-0034	<b>12</b>	<b>13</b>																																																																																																	
<b>14</b>	<b>15</b>	<b>16</b>  Web Design Anna Collens 203 746-5922	<b>17</b>  7:30 PM LINUX Bill Keane 203 438-8032	<b>18</b>  7:30 PM INVESTMENT Paul Gehrett 203 426-8436	<b>19</b>	<b>20</b>  DACS.DOC DEADLINE																																																																																																	
<b>21</b>	<b>22</b>	<b>23</b>  7:00 PM Microcontroller J. Gallichotte 203 367-1202	<b>24</b>  7:00 PM Digital Imaging Ken Graff 203 775-6667	<b>25</b>  Thanksgiving	<b>26</b>	<b>27</b>																																																																																																	
<b>28</b>	<b>29</b>  7:00 PM WALL STREET Phil Dillaway 203 367-1202	<b>30</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="7" style="text-align: center; font-weight: bold;">Oct 2004</td> </tr> <tr> <td style="text-align: center;">S</td><td style="text-align: center;">M</td><td style="text-align: center;">T</td><td style="text-align: center;">W</td><td style="text-align: center;">T</td><td style="text-align: center;">F</td><td style="text-align: center;">S</td></tr> <tr> <td style="text-align: center;">3</td><td style="text-align: center;">4</td><td style="text-align: center;">5</td><td style="text-align: center;">6</td><td style="text-align: center;">7</td><td style="text-align: center;">8</td><td style="text-align: center;">9</td></tr> <tr> <td style="text-align: center;">10</td><td style="text-align: center;">11</td><td style="text-align: center;">12</td><td style="text-align: center;">13</td><td style="text-align: center;">14</td><td style="text-align: center;">15</td><td style="text-align: center;">16</td></tr> <tr> <td style="text-align: center;">17</td><td style="text-align: center;">18</td><td style="text-align: center;">19</td><td style="text-align: center;">20</td><td style="text-align: center;">21</td><td style="text-align: center;">22</td><td style="text-align: center;">23</td></tr> <tr> <td style="text-align: center;">24</td><td style="text-align: center;">25</td><td style="text-align: center;">26</td><td style="text-align: center;">27</td><td style="text-align: center;">28</td><td style="text-align: center;">29</td><td style="text-align: center;">30</td></tr> <tr> <td style="text-align: center;">31</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	Oct 2004							S	M	T	W	T	F	S	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31							<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="7" style="text-align: center; font-weight: bold;">Dec 2004</td> </tr> <tr> <td style="text-align: center;">S</td><td style="text-align: center;">M</td><td style="text-align: center;">T</td><td style="text-align: center;">W</td><td style="text-align: center;">T</td><td style="text-align: center;">F</td><td style="text-align: center;">S</td></tr> <tr> <td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td><td style="text-align: center;">4</td><td style="text-align: center;">5</td><td style="text-align: center;">6</td><td style="text-align: center;">7</td></tr> <tr> <td style="text-align: center;">8</td><td style="text-align: center;">9</td><td style="text-align: center;">10</td><td style="text-align: center;">11</td><td style="text-align: center;">12</td><td style="text-align: center;">13</td><td style="text-align: center;">14</td></tr> <tr> <td style="text-align: center;">15</td><td style="text-align: center;">16</td><td style="text-align: center;">17</td><td style="text-align: center;">18</td><td style="text-align: center;">19</td><td style="text-align: center;">20</td><td style="text-align: center;">21</td></tr> <tr> <td style="text-align: center;">22</td><td style="text-align: center;">23</td><td style="text-align: center;">24</td><td style="text-align: center;">25</td><td style="text-align: center;">26</td><td style="text-align: center;">27</td><td style="text-align: center;">28</td></tr> <tr> <td style="text-align: center;">29</td><td style="text-align: center;">30</td><td style="text-align: center;">31</td><td></td><td></td><td></td><td></td></tr> </table>	Dec 2004							S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Oct 2004																																																																																																							
S	M	T	W	T	F	S																																																																																																	
3	4	5	6	7	8	9																																																																																																	
10	11	12	13	14	15	16																																																																																																	
17	18	19	20	21	22	23																																																																																																	
24	25	26	27	28	29	30																																																																																																	
31																																																																																																							
Dec 2004																																																																																																							
S	M	T	W	T	F	S																																																																																																	
1	2	3	4	5	6	7																																																																																																	
8	9	10	11	12	13	14																																																																																																	
15	16	17	18	19	20	21																																																																																																	
22	23	24	25	26	27	28																																																																																																	
29	30	31																																																																																																					

# Digital Horizons

## Computers and Creativity

### Part 3: The Black Box Problem, or Too Much Learning Can Be Dangerous

by Richard P. Ten Dyke

**I**N THIS SERIES of articles we use simple computer problems to illustrate concepts of the creative process. In Part 1 we started with optimization, the process of making continual improvements to achieve a result that is the best we can do. Then in Part 2, looking for a magic square, we introduced the concept of the local optimum, that is, finding a solution that is better than its nearest neighbors but not the best over all. We used random behavior as a means of making changes and for breaking out of traps. In doing this we discovered an interesting paradox: it is possible to use disorder to lead to order. Now in part 3, we will explore a new kind of problem, called the "Black Box."

A Black Box is like an unopened Birthday present. We ask the question "what's inside?" You look at it (how big is it?) and you pick it up (how heavy is it?) and you shake it (does it have parts?). Then you run down the list of possibilities ... a book?... a necktie? ... an electric train?

The airplane flight recorder, a device carried aboard aircraft to record events that precede a crash and called "a Black Box" gets its name from a device of the same name that is familiar to first-year students of electrical engineering. There, the infamous Black Box housed an electrical circuit. It was, literally, a sealed black wooden box, with two connections for input, two connections for output, and circuit inside that consisted of some combination of a resistance, a coil, and a capacitor. The student is told to apply a series of electrical signals to the input terminals, measure the signals that emerge as output, and with that information, deduce and explain the circuit inside the box.

The Black Box illustrates a basic situation in research. We know how a system

behaves, but we are curious to know what is causing it to behave that way. More important, we want to predict how it will behave in the future.

Our characterization of the Black Box problem is quite simple. Instead of an electrical circuit, we will look at a process that is the result of a mathematical equation. We will use a problem that is found in intelligence tests. Consider the sequence of numbers below: can you fill in the blank?

-1, 1, 0, 1, 1, \_\_\_\_?

We have an unknown "system" that is creating a series of numbers. We look at the numbers that have been created, and try to guess the next number. This sequence is produced, we think, by a mathematical equation.

But what equation? Can we program a computer to find the answer? There might be more than one equation that will reproduce the series, but we will be looking for just one — a simple one.

To solve it, we will use the principles established in the previous two parts. First, we need a measure of success. Second, we need to find trial solutions that we can modify. Third, we need to test the trial solutions against the goal. We will again use randomness as a tool.

The equation we seek will use the basic mathematical functions: add, subtract, multiply, divide, and exponentiation. We will also need some arguments (operands) for the operators to work with. These will be selected, randomly, from the numbers in the series, the index value of each number in the series, and a few constants like the integers from 0 to 5.

We need some trial equations to choose from, so we use a combinations of operators and operands that are assembled using a "random algorithm gen-

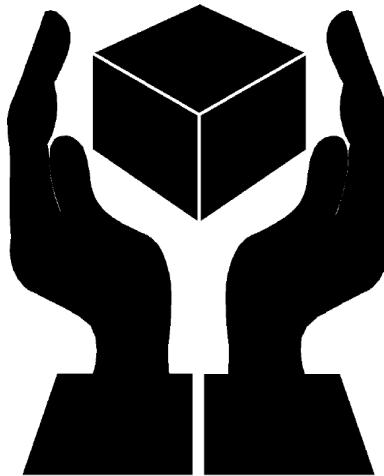
erator." For each trial we see if an equation can predict the fourth number in the series based on the first, second, and third. If we have a success, we then apply the same randomly created equation to see if it will also predict the fifth number in the series based on the second, third, and fourth. If we get a match on the second try, we then assume success, and calculate the sixth value based on the values for the third, fourth, and fifth.

It actually works. In this particular case, after a large number of trials, the computer says that the fourth number in the series has been found to be the sum of the second and third. Shifting to the right, it finds that the fifth number is the sum of the third and fourth. Therefore, the sixth number is predicted to be the sum of the fourth and fifth which is 2 ( 1 plus 1 ), so that is our solution. Granted, other algorithms may meet the criteria and come up with the same or even a different result, but our simple answer works and therefore is an acceptable solution to the problem.

The same method will solve almost any series that can be expressed in terms of simple mathematical relationships between the values. In each case, the computer will search through thousands of randomly generated equations until it finds one that works for that particular series.

Playing around with this toy problem many years ago I came upon an interesting and unexpected insight. I added to it a feature called "learning." The program would need to discard many proposed solutions before it would find one that worked. So, when the computer was finally able to achieve a solution to a series, I programmed it so it would adjust a table of probabilities so key characteristics of a solution would be more likely to be selected the next time to increase the probability that a trial solution would succeed. I then asked the computer to solve the same sequence several times in succession to determine if the computer would be able to solve subsequent trials more quickly.

When the experiment was being run — many years ago — it was necessary to submit the jobs to the computer center and wait several hours for the result. I decided to batch-up some experiments. I took two distinct series, and asked the computer to solve the first one about 100 times, then do the same to the second. I expected to get a curve showing the value of learning in each case. But I got an unexpected result. The computer would solve the first series with ease, and subsequent trials with the same series proved faster. But the computer would hang up



on the second. I did not understand this, since the computer had been able to solve both series on a previous occasion. So I switched the order of the two and tried again. Now, the computer was able to solve the first one — the one it did not solve before — but was unable to solve the second one. Then the light-bulb went off. The reason was obvious. The process of learning had done me in. After solving one series so many times in succession, the computer's ability to come up with randomized solutions had vanished. The computer had "learned" to a point where it could only solve one problem, the first series, whatever that one was, but had lost the "imagination" to recognize a new situation when it occurred.

How human! I had discovered the principle of overlearning.

I easily overcame the difficulty by asking the computer to solve a variety of series in a mixed up order, so that it never got the chance to overlearn.

I have thought about this experiment for many years. It illustrates for me the value of a person having a variety of experiences early in life, so that paths to new ways of thinking are available later on. In the interesting coincidence department, a recent Wall Street Journal contains a letter by Jim Pandjiris concerning the problems with today's railroad industry. Quoting from the letter: "Many senior officials had worked only in the railroad industry, and many operating practices were based on custom ('we always do it that way')", which illustrates how overlearning can be a problem in the corporate world as well.

So we ask, is this just a toy problem, one that is not scaleable to larger and more significant situations?

Yes and no. Similar methods are used today to find relationships for setting company policies and practices.

For example, a teller in a bank follows policies to determine whether the bank will cash a customer's check. Does the person have an account at the bank? Is the check drawn from this branch or another branch? Does the issuer of the check have an account at the bank? Computer programs use a history of outcomes, to develop predictive algorithms based on real experiences in cashing checks. Bank policies are then established to reduce the likelihood that bad checks will be accepted in the future. Similarly, credit card companies use predictive algorithms to try to guess when a credit card is being fraudulently used.

A technique that has been applied to these kinds of problems is "neural net-

works" which uses mathematical functions that can be assembled and manipulated to resemble complex logic and relationships. It is a form of reverse engineering. I once was given a quantity of market research data in which several hundred respondents were asked to select and rank a variety of proposed products. The products were similar in function but with differences in several key characteristics. The client wanted to know which characteristics were the most important to insure the success of the product. Using a neural network technique, we created a model of the decision process using these characteristics, and then "tuned" the model to most closely reproduce the results of the market research. We could then disassemble the model to find out which of the product characteristics were the most important to the potential customer.

The results were then compared to a parallel study in which the same respondents were asked directly, which characteristics were the most important.

The results were surprising. When faced with an actual decision, the model showed that the respondents used entirely different criteria to make their selections than the claimed they used in the parallel study. It is as if the respondents did not really know how they made their decisions. When asked "what characteristics are important to you?", they provided answers that they thought were reasonable or perhaps "expected" rather than those which they actually used when faced with an actual decision. A warning to market researchers in the future.

But using these techniques sometimes requires a leap of faith rather than logic. Models may be created to fit the results, without knowing whether the results are caused by a similar model. One can only say that the model would have worked in the past, and perhaps it will continue to work in the future. The amount of risk inherent in this approach depends on the situation, so the technique should be used with great care, for it is possible to create a model that can explain history but has no predictive capabilities whatsoever. Nevertheless, it remains a useful tool in those cases where cause and effect relationships do exist.

On a much broader scale, as we approach the 100th anniversary of Einstein's 1905 paper on relativity, physicists are still searching for a theory that will unite Relativity and Quantum Mechanics and that will explain the forces in the universe including gravitation, magnetism, and the sources of energy. A way to describe the problem that physicists are attacking is to see it as a complex Black Box problem. We know the inputs and the outputs, and now physicists are looking for the mathematical relationships that will explain a vast quantity of these well documented results.

Next month: Playing Poker.

---

**RICHARD TEN DYKE**, a member of the Danbury Area Computer Society, has previously contributed to this newsletter on the topic of Digital Photography. He is retired from IBM and can be reached at [tendyke@bedfordny.com](mailto:tendyke@bedfordny.com). All opinions are his own, and he welcomes comments.

...

Copyright © 2004 Richard P. Ten Dyke



## Unwanted Computers, Servers, Laptops, Etc.?

Sell Them Today at Sellers' Market

We Turn Unwanted Items Into Cash

- We sell on eBay to the highest bidders in the world.
- We are an eBay Gold Level Power Seller. We are experts at selling on-line, having sold thousands of items. Our Feedback Rating is extraordinary.
- Just drop your item off. We handle everything for you, and we send you a check.
- For more information:
  - call us at (203) 778-0003,
  - email us at [info@sellers-market.com](mailto:info@sellers-market.com),
  - visit us at [www.sellers-market.com](http://www.sellers-market.com), or
  - drop by our store right off 1-84, Exit 8 in the Stop & Shop Shopping Center on Newtown Road.

# Operating Systems

## PROBLEMS WITH WINDOWS XP SERVICE PACK 2

By Bettie Cummings Cook

**R**ECENTLY WE HAVE been reading about the debate over whether or not to install Windows XP Service Pack 2. The update has some bugs that cause problems in some software.

I am a firm believer in keeping software updated. The update is not created to cause you frustration but to make your software work better. Considering all the hundreds of software programs and hardware drivers, it is amazing updates work as well as they do.

Your software is far more likely to work well if it is kept updated. Most problems are created by structure of the program compilation of non-Microsoft software.

When installing an update, it is important that you must read the update instructions carefully. I'm convinced failure to read and apply the instructions to your computer is the cause of some conflicts.

Microsoft Knowledge Base Article 884130 (<http://support.microsoft.com/default.aspx?kbid=884130>) provides a list of programs that are known to experience a loss of functionality when they run on a Windows XP Service Pack 2-based computers. If you have downloaded and installed SP2 and are experiencing error messages, this web site is for you.

SP2 includes Microsoft Windows Firewall that updates the firewall and replaces Internet Connection Firewall (ICF). If firewall is blocking a program, Knowledge Base Article 875357 provides the solution to unblock the firewall. Of particular importance to everyone who has updated to Windows XP SP2 is the caution that Norton's Anti-Virus 2003 may not be automatically scanning. You may not be getting an error message about this so it is vital to read the data regarding Norton's. Some of the popular software experiencing problems are the AOL toolbar, BlackICE, Norton's Systemworks 2003 GoBack, OmniPage Pro, Word Perfect Office, Yahoo Instant Messenger, and Zone Alarm. See the list for others not named here.

The web page lists the programs and a link to their maker's web site. Use the link to go to that site and download a patch to allow the software to work with SP2.

While I'm on the subject of Microsoft, did you know there is a Microsoft Products Public Newsgroup web page? (<http://support.Microsoft.com/newsgroups/>) Each product has a forum where one can post questions and answers. Solutions to MS problems may be found here.

**BETTIE CUMMINGS COOK** is a member of the Southwest Indiana PC Users Group, Inc

*This article was provided by The Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member.*

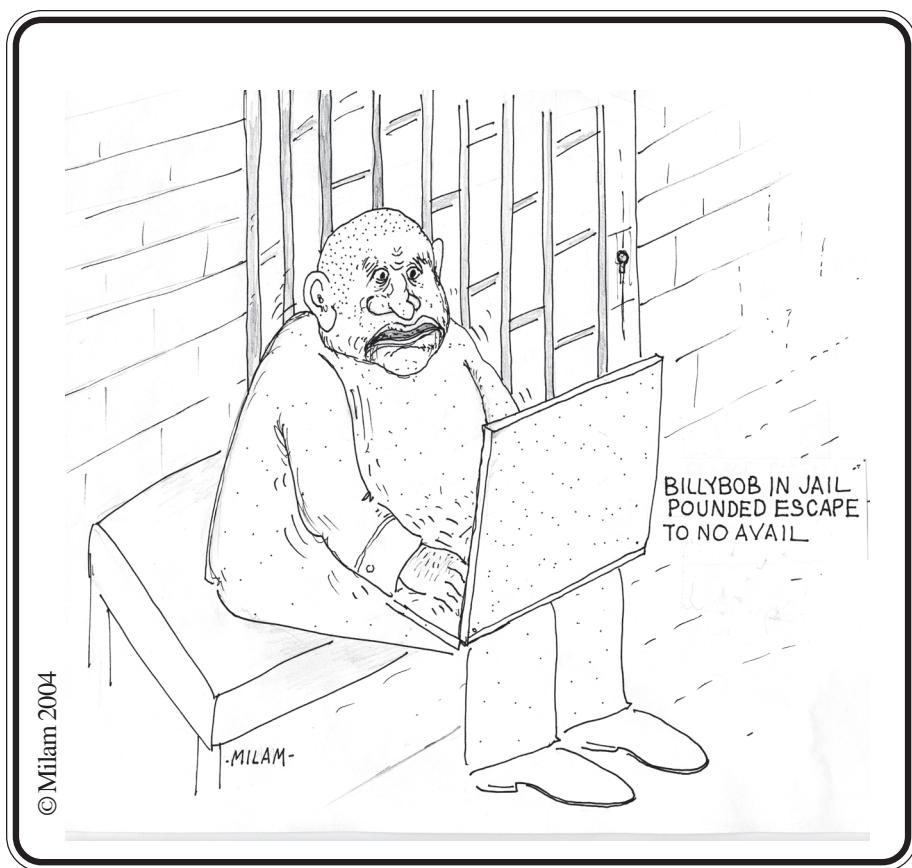
## GPS, Continued from page 7

times with the GPS is Geocaching ([www.geocaching.com](http://www.geocaching.com)). This is a scavenger hunt with a GPS. A box is hidden in an interesting location like a city park. Inside a weather-proof box is a logbook and some trinkets. The coordinates of the "cache" are posted on the website providing details on the type of box, terrain, and notes from prior hunters. Because the GPS is only accurate within 10 feet or so, the cache can be quite difficult to locate.

Once found, you sign the logbook and exchange an item inside for one that you brought. The item is often of little monetary value. I often bring matchbox cars or maybe spare batteries for the GPS. Click on the link for the site and enter you're zip code and check out how many are near you!

In addition to the using the receivers as stand-alone units almost all of them can tie into your computer to expand its capabilities. Next month I will show you all the programs that are available to you and some great resources on the web for maps and waypoints.

*This article was provided by The Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member.*



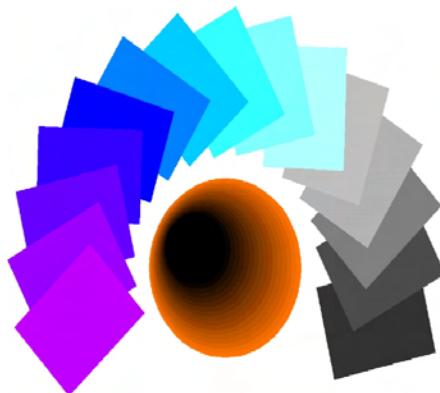
## Computers and Creativity, Computer Programming and mathematics – Magic Squares Continued -Part (2)

By Charles Bovaird Jr.

SOMETIMES WE CAN approach the solution to a problem in more than one way. Two such approaches are (1) **top down** – and (2) **bottom up**. Whichever approach you decide to take will be colored with your background, personal preferences, and assumptions on the perceived effectiveness of your choice. In the case of  $M_3$ , a 3x3 magic square I chose the **top down** approach because I was itching to write a program with the potential to answer with conviction the question “Is there a finite number of solutions to the  $M_3$  problem?”. I also believed that the process of programming a model of the thinking process would be a tool to enlighten, clarify, and give me confidence in the solution. I also believed there was a chance that the modeling process would be a good preparation for solving more complex magic squares, which we will attempt in future, articles.

Past experience solving other problems demonstrated value in creating a programming model of the thinking process since it allowed a study of perspectives not likely found using just paper and pencil. In such a case a computer program model used as a tool for problem solving becomes “**A Tool of Thought**”. There are many programming languages that have been used in this manner. Along the way we will comment on some strengths and weaknesses of some programming languages.

In this article we will answer the questions posed last month, then define a procedural process for generating an  $M_3$ . Next month we will discuss the design of a **top down** computer model to address the question “How many solutions are there to the  $M_3$  magic square?” followed by a **bottom up** approach to the same question. After all this effort working with  $M_3$  we will address  $M_4$ . The 4x4 magic square.



The following problems were posed in last month's article.

Problem 1: Can you create a 9x9 magic square (with the integer numbers 1 through 81)? [Sorry, the constraint “other than 1,2,...9” was a typo in last months article].

Answer: Yes, if we follow the same procedure that generates an  $M_3$  basic magic square as follows:

a. Draw a 3x3 matrix with no values assigned to the 9 cells contained in the “box” we call a matrix. Warning! This process requires you to “think outside the box”.

b. Start with the top (first) row center box  $M_3[1;2]$ , and place a one (1) in it. Move your pointer up one cell (outside the “box”) and to the right one cell. Since the pointer is now above column 3 (and outside the box) move the pointer to the lowest cell in column 3  $M_3[3;3]$  and place a 2 in it. Now move the pointer up and to the right one cell. The pointer is now (outside the box) and one cell to the right of row 2. Since we are now (outside the box) we move our pointer to the opposite end of row 2 and place a 3 in cell 1 of row 2  $M_3[[1;2]$ . Since this is a 3x3 magic square we have a slight departure from the previous process every 3 moves (the 4<sup>th</sup> and 7<sup>th</sup> move). We place the next number (4) in the cell just below where you placed the 3 (place the 4 in  $M_3[3;1]$ ). Now go back to **Start** and repeat the process till you finish (5 in  $M_3[2;2]$ , 6 in  $M_3[1;3]$ , 7 in  $M_3[2;3]$ , 6 in  $M_3[1;1]$ , 9 in  $M_3[1;3]$ .

c. The resultant matrix is basic  $M_3$  matrix.

8	1	6
3	5	7
4	9	2

Using the same procedure an  $M_5$  will look like this:

$M_5 =$	17	24	1	8	15
	23	5	7	14	12
	4	6	13	20	22
	10	12	19	21	3
	11	18	25	2	9

Problem 2: The maximum number of  $M_{odd}$  magic squares that can be generated is infinite since there is no limit to how large an odd number can be.

Problem 3: Other magic squares can be generated from and **any** basic magic square if we are not limited to an integer sequence beginning with 1. For example if we take the basic 3x3 magic square and add 1/3 to all cells we get a magic square that adds to 16.

$8\frac{1}{3}$	$1\frac{1}{3}$	$6\frac{1}{3}$
$3\frac{1}{3}$	$5\frac{1}{3}$	$7\frac{1}{3}$
$4\frac{1}{3}$	$9\frac{1}{3}$	$2\frac{1}{3}$

Continuing with the  $M_3$  magic square, How can we prove we have discovered all 3x3 magic squares? (Remember even though we can look at the magic square from different perspectives such as rotating it or looking at it through a mirror, it is still the same magic square – it just looks different.)

Next month we will discuss a programmed **bottom up** approach using a computer program design and an analytical **top down** approach to the solution of this problem.

CHARLES BOVAIRD retired from IBM. He is presently Treasurer of DACS. You may contact him at treasurer@dacs.org.

Copyright © 2004 Charles F. Bovaird Jr.

Smart advertisers reach  
over  
500  
active computer  
users and  
software buyers  
by taking  
advantage of  
the attractive  
advertising rates  
in

DACS.DOC

# Random Access

October 2004

Bruce Preston, Moderator

MEMBERS WHO ARE UNABLE TO ATTEND THE GENERAL MEETING may submit questions to "askdacs@dacs.org" by the day prior to the meeting. We will attempt to get an answer for you. Please provide enough detail, as we will not be able to ask for additional information.

**Q. I used to be able to open PDF files with Adobe Acrobat Reader. How I get a message that says that a Windows XP Journal Viewer is not able to open the file. Why is something that isn't there trying to open it, when I have Acrobat Reader on the machine?**

A. It looks like an install of some other application 'stole' the association of .PDF files away from Acrobat Reader, and then you probably removed that application, leaving no valid association for .PDF files. To fix it, find a .PDF using Windows Explorer, then right-click it, and select OPEN WITH. Then find Adobe Acrobat Reader in the list of programs, click "Always Use Selected Application", and click OK.

By the way, if you ever need to create a .PDF file, you might look at the combination of GhostScript, GhostView and RedMon (Redirect Monitor) - all freeware - which will let you define a pseudo-printer that will let you 'FILE / PRINT' to a PDF file.

**Q. My computer boots and then locks with the message "Out of Scan Range". Is anyone familiar with this message?**

A. Somehow your display adapter got set to a refresh rate (such as 72Hz, 75Hz, etc.) that is beyond what the monitor is able to support. If you boot into safe mode you should be able to set the display adapter to a basic VGA or SVGA setting of 800x600 with a default refresh rate. Then restart the machine normally, make certain that you have the correct/latest device driver for your adapter card, and then set the display resolution and refresh rate to what you want (within the limits of the hardware.) You do the settings via the Properties page for your display (right-click desktop, Properties) – select SETTINGS, then ADVANCED, then MONITOR to get at the refresh rate.

**Q. Comments on the installation of Windows XP Service Pack 2?**

A. Many have installed it, mostly from the free CD. The most common problem reported on the web (and by one member) was that wireless networking connections seem to get lost or confused. You can order the CD (free) from [www.microsoft.com/technet/prodtechnol/winxppro/maintain/winxpssp2.mspx](http://www.microsoft.com/technet/prodtechnol/winxppro/maintain/winxpssp2.mspx)

The biggest source of problems are with machines that have spyware running, or have worms or viruses. Make certain that your machine is clean before you start the install.

**Q. My machine was running when we had a power failure. Now when I boot, I get a message that says that there is a bad driver, and it grunts and groans for a while, and then proceeds. However, the next time I boot it goes through the same sequence again. How do I get it to fix it once and for all?**

A. Find the system file checker (SFC.EXE) and run it. It should go back to your last good configuration. Or, in XP, press F8 when booting and select booting from last known good configuration.

**Q. Is there a way to lift text from a PDF file?**

A. It depends upon the PDF file. If it isn't encrypted there is a text tool (a big "T" icon) that lets you select text and copy it to the clipboard.

**Q. Very often when I go to a web site I get a pop-up window telling me that there are errors on the page and do I want to compete loading with errors? How do I get rid of this?**

A. In Internet Properties (either via Control Panel, or via IE's Tools /

Internet Options ...) on the Advanced tab, in the Browser section put a check against the item "Disable Script Debugging" and it will go away.

**BRUCE PRESTON** is president of West Mountain Systems, a consultancy in Ridgefield, CT specializing in database applications. A DACS director, Bruce also leads the Access SIG. Members may send tech queries to Bruce at [askdacs@dacs.org](mailto:askdacs@dacs.org).



## Post Your Biz on [dacs.org](http://dacs.org)

We would like to post a directory of our members' business services on the DACS web site.

These would preferably be computer related, hardware and software solutions, Web design, etc., but can include Accounting, Travel, Advertising, Public Relations, or any other business service that you might be able to provide to all our members.

At some future date we may include the directory in our newsletter.

To get your listing, post your name, business, phone, e-mail and Web address to [dacsprez@dacs.org](mailto:dacsprez@dacs.org),

**SIG NOTES, Continued from page 8**

seems to have more security, because in effect, the user authorizes the credit card company to issue a payment for some value. In this case and although the transaction is over the web, Amazon.com doesn't get your credit card information, they only get the guaranteed payment. This appears to be more secure to me. But, looking at the site, you can quickly see why a standard graphical approach is of revered interest. To get the site up quickly, multiple developers worked on it. And it looked like it! Some astute attendee pointed out that all this commercial rhetoric about twenty minute web pages is really achieved using a paradigm of highly engineered, re-engineered and field tested by many deceived patrons before the web pages look consistent and are easy to implement. In three words, "it ain't simple", it just looks that way. We then move on to sample web page code. Our continuing interest is the development of a rich UI on the browser and the least amount of server postbacks as possible. Our current assignment involves the use of a web grid. We experimented with the DataGrid that accompanies Visual Studio.Net. In a nutshell, unless your page requires 10 or less rows on the grid, don't use the DataGrid. Its incredibly SLOW. So, seeking a solution we embraced another 3rd party tool called WebGrid. The motivating factor for employing WebGrid is its OnTheFlyPostback is a special postback that does not involve repainting the page on return from the server. It uses a different HTTP communication scheme. And it works. The trade off involves your sanity however. The tool was authored in Indonesia, with attendant verbal and writing difficulty. We have it working, but still many questions remain. By the next meeting we will further demonstrate the application and the WebGrid.

The dotNet-SIG is fortunate to have Jim Scheef's efforts to secure support materials for our attendees. This month he came to the meeting with a box full of asp.netPRO magazines. For those interested, there is a very good article in this issue about the life cycle of a web page. Its helped me better understand the process. There are still many issues at the resource center, help yourself.

**Macintosh.** We started out pursuing the burning question from last month, how to share files between

Mac OS 9 and Mac OS X. When sharing between two Mac OS 9 machines only AppleTalk is required. To share between Mac OS 9 and Mac OS X, a TCP/IP configuration for the Ethernet connection may need to be added on the Mac OS 9 machine. The laptop someone brought in only had a TCP/IP configuration for their dial-up modem connection, so we had to add one for the Ethernet connection.

Another possible issue in Mac OS 9 is the permissions on the shared folder. We set permissions for "Everyone" to have read access on the shared folder. Once we did, we could see the Mac OS 9 machine in the Network folder of the Mac OS X machine, and then were able to open the shared folder. To enable sharing in the other direction, enable Personal File Sharing in the Sharing preference pane of Mac OS X System Preferences. Then on the Mac OS 9 machine use the Chooser and open the AppleShare icon.

We went on to our scheduled topic of demonstrating iTunes. I explained how the MP3 format is more widely supported than Apple's default AAC compression format for encoding music files in iTunes. For example many recent home and even some car CD players now support playing MP3 CDs, which allow you to put many more songs onto a CD. You can change the format iTunes uses to import music CD tracks in Preferences.

To demonstrate using the iTunes music store we downloaded the free single of the week. Music files downloaded from the iTunes music store are only available in AAC format, and in addition are protected by a scheme called FairPlay. You can only play these protected files on up to 5 Mac or Windows computers on which you have iTunes installed, and on your iPod. You can however burn the songs to CD and then play them anywhere.

As we were wrapping up we got a question on iPhoto and explained how to make a duplicate of a photo before editing it. Just select the photo and choose Duplicate from the File menu or press Command+D.

**Web Design.** Jim Sheef was guest moderator for this session. The topic was how he manages the CT AMC web site from soup to nuts. This includes security, tracking update requests, editing content, and transferring files to the ISP!

Anna was out, due to recent back surgery, but expects to be back for the November 16th. meeting.

For more information and a re-cap of last season's presentations go to: <http://www.annographics.com/sigsite/>

**FREE CLASSIFIEDS**

DACS members may publish noncommercial, computer-related classified ads in *dacs.doc* at no charge. Ads may be placed electronically by fax or by modem, or hard-copy may be submitted at our monthly general meeting. Fax your ads to Charlie Bovaird at 203 792-7881.

Leave hard-copy classifieds with Charlie, Marc, or whoever is tending the members' table at the meeting.

Do you have special computer skills or a business that uses digital technology in interesting ways? Demonstrate your unique talents and expertise at a General Meeting.

## Become a DACS Presenter

*When dining at the  
DACS Resource Center,  
please carry your  
leftovers out with you.*

**Thanks!**  
*The  
management*

One- to four-color printing  
Direct from disk high speed  
black & white and color copying  
now available

*For All Your Printing, Graphics, and Copying Needs*



3 Commerce Drive  
Danbury, CT 06810  
(203)792-5045  
Fax (203)792-5064  
[mail@rapid-repro.com](mailto:mail@rapid-repro.com)

## Voice for Joanie

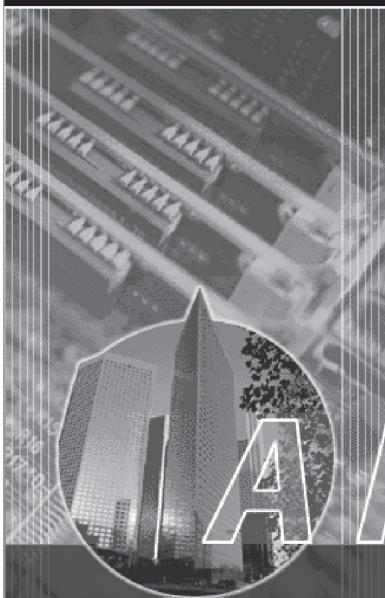
Help give the  
gift of speech  
Call Shirley Fredlund  
at 203 770-6203  
and become a  
**Voice for Joanie**  
volunteer.

## Future Events

November 2 • Microsoft • New Software Products  
December 7 • John Patrick • "The Future of The Internet"  
January 4 • Verizon Wireless • Wireless Broadband

**AMSYS.NET®**

*...making your Net-Work!*



- Consulting Services
- Network Solutions
- Application Hosting
- Internet Solutions

AMSYS has been recognized as a leader in computer consulting, computer technology, computer services, Internet services and computer networking in the New York and Connecticut market for more than 14 years. AMSYS offers a one-stop source for complete MIS outsourcing, computer application hosting and support services to the small and medium size business owner.

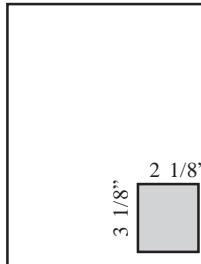
AMSYS makes your Net-Work!... so that you can run your business!

AMSYS, Inc.  
900 Ethan Allen Highway  
Ridgefield, CT 06877  
Phone: 203-431-1500

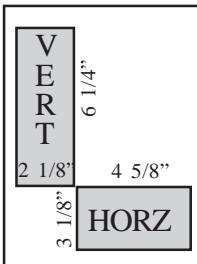
# dacs.doc

THE NEWSLETTER OF THE DANBURY AREA COMPUTER SOCIETY, INC.

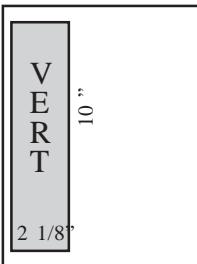
## Rate Card



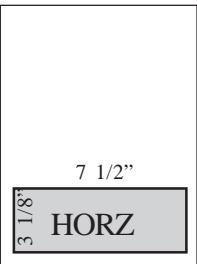
**1/9 PG**  
1 Insertion \$26  
6 Insertions \$130\*



**2/9 PG**  
1 Insertion \$50  
6 Insertions \$250\*



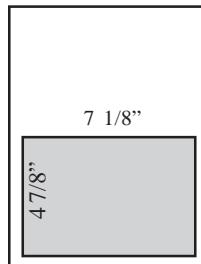
**1/3 PG**  
1 Insertion \$72  
6 Insertions \$360\*



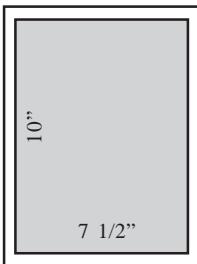
GUARANTEED US MAIL=450+  
OTHER DISTRIBUTION=100+  
PDF FULL-COLOR VERSION DISTRIBUTED  
ON WEB SITE WWW.DACS.ORG

DEADLINE FOR COPY IS 15th OF THE  
MONTH. NEWSLETTER NORMALLY  
ARRIVES IN MAIL BY 1st OF EACH  
MONTH. ALL PAYMENTS IN ADVANCE  
WITH COPY TO:

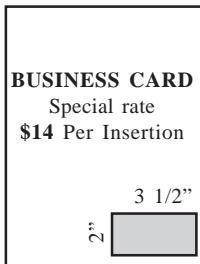
CHARLES BOVAIRD, TREASURER  
DANBURY AREA COMPUTER SOCIETY  
4 GREGORY STREET  
DANBURY CT 06810-4430  
TEL: 203-792-7881  
E-mail aam@mags.net



**1/2 PG**  
1 Insertion \$100  
6 Insertions \$500\*



**FULL PG**  
1 Insertion \$170  
6 Insertions \$850\*



\* 6 INSERTIONS AT 5 TIMES THE  
SINGLE INSERTION RATE

## Order Form

ADS CAN BE SUBMITTED AS CAMERA READY ART, OR VIA E-MAIL AS A PDF, JPG OR TIF FILE. Editors will set up ads submitted as plain text without additional charge.

COMPANY  
ADDRESS

---

---

---

---

---

CONTACT

---

PHONE

---

FAX

---

E-MAIL

---

SIZE  1/9  2/9V  2/9H  1/3V  1/3H

HALF PAGE  FULLPAGE  BUSINESS CARD

ISSUE DATE \_\_\_\_\_

SIZE \_\_\_\_\_ (V H) SINGLE  6 INSERTIONS

TOTAL \$ \_\_\_\_\_

Comments \_\_\_\_\_

---

---

---

Sketch ad in this box



Danbury Area Computer Society is a non-profit corporation organized under section (501)(C)(3) of the US Tax Code. Its purpose is to promote education, knowledge sharing, networking and communication between users of personal computers. DACS is an all volunteer organization, with no employees. The major source of income is member dues. Members can volunteer to become instructors, lecturers, DACS officers and board members, committee members, or SIG leaders.

We sponsor or participate in community support projects by collecting, repairing, and redistributing used computer equipment and software to community service providers such as schools, libraries, and patient/client support groups. DACS members provide pickup, refurbishing, installation, and training assistance as needed. Firms or individuals with equipment to donate should leave a message on the DACS Infoline (203-748-4330). or send an email to [recycling@dacs.org](mailto:recycling@dacs.org).

The Voice for Joanie program was created in 1992 through the initiative of DACS member, Shirley Fredlund. This program provides computer-assisted speech for victims of amyotrophic lateral sclerosis ("Lou Gehrig's Disease"). DACS members have contributed volunteer time and technical assistance since the program began. Voice for Joanie and DACS have earned national computer industry recognition and financial assistance for this vital collaboration.

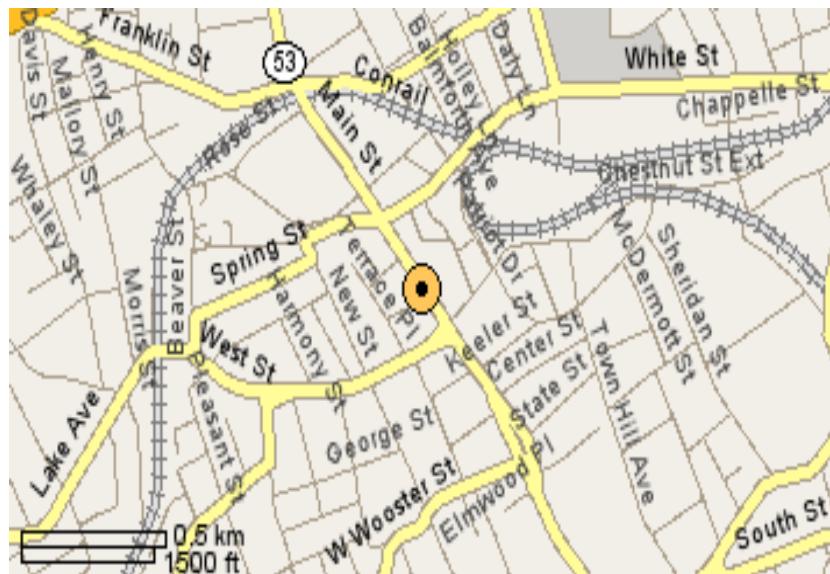
Our general meetings are held on the first Tuesday of each month in the Danbury Hospital Auditorium at 7 p.m. These meetings are open to the public. The main presentation is scheduled from 8-9:30, preceded by casual networking, announcements and Random Access, an informal question and answer session. A free product raffle is often held at the conclusion of the main presentation.

In addition to the general meeting, DACS sponsors many special interest groups (SIGs) where members can learn and share information about a specific topic. Each SIG plans its own meeting schedule and program topics.

Our newsletter, *dacs.doc* is published monthly for our members, and mailed to arrive before the general meeting. It features articles written by members and others on timely topics including product and software reviews, issues and trends in personal computing and "how-to" articles on sound, video, digital photography, etc. In addition, each issue includes the calendar of meetings, announcements on SIGs and other DACS events. *dacs.doc* has won numerous prizes over the years for its design and content.

Through its activities, DACS offers numerous opportunities to network both professionals and computer hobbyists. Our Special Interest Groups are an excellent way for members to both learn and share application or hardware knowledge. Any DACS member can form a special interest group on any topic where there is interest. Most SIGs meet in our Resource Center in downtown Danbury.

If you have concerns, requests, or suggestions regarding DACS or its programs, please contact [dacsprez@dacs.org](mailto:dacsprez@dacs.org). DACS officers and board members' phone numbers are listed on page 3 of *dacs.doc*.



The DACS Resource Center is in Ives Manor, Lower Level,  
198 Main Street, Danbury, CT 06810 (203-748-4330).



DANBURY AREA  
COMPUTER SOCIETY, Inc.  
Individual Membership Application

Personal Information

Name \_\_\_\_\_ Home Phone (\_\_\_\_\_) \_\_\_\_\_  
Address \_\_\_\_\_ Work Phone (\_\_\_\_\_) \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_  
Company \_\_\_\_\_ E-Mail: \_\_\_\_\_ @ \_\_\_\_\_

Billing Information

1 Year ( ) \$25.00 3 Years ( ) \$68.00 Automatic Annual Renewal ( ) \$22.50  
Please bill my: MasterCard ( ) Visa ( ) AMEX ( ) Check Enclosed ( )

Card # \_\_\_\_\_ Exp. Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

\* Under the automatic renewal program, DACS will bill your annual membership dues to the credit card of your choice each year. You may cancel the automatic renewal option at any time by calling the membership department at (203) 792-7881.

Make checks payable to DACS, Inc.

Please return this form to: Charles Bovaird, Treasurer  
4 Gregory Street  
Danbury, CT 06810-4430

Tell Us About Yourself

Please take a moment to answer the following questions. Answer all that apply.

Hours a week you use computers \_\_\_\_\_

Hardware: PC\_\_\_\_ MAC\_\_\_\_ desktop\_\_\_\_ laptop\_\_\_\_ palm\_\_\_\_ other\_\_\_\_\_

OPSYs: Windows\_\_\_\_ MAC\_\_\_\_ LINUX\_\_\_\_ other\_\_\_\_\_

Communications: Dialup\_\_\_\_ HI-Speed\_\_\_\_ WiFi\_\_\_\_ LAN\_\_\_\_ other\_\_\_\_\_

Applications: Office\_\_\_\_ Financial\_\_\_\_ other\_\_\_\_\_

Digital: Music\_\_\_\_ Photo\_\_\_\_ CAM\_\_\_\_ TV\_\_\_\_ other\_\_\_\_\_

Business: Corporate Employee\_\_\_\_ private employee\_\_\_\_ professional\_\_\_\_ business owner\_\_\_\_

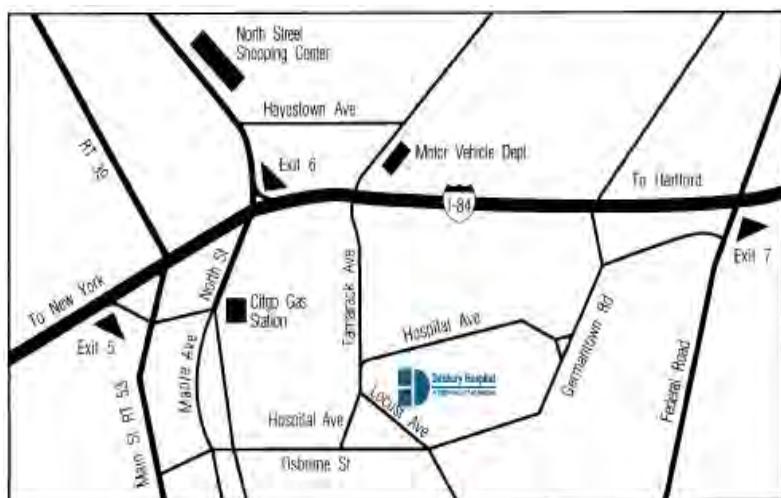
Office use only: Paid \_\_\_\_\_ Check # \_\_\_\_\_ Membership # \_\_\_\_\_

# Meeting Location

Danbury Hospital  
24 Hospital Avenue  
Danbury, CT

Traveling West on I-84, Take Exit 6. Turn right at exit ramp light at North Street. Turn right on Hayestown Avenue. Turn right on Tamarack Avenue. Follow Tamarack Avenue uphill to traffic light. Turn left at this light onto Hospital Avenue. Follow Hospital Avenue to appropriate visitor parking lot on right.

Traveling East on I-84: Take Exit 5. After stop sign, go straight ahead to intersection of Main Street and North Street. Go straight through onto North Street. Turn right off North Street to Maple Avenue. Go on Maple Avenue to Osborne Street. Turn left on Osborne Street. Turn left onto Hospital Avenue. Follow Hospital Avenue to appropriate visitor parking lot on right.



## West Mountain Systems, Inc.

Bruce J. Preston  
President

120 Old West Mountain Rd., Ridgefield, CT 06877-3603  
203.431.2920 / fax: 203.431.4543

Creative & personal design for individuals & small businesses



Web Site Design • Graphics • Digital Pre-Press

Tel: 203•746•5922

ac@annagraphics.com

# Kenneth Graff

Digital imaging - fine art printing  
Photography - Graffic Illusions

34 Ledgewood Drive  
Brookfield Connecticut 06804 graffic@bigfoot.com  
203-775-6667

## Telemark Systems Inc.

860-355-8001



Windows NT/2000/2003/Linux Networking  
Server Installation and Upgrades  
Custom Software Design and Development

Jim Scheef jscheef@telemarksys.com  
[www.telemarksys.com](http://www.telemarksys.com)



Arthur E. Crane  
Principal  
(860) 350-8848

## Capstone Services

HUMAN RESOURCE ADVISORS

18 Wanzer Hill Road • Sherman, Connecticut 06784  
Phone: 860-350-8848 • Fax: 860-350-8898

## Print Media

Allan Ostergren  
president

2 Crooked Furrows Lane  
Sherman, CT 06784  
Tel: (860) 210-0047  
[ostergren@worldnet.att.net](mailto:ostergren@worldnet.att.net)