

# Carlson UPdate

The Official Newsletter of Carlson Software, Inc.

Spring 2002

## Carlson Software Acquires C&G Software and Simplicity Systems

Carlson Software has acquired C&G and Simplicity, which allows us to reach a larger user base and offer an expanded variety of products for all budgets. The combined Carlson customer base is now over 12,000. C&G was founded in 1979 by Ed Cowherd, PLS and Dean Goodman, PLS. Dean has joined us and is now based in the Boston office. We've also opened an Atlanta office, whose staff include Don Morrison, John Van Meter and Burke Mitchell, all veteran C&G employees. Jeff Smith, PLS, handles tech support for C&G out of our Maysville, KY office. Simplicity began operations in 1983 and was originally based in East Grand Forks, Minnesota. Mark Floan of Simplicity has joined Carlson in our Maysville, KY office. C&G and Simplicity are now divisions within Carlson Software. All C&G and Simplicity Products will not only be maintained, they will be improved with new releases that borrow from the Carlson product line. SurvCADD and Carlson Survey will benefit from improved linkages to C&G and Simplicity.

**Products at All Price Levels:** As a result of this merger of companies, Carlson Software now offers a wider range of solutions to the survey market.

**Simplicity "Sight" Survey:** In the low-cost category, we offer Sight Survey Professional, from Simplicity Systems, priced

at \$399 (\$499 with hard-copy manual). This product includes full COGO, traverse reduction and CAD functions, with output to DWG and DXF. Over 4500 copies of Sight Survey and related software from Simplicity have been sold.

### Carlson Survey and Autodesk Field Survey:

The next step up is Carlson Survey, based on the AutoCAD 14 engine and priced at \$1295. Carlson Software also sells Autodesk Field Survey, which uses the AutoCAD 2000i engine and is priced at \$1395. Autodesk Field Survey is similar to Carlson Survey but additionally includes digitizing.

**C&G Office Solutions:** Then there are 3 survey products of C&G: C&G DOS (\$1495), C&G Windows (\$1795), and C&G AutoCAD (\$1595). Most new sales are on the Windows or AutoCAD platform, and C&G DOS can be upgraded to Windows or the AutoCAD version for \$795. Additional copies of C&G Windows and C&G AutoCAD are \$995.

**SurvCADD:** Finally, there is SurvCADD, which works with AutoCAD or AutoCAD Map and is priced at \$1000 each for the Cogodesign, DTM-Contour and Section-Profile modules. Additional copies of SurvCADD are half price or \$500 per module.

**Upgrades to SurvCADD and Carlson Survey:** Simplicity and C&G users have an opportunity for substantial savings if they up-



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grade to SurvCADD. Carlson Software is offering a special upgrade price of \$500 per module for copies of SurvCADD for all users of C&G and Simplicity. A \$200 discount on Carlson Survey is also provided. This offer will be good throughout 2002. It recognizes that all our users, from whatever source of software, are "in the family".

### There are now 3 offices of Carlson Software.

With the addition of the Atlanta office (seen above), we now have 3 major locations: Maysville KY, Boston, and Atlanta. The Maysville office is where most business is conducted, including sales, training and tech support. Boston is primarily a programming office, with occasional training conducted. Atlanta is the headquarters of the C&G Division.



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## HIGHLIGHTS

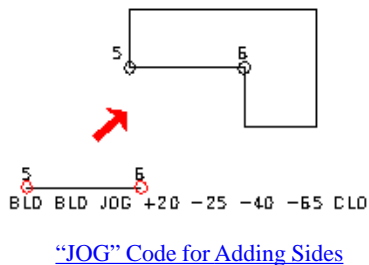
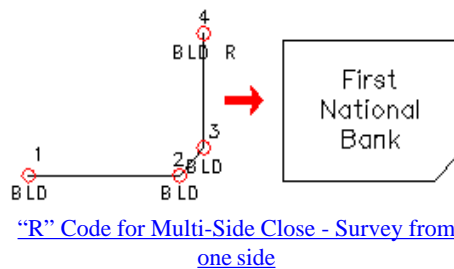
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# New SurvCADD XML Features

## New SurvCadd XML Ships April 15, 2002

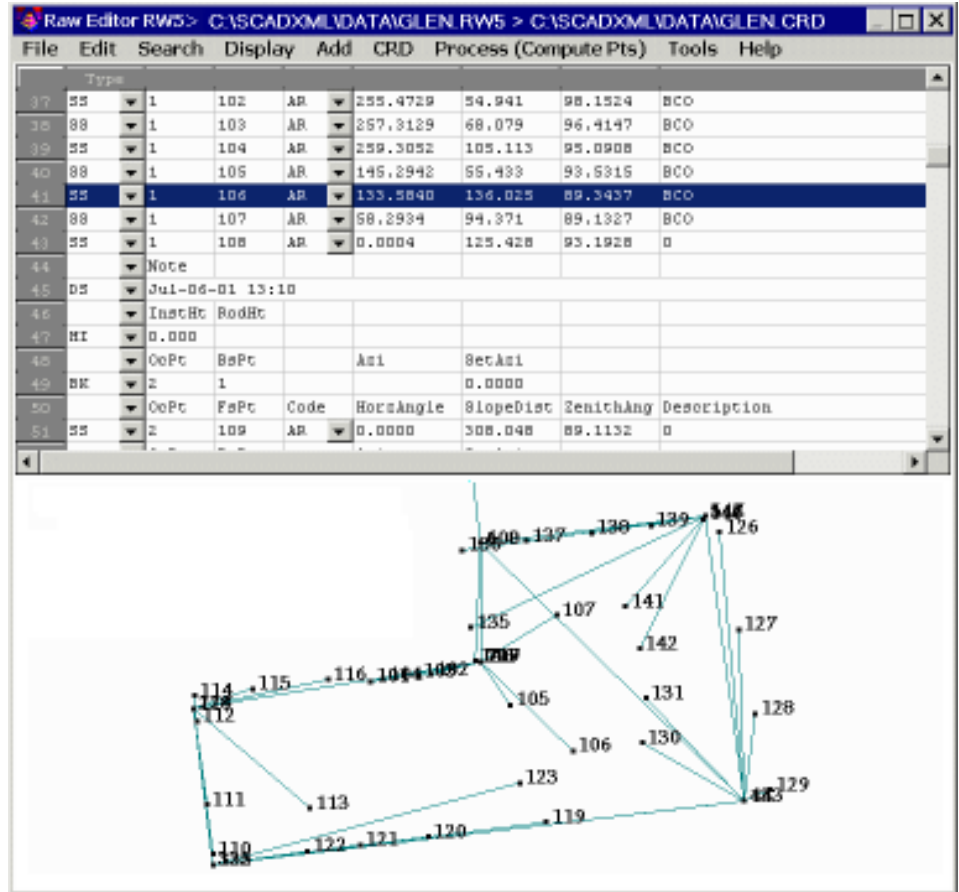
The new SurvCADD release, following SurvCADD CES, has been designated SurvCADD XML. This release is available April 15, 2002 and will be automatically shipped to all SurvCADD users on maintenance. The new SurvCADD includes over 100 new features and about 20 new commands. SurvCADD XML will also import and export the new "XML" file format for centerlines, profiles, TINs, grids and other design files. LandXML is fast becoming a standard for data file exchange for survey and civil engineering design work. Here are some of the highlights:

**For the surveyor.... Field-to-Finish** includes new field code options to auto-create building sides by taped measurement and to close multi-sided buildings by projecting the first and last sides.



**Edit-Process Raw File** now includes full 3D Least Squares and assists your editing by displaying a graphics window to show points and traverse lines in real-time. As you change an angle or distance on a particular traverse leg, for example, the entire traverse representation changes graphically.

**Avoid Crossing Contours:** Triangulate & Contour has been enhanced to prevent crossing contours even at the highest degree of smoothing.

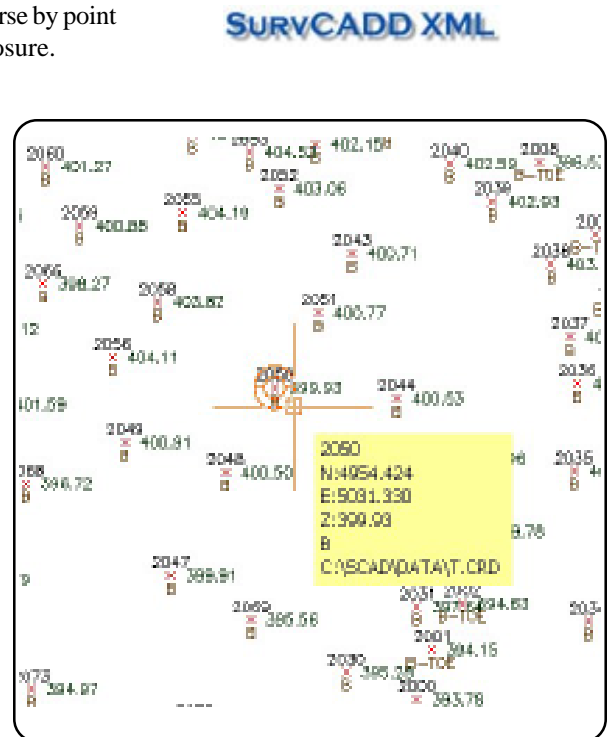


Edit Process RAW File now has Text/Graphic Window for Real-Time Graphic Reaction to Edit Changes

**Quick Closure:** Enter your traverse by point number sequence and obtain closure.

**CutSheets Made Easier:** Many improvements to cutsheets, including ability to specify a distance tolerance and survey field points at random and obtain automatic cut/fill results on points that fall within distance tolerance of design point list. The cutsheet report is fully configurable.

**New Point Snap!** You can always snap to a node, but now you can move your cursor across a busy area of points and see which point number is nearest. When you have the one you want, just pick and it automatically snaps to the node of the point.



Point Snap in Action



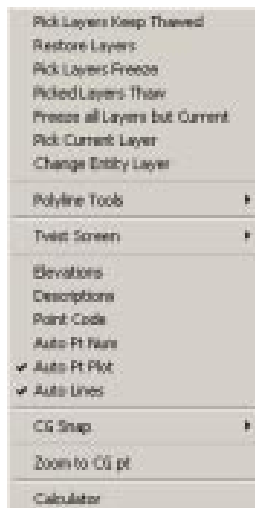
# New CGSurvey Features for AutoCAD 2000/2002

## General

- The C&G menu is now appended to the existing AutoCAD menu/toolbar as a “partial menu” so loading the CGSurvey application will not destroy your preferred menu setup.
- CGSurvey for AutoCAD 2000 will no longer use the Hardware Locks for protection. Each seat will be registered and protected through software.
- The old DOS editors for Raw Data, X-Sections, Templates and Map Check files have been replaced with a color-coded windows spreadsheet editor. When you go into the editor, all ACTIVE files will be displayed for editing. This is a multi-document editor.
- The Data Transfer program has been changed to a Windows 32bit program that can be run “Stand-alone”. It brings in data from collectors, and converts that data to a variety of formats (in addition to the standard C&G formats).
- Coming soon to CGSurvey for AutoCAD 2000/2002 and CGSurvey for IntelliCAD 2000: A 3D network least squares adjustment option. This program can handle Triangulation, Resection and Trilateration, as well as networks of traverses, and adjusts all traverses simultaneously. Full report of all error ellipses and residuals.



- In addition to the standard tools that were in the CG Pop Menu, we have added new tools from SurvCADD including layer management and polyline editing.



## Topo

- When you leave the Topo Settings dialog box, the topographic layers will be automatically created.
- When you create a new surface, or open an existing surface, the topographic layers will be created if they do not already exist.
- All the information (except the Curve Fit Type) is now saved in the TIN file, and will be set when you open a surface.
- Function to create a C&G TIN file from a mesh of AutoCAD 3D faces.
- Map Erase function to erase breaklines created by mapping codes.
- When working with a surface, the TIN entities shown will now pay attention to which layers are frozen, ON, OFF and thawed. For example, if you freeze the TIN layer, the TIN will not be shown (even though they are not yet AutoCAD drawing entities).
- Screen “regens” and “zooms” are now detected and the surface will be redrawn automatically without needing to use the Show Surface function. Since the PAN function works in real time, the surface will disappear until the PAN is complete. The scrollbars are not detected, and you will have to use the Show Surface function to redraw the surface.
- When a new surface is created, you will have the option to ZOOM to the extents of the surface (even though there are now graphic entities created).
- You now have functions to erase the following surface entities already written to the drawing file:

TIN

Main Contours

Intermediate Contours

Breaklines

Include / Exclude Boundaries

All of the above

## New Faces at Carlson Software



**Jeff Smith, PLS,** joins Carlson in our Maysville office and heads up technical support for the C&G Division.



**Steve Weber, PE,** is a graduate of Rose-Hulman Institute of Technology and has 25 years experience in Civil, Mining, Forensic Engineering & Software Development. He is VP of R&D at Carlson Software.



**Barbara Carlson** is a 2001 graduate of Miami University of Ohio with a degree in marketing. She will be taking on secretarial and office management functions.



L to R, Don Morrison, Bruce Carlson, Burke Mitchell, and John Van Meter. Don and John cover sales and tech support for C&G Products while Burke works with Dean Goodman on C&G development.

Not shown are the following new employees:

**Jason Hallett, PLS,** Director of West Coast Operations, Based in California.

**Ron Little,** Applications Developer, who joins the programming team, based in California.

**Mark Floan,** Simplicity division of Carlson Software, based in Maysville office.

**Johnny Barbour,** also based in Maysville office.



## Hot Features

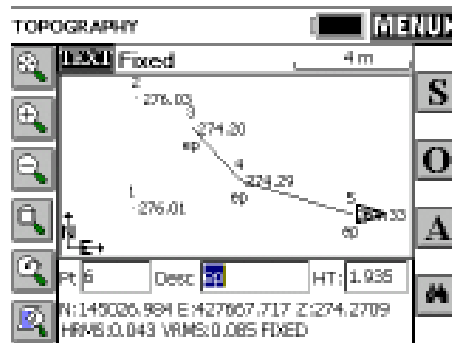
### Announcing the New SurvCE Windows CE Data Collection for Total Stations and GPS

SurvCE began shipping on March 1, 2002. It works on the "At-Work" CE computer, as well as the DAP and Juniper Allegro. Porting to the iPaq and Panasonic "Pocket PC" CE boxes is ongoing. Call for availability. SurvCE can be purchased direct from Carlson Software or from many Topcon and Leica dealers in your area.

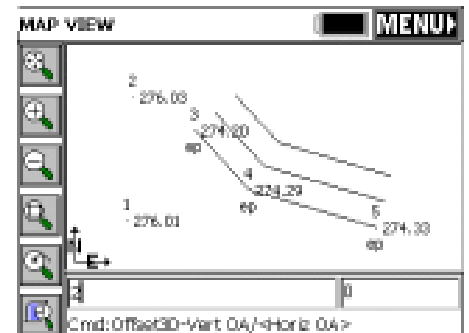
- Drivers for virtually all commonly used GPS and Total Station Equipment
- Convenient "Pull-Down" Menu Structure (no "scroll-to" commands)
- Points Plot on Screen in Real-Time as shot in the field
- Alternative Text or Graphic Screen Environments for Data Collection
- Configurable Enter Key for Read & Store, or Read first, Store next or even Store Last Reading, Read Next
- Powerful Command Line in the Map View (Graphics) for offsetting linework, importing drawings, freezing and thawing layers, turning entities into points for stakeout, and much more.
- "Ultimate", fast Slope Staking
- Hot Keys and Minimized Key Strokes for Field Work

JOB: test1		MAP		
File	Equip	Surv	COGO	Road
1 Sideshot/Traverse	6 Building Face Survey			
2 Stakeout Points	7 Remote Elevation			
3 Stakeout Line/Arc	8 Resection			
4 Offset Stakeout	9 Set Collection			
5 Elevation Difference	0 Set Review			

Fast Command Access



Points Plot in Real-Time



Powerful Command Line



### We Remember Evelyn

It is with deep sorrow that we announce the passing of Evelyn Miesch on January 6, 2002. Evelyn joined Carlson Software in 1987, and served as secretary, receptionist, office manager and bookkeeper. In her role as receptionist, she was the "voice" of Carlson Software. Over the years, she made many friends among our clients, dealers and partners. She took great pleasure in our successes, and always looked out for the best interests of our company—which is to say, placing the client's interests first.

She "ran a tight ship" and kept us all in line. She expected hard work and sacrifice from those around her, believing strongly in a good old-fashioned work ethic. But she was also that rare individual who touched the lives of everyone who knew her. Evelyn, we are all the better to have known you. The staff of Carlson Software offer this tribute to you, that we will dedicate ourselves all the more to the challenge of providing the highest quality software and service to our marketplace—and we will never forget you.

## Tsunami 2000 Ships

Tsunami—the most advanced CAD-based data collection on the market, with unique features such as “snap”-base stakeout. Now on the AutoCAD 2000i engine. Further simplified by use of icon menu for touchscreen computers. Improved drivers for robotic total stations. Reads and writes AutoCAD drawings. Upgrade Cost from Tsunami Release 14: \$495

Tsunami is optimized for the Panasonic Toughbook, a ruggedized, lightweight touchscreen computer. Currently, the most popular model is the Panasonic CF-M34, a 3.4 lb mini laptop with a 9GB hard drive and 64MB of RAM. Battery life is approximately 3 hours of continuous field use so each Panasonic purchased through Carlson Software comes with a kit including a battery charger, extra battery, pole or tripod mounting bracket, car power adapter, visor, carrying case, and a 32MB PCMCIA card for data transfer. The Panasonic with full kit sells for just under \$4000. New copies for Tsunami are priced at \$2495. For \$6500, the Panasonic Toughbook and Tsunami represent the pinnacle of data collection power for contractors, surveyors, and GIS professionals.

## Partnership Products

**Nikon AIMS:** Data collection, field-to-finish, contouring and drafting utilities built on the AutoCAD 2000 engine and complete with full accident reconstruction tools. Use skid mark lengths, car crush dimensions, etc. to compute travel speeds at points of impact. Complete library of all major car and truck types for impact computations. Ideal for police and sheriff departments. Users include New York City Police Department, the Utah State Troopers, the FBI, as well as many city and county police and sheriff departments.

**Sokkia MapVista:** AutoCAD engine-based survey package with contouring sold through Sokkia channels.

**Leica Site Manager:** AutoCAD engine-based CAD program designed to prepare files for the Leica Dozer 2000 and GradeStar programs for automated dozer and other heavy equipment grading. Plan views are “pln” format, TINs are “flt” format and grids are “grd” format. Sold through Leica channels.

**Topcon TopSite:** AutoCAD engine-based CAD program that prepares the files for the Topcon 3DMC program used for automated dozer and other heavy equipment grading. TINs are “TN3” format. Sold through Topcon channels.

**Autodesk Field Survey:** Full survey CAD program designed for and sold by Autodesk. Further expansion of Carlson Survey feature set with addition of digitizing and profiling and based on the AutoCAD 2000i engine. Priced at \$1395 and available, additionally, direct from Carlson Software. First released in April, 2001.

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Tsunami “Icon” Menu



SurvCE, Tsunami, Dozer 2000, and GradeStar all can utilize optional Light Bar

## Carlson Software Teams with Leica to offer Dozer 2000 and GradeStar MC

Carlson Software and Leica together have sold over 70 copies of Dozer 2000 into the mine industry, including sales in North America, South America, Africa and Australia. Dozer 2000 is an indicate-only grading solution, which now includes radio linkage of files to and from the office, and options for dozer monitoring and productivity analysis.

With the purchase by Leica of Laser Alignment of Grand Rapids, Michigan, the new partnership has developed GradeStar MC, a machine control grading solution designed for motor graders. GradeStar MC uses GPS (seen below) or the Leica TCRA1101 robotic total station to obtain blade position, and utilizing the Laser Alignment Sonic Master, drives the blade automatically to the correct slope and elevation. Projects have included federal highways, new runways at the Denver International Airport and large construction sites such as Walmarts. Grading files are prepared by contractors or surveying and engineering firms using SurvCADD or Leica Site Manager. Sales in Great Britain on dozers, for example, have made use of the optional Light Bar indicator, shown above. Contractors have experienced tremendous cost savings and efficiencies using GradeStar MC. Prime dealers include:

Servco in Costa Meas, CA ([mstrom@servco1.com](mailto:mstrom@servco1.com))

Laser Specialists of Olathe, Kansas ([laser5700@aol.com](mailto:laser5700@aol.com))

Rocky Mountain Laser of Denver, Colorado  
([sales@rockymtnlasers.com](mailto:sales@rockymtnlasers.com)).

