Data Collector Trade-In for new Surveyor 2 with SurvCE

December 16, 2016



This is a last-minute addition to Carlson's year-end specials…

If you have any old, broken-down, beaten-up, driven-over data collector laying around, it's now worth at least $900 toward

the purchase of a new Surveyor2 data collector with SurvCE.

Click here to request a custom proposal – prices will vary depending on the model of Surveyor 2 and the modules of SurvCE you need to have loaded.

Carlson Year End Specials – Sweet Suites & Bundles of Hardware

December 16, 2016
Carlson announced their year-end specials early this year and they have lots of great offerings for hardware and software… but we've done a little better!

Click here to browse all the discounts – pricing is good through 12/31/2016. And, don't forget! If you purchase new software through That CAD Girl you will be eligible for 12

months of our live and interactive webinars. You can see the list of upcoming webinars here.

If you've never attended one of our webinars, we'd love to have you attend as a guest for one of our upcoming sessions. Click here to send a request or to request a custom proposal or live demonstration.

Also (hint, hint) you may want to register for our newsletter because we *MAY* have other That CAD Girl exclusive specials to announce later this month!

2014 That CAD Girl Workshop – Time to Register!

December 16, 2016

That CAD Girl

It’s workshop and PDH time again!

We’re mostly following the same calendar as last year with a 1/2 day in Asheville and 2 full days in Statesville and Raleigh. Each event includes drinks, snacks, lunch, door prizes/giveaways and “day-of-show” pricing for Carlson Software including new seats and maintenance renewals.

Register for the Statesville events by Sept 30th or for the Raleigh events by Oct 31st for early registration discounts. Late fees will be applied to registrations within one week of each event.

Carlson Software Workshop in Asheville NC, Monday Nov 17th
View Announcement – ***Register Now!***

Statesville Workshop for Surveyors and Contractors, Tuesday Nov 18th
View Announcement – ***Register Now!***

Statesville Workshop for Engineers and Designers, Wednesday

Nov 19th

View Announcement – ***Register Now!***

Raleigh Workshop for Surveyors and Contractors, Tuesday Dec 9th

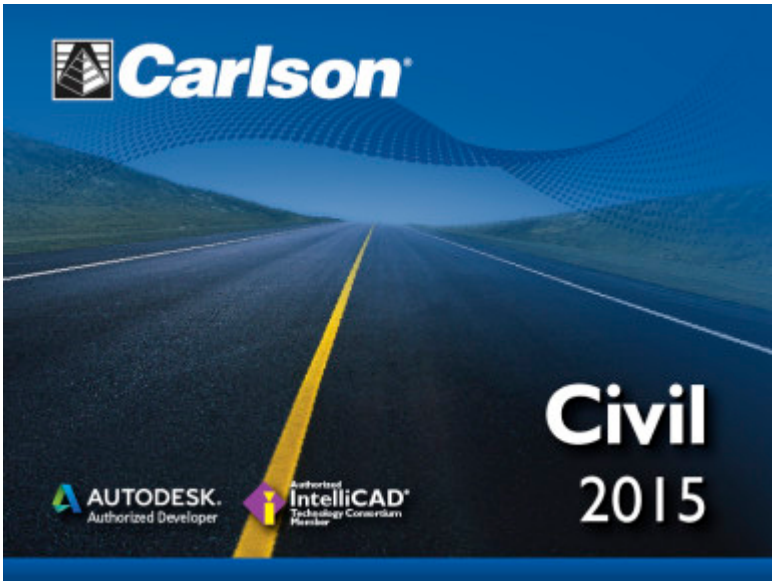
View Announcement – ***Register Now!***

Raleigh Workshop for Engineers and Designers, Wednesday Dec 10th

View Announcement – ***Register Now!***

That CAD Girl





That CAD Girl





That CAD Girl



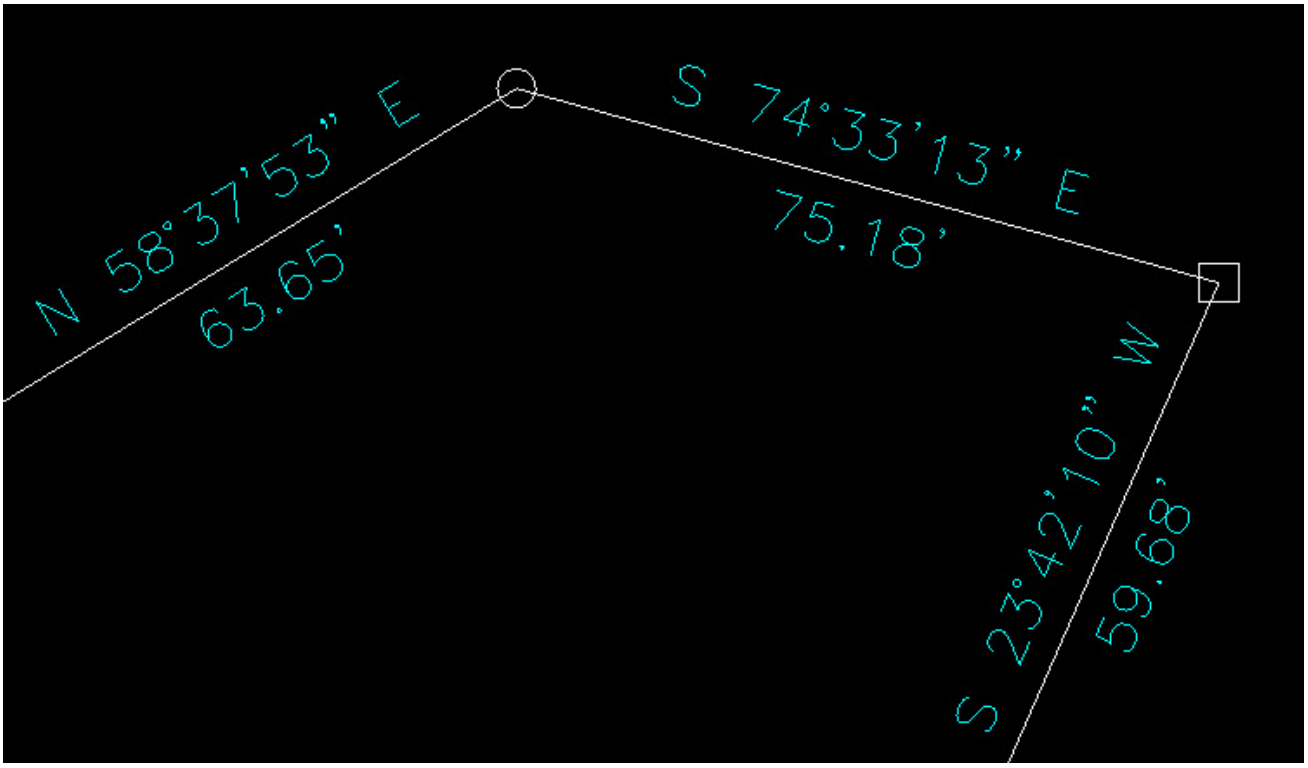


Carlson Tip of the Day… Wiped Out Property Corner Symbols

December 16, 2016

I get this question quite a lot and thought it would be a good topic for Tips of the day…

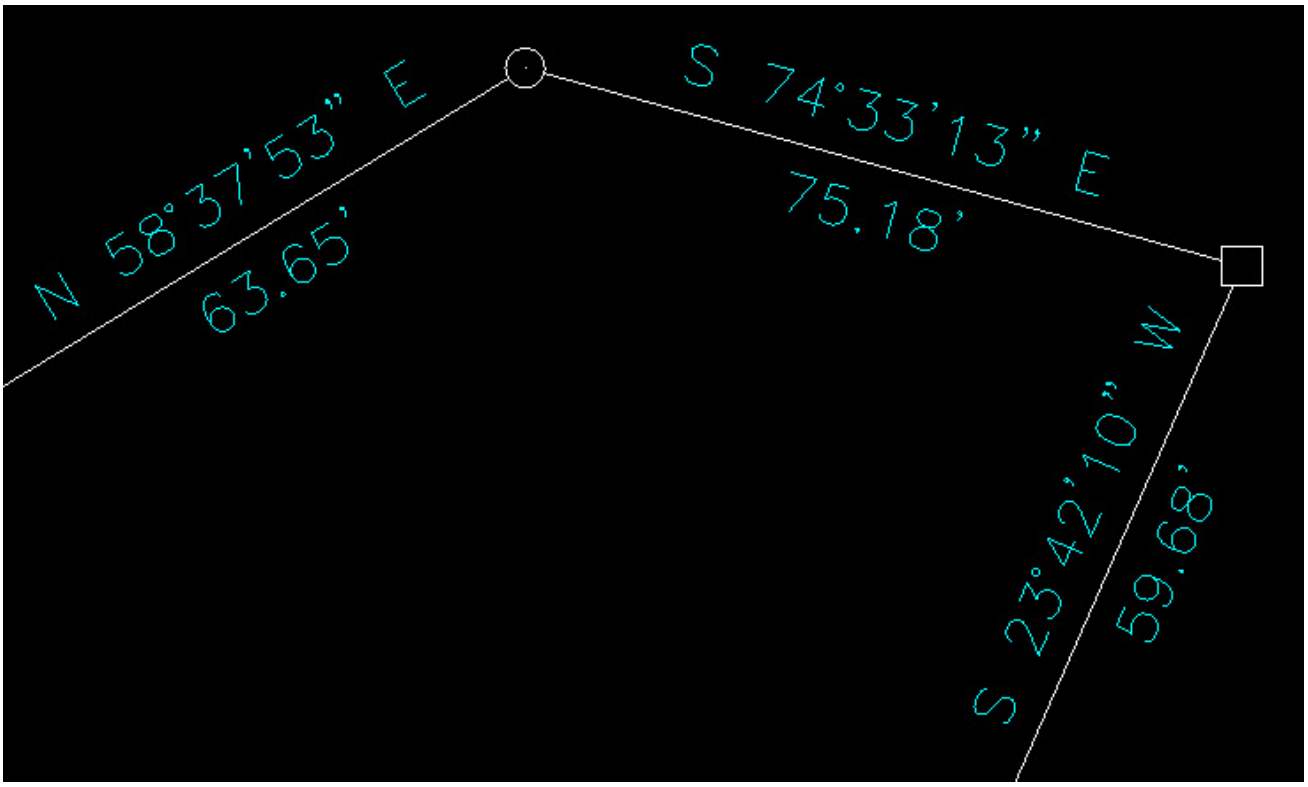
Problem: Lines or polylines of a boundary show up inside your open property corner symbols. See the image below for an example:



The additional problem is that, if you trim the lines inside the symbols to make it look cleaner, you're actually modifying the length of property lines so the distances from corner-to-corner are no longer accurate.

Here's an alternative: You can download a modified set of

Carlson's point symbols that include a "wipeout" entity that hides the lines behind/underneath the open symbols instead of trimming them and changing the length of the lines. Using the new set of symbols, the same property lines and symbols look like those in the image below (notice that the distances of linework are unchanged):

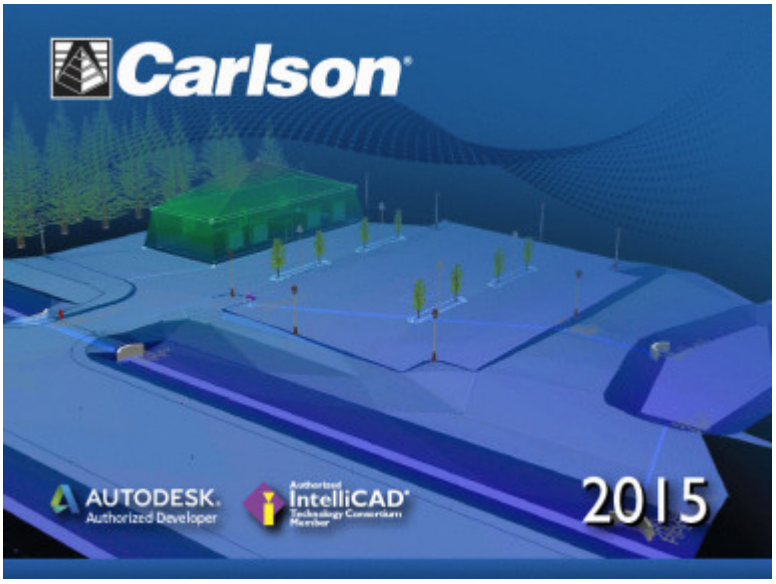


How to do this?

Here is the knowledge base article on Carlson's website that includes a ZIP file with the new symbol DWG files and instructions on where the files must be saved.

Carlson Tip of the Day… List of improvements in Carlson 2015 programs

December 16, 2016



General

- AutoCAD 2015 – Added support for this new version.
- IntelliCAD 8.0 – Direct support for 2013 DWG file format. Added 64-bit version. New features including support for dynamic entity reactors, layer states and improved ddvpoint interface.
- Google Earth – Added support for exporting 3D Faces.
- Import 3D View Model File – New command to create drawing entities from a 3D model file.

- Export 3D View Model File – New command to create a 3D model file from selected drawing entities.
- 3D Model Library – New command to prepare the 3D models to use in the 3D Viewer commands.
- Toolbar Manager – New command to save status of toolbars and allow migrating toolbar settings between versions.
- File Selection – Added list of subfolders within current folder and button to move up a folder level. Added option for warning when selecting a data file that is not within the current project folders.
- Textures – Added 40 new textures for 3D viewing.
- Settings File Manager – Added function to compare two settings files and report differences.
- Leader With Text – Added option for horizontal tick and option to create with Mtext.
- Join Nearest – Added filters for common colors and linetypes.
- Join Polyline By Trace – New command to join linework into a polyline with prompts at intersections

Survey Commands

- Field To Finish – Added special pipe feature coding with ability to create pipe network (.sew) file. For tree feature coding, added option for drip as diameter instead of radius, added option for solid circle for trunk and option for relative tree size for the symbols. Added control for separate layers for the point attribute block and point node. Added new AFIT special code for making a curve tangent through a series of three curve points. Added method for dynamic templates with variable horizontal and vertical offsets by using the OH and OV special codes. Added settings file default distinct point layer prefix/suffix. Added separate text size settings for attribute text labels and point block attributes.
- SurvNET – Added error report for individiaul observations to track down blunders. Added import for TDS GPS vectors.
- Edit Process Level Data – Added support for processing with zero horizontal distances.
- Carlson Cloud – New command for communicating with SurvCE for sending messages, data files and crew

locations.

- Report Distance Scale – Added methods for grid/ground factors on-the-fly in addition to a fixed factor.
- 3D Transformations – Added 3D coordinate transformations.
- Point Group Manager – Added method to create point group by offset distance from alignment polyline.
- Move Point Attributes With Leader – Added controls for attribute order and ability for curved leaders.
- Import Text/ASCII File – Added method import from text with fixed widths and method to use inclusion/exclusion perimeters.
- Legal Description – Added method to report station/offset using a reference centerline. Added method for reporting with geodetic mean angle and geodetic distances.
- Cut Sheet – Added method to get station/offset from the point description coding. Added field for design point description.
- Offset Points By Interval – New command to create offset points along an alignment.
- Label Coordinates – Added options to include a description, to use Mtext, to draw the labels at an

angle and option for mleader.

- Draw Legend – Added method to put each symbol or a specific layer.

Civil Commands

- Draw Profile – For paper space profiles, added method to use an existing layout as a reference template for the new layout. For the horizontal label box, added option for horizontal text in addition to vertical. For pipe profiles, added settings to label inverts by left/right order, added option to draw cutoff style pipe extensions, added option to create labels as MText, added option for flow arrow in middle of pipe, new option for labels above the pipes, added justification settings per label, added setting for separate layer for pipe thickness than pipe profile and option to connect rims with a polyline for a simple surface profile. For Label Line/Point crossings, added option to label elevations at crossings, added method for labeling GIS attributes, added method to label points of selected descriptions within offset

tolerance, added option to label CL deflections and added option to avoid label overlaps. Added special CL stations for break point station/elevation labels plus new prefix/suffix settings. For EOP profiles, added new break point and EOP leader style to the start of the labels, added option to label ground profile on road EOP profiles and added controls to select which profiles are EOP, road and ground. For the manhole name within circle option, added setting to put the name and number on separate lines and added the option to auto shift the labels to avoid overlaps.

- Draw Sections – Added option to label cut/fill volumes per station. Added separate settings for pipe crossing layers for decimals on pipe size, offset and elevation.
- Draw Plan View Sheets – Added option to set station range to draw.
- Input-Edit Centerline – Added Fit Curve method to apply speed table to all PIs in centerline.
- Input-Edit Profile – Added method to apply speed table for vertical curve lengths to all PIs in profile.
- Label Station/Offset – Added method to use a TIN or grid surface for the elevation reference.
- Draw Lot Setback – Added method for separate corner

side setback amount.

- Move Spot Elevations – New command to move spot labels and update elevation to new position on reference surface.
- Line Of Sight Viewshed – New command to calculate line-of-sight from a point and eye height on a surface.
- Draw Spot Elevations – Added option for label only and option to pick an entity instead of a point.
- Cut/Fill Labels – For points method, added more options like separate layers for existing and design. For the TIN method, added options for deep cut/fill labels and option for marker symbol.
- Smooth Polylines – Added method to smooth polyline between selected points.
- Triangulation File Utilities – Added function to color TIN within inclusion perimeter.
- Road Stripe Library – New command to setup named sets of road stripes with offsets, colors and styles.
- Draw Road Stripes – New command to draw linework for road stripes.
- Linear 3D Object Polylines – New set of commands to manage alignment polylines for 3D Viewer commands for linear 3D features such as fences or guard rails.

- Label Profile On Centerline – Added label position by left/right in addition to above/below. Added prefix/suffix and station interval settings.
- Offset 3D Polyline By Grade Table – New command to offset a 3D polyline using the distances and slopes from a template grade table.
- Road Network – Added settings for station range to process for each road.
- Mass Haul Analysis – For borrow pits, added offset from road to account for offset travel time.
- Sections From 3D Polylines – New command to create cross sections from 3D polylines.
- Surface 3D Viewer – Added option to show contours. Added functions to edit triangulation by swapping edges, adding breaklines, removing points, removing triangles or editing point elevations.
- Surface 3D Flyover – Surface model is kept in sync with any edits in CAD so that the 3D view is automatically updated. Added method to add models to the scene by screen picking plus the ability to pick models in the scene to edit properties (location, rotation, scale). Added function to record a movie. Added method to map textures by color and method to scale textures. Added

run view mode for detached from moving vehicle. Added option to show contours. In pick mode, display real-time coordinate and elevation for mouse position on surface.

- Motion 3D Viewer – New command to assign path polylines with speeds to 3D models and the camera.

Hydrology Commands

- Design Detention Pond – New command with all steps for detention pond design plus support for multiple rain events.
- Pipe Culvert Design – Added method for tailwater by channel or discharge rating and added overtopping analysis.
- SCS Rainfall Library – New command to define an SCS data reference library for rain events.
- Rational Rainfall Library – Added import of IDF tables from comma separated text files.
- Collision Conflict Check – Added support for checking unlimited pipe networks and using the report formatter.
- Sewer Network Design – Added option for junction loss

for pipe connections including laterals. Added method for tailwater at each outlet. New method to set symbol rotation by screen pick. Added graphic preview during .sew file selection.

- Lateral Design – Allow for multiple lateral connections at manholes.
- Identify Pipe Polylines – New command to ID or list pipe data assigned to 3D polylines.
- Import Network From 3D Polylines – Added method to control order of names by design order, elevation or polyline direction. Added method to set rim elevation by depth.

GIS Commands

- Label GIS Point Data – New command to create text labels or block with attributes for selected GIS attributes.

Field Commands

- Drivers: Upgraded many drivers from the SurvCE updates.

Geology Commands

- Define Mining Model – Added Mine Model collection of surfaces for modeling only mineable strata already adjusted for recovery, roof/floor gain/loss and minimum parting. Renamed “Pre-Calc Model” to “Geologic Model”.
- Geologic To Mining Model – New command to adjust a Geologic Model to make a Mining Model.
- Drillhole Database – Added support for MS Access .accdb format.
- DHDB – Added drillhole database import/export to DHDB format.
- Import From Coal Section – New command to create pit/channel samples from coal sections.
- Configure Section Info – Added method to set folder for section drawing to allow storing the section info on a server.
- Import/Export Coal Sections From Text File – New commands to import/export coal sections from/to text files.

- Grid Files – Added option to store .grd files as binary to improve read/write speed.
- Grid File Utilities – Added method to call other GFU macros and pass parameters from another macro. Added sin() and cos() functions for grid math. New dialog interface including dialog for creating IF statements. Added 3D window to show grid while modified.
- Draw Geologic Column – Added method to draw in 3D with strata sections sized based on grade parameters. Also added 3D draw method as 3D lines. Added method to label grade names and added separate layer settings for attribute labels. For labels in 3D, added options for rotate labels vertical and draw label leaders. 3D Viewer Window now shows 3D text generated by Geologic Column.
- Drillhole Report – Added method to report grades for each strata.
- Drillhole Core Images – Added method to draw the report to the drawing and added option for labeling depth or elevation.
- Draw eLog – New command to draw graph of selected attributes from an eLog LAS file.
- Create Drillhole from eLog – New command to create

drillholes with strata classification using the eLog paramters.

- Trim Isopach Within Fault Zone – New command to isopach elevations and break contours at fault zones.
- Draw Fault Labels – New command to label fault deltas.
- Draw Fault Symbols – New command to draw +/- symbols for faults.
- Apply Faults To Grid – Added method to handle thrust faults. Added method for processing multiple grids at a time.
- Surface Mine Reserves – Added Adjust Pits Manager for adjusting pit perimeters with real-time quantity updates.
- Draw Grade Boundary – New command to draw boundary polylines around area with specified grade.
- Block Model Statistics – Added min/max/average elevation and depth to the report. Added level # to report name.

Surface/Underground Mining Commands

- Ribbon – Added a mining ribbon for running with AutoCAD 2012 and higher.
- Import Pit Points – Added method for user-defined input

file formats.

- Import Polyline File – Added method to draw 3D polylines from sequence of top/bottom points for blast holes.
- Label Property Lines – Added option to label owner or id labels and added setting for label layer.
- Surface Equipment Timing – Improved calculation speed by 25%. Added method to use table of production targets with variable equipment usage to adjust to meet the targets.
- Underground Timing – Added option for transparent hatching and for buffer hatching.
- Dozer Push – Added support for push cut area by closed polyline. Added method for reporting single, average push. Added option to keep existing polylines, to draw centroid symbol and to label total push distance. Added settings for label text size, layer, style, decimals and prefixes.
- Regrade Backfill – Added bench option to cross section regrade design.
- Range Diagram – Added dimensions for all angles and distances. Added options to output final profile and to output parameters to sequence file.

- Design Ramp Profile – New command to create a ramp profile between two surfaces.
- Ramp Bench Polyline Generator – New command to design bench pits using polylines.
- Edit Dragline Sequence – New command to edit the steps for pit cuts.
- Make Solid From Points – New command to create a solid model from a cloud of points.
- View Solid – New command to view a solid model in the 3D viewer.
- Draw 3D Mine Model – Added method to make model from coal sections and pillar/perimeter polylines.
- View 3D Surface History – Added support for displaying TINs.

Construction Commands

- Define Layer Target/Material/Subgrade – Added support for up to 7 subgrades.
- Color TIN By Layer – New command to color the surface TIN using the color assignments in Define Layer Target.
- 3D Drive Simulation – Added method to apply textures to

design layers in addition to colors for viewing in 3D.
- Tag Segments To Skip Linear – New command to tag polyline segments to skip for material linear quantities.

CADNet Commands

- Merge Raster Files – Added method to automatically select control points.
- Import SketchUp File To Drawing – New command to create drawing entities from a SketchUp file.
- Import PDF File – New import engine with ability to use layers for PDFs with layers.
- Drawing to 3D PDF – New command to create a 3D PDF from selected drawing entities.
- 3D Viewer to 3D PDF – New command to create a 3D PDF from a 3DX file from the 3D Viewers.

Point Cloud Commands

- Faro – Added direct import method uses Faro toolkit.

- E57 – Added support for importing industry standard e57 format.
- PLY – Added import for PLY format.
- LAS – Added method to use LAS classification for coloring and selection.

Data Conversions

- 12D – Added import and export for pipe networks plus support for some more entity types.
- Canada – Added support for NTv2-NAD27-83
- Geoids – Added support for Canada CGG2010 and CGG2013n83, Sweden 08_rh2000, Sweden 08_rh70, Poland 2011 and Georgia 2012
- Iowa – Added projections for Iowa Regional Coordinate System
- Ireland – Added national grid projection.
- KOF – Added function to draw linework from KOF files.
- MDL – Added support for binary data within FSC file.
- Norway – Added support for N2000 format.
- SketchUp – Added import for SketchUp models in Surface 3D FlyOver

- SurvCE – Added import for points with photos in Google KML format as created by SurvCE

Carlson SurvCE 3.0 and SurvPC 3.0 Released

December 16, 2016
From Carlson's website:

> *Featuring hundreds of additions and improvements, Carlson SurvCE 3.0 supports the widest range of popular and new release RTK GPS and conventional/robotic total stations of any other data collection software on the market.*
>
> *SurvCE 3.0 has been released and is now ready for download. Constantly being upgraded, SurvCE features an optional*

icon-based interface and new Cloud-based messaging, file transfer, NGS monument recall, simplified stakeout methods and powerful GPS measurement averaging and blunder detection in the field (with accuracies in-between RTK and post-processing).

The Carlson SurvCE 3.0 upgrade is offered for just $150 for Carlson customers already using SurvCE 2.0 and above. The price to purchase SurvCE remains the same as it has since 2007.

Literally 100s of enhancements have been built into SurvCE 3.0.

Click here for SurvCE 3.0 Features

Click here for SurvCE 3.0 Screen Shots

Click here for SurvCE 3.0 System Requirements

Click here for SurvCE 3.0 Supported Hardware

Click here to purchase and also, **sign up here for our newsletters** to be notified of upcoming hardware and software special discounts!

Carlson Software End of Year Specials

December 16, 2016
Last week Carlson announced their end-of-year specials for 2012. This year's offerings include steep discounts on Carlson Civil Suite, Survey with embedded AutoCAD, Takeoff and Survey.

All discounts will end at noon on 12/31/2012.

As with all of my pricing, I'm prohibited from advertising my actual lowest prices **so call or email for Coupon Codes** for further discounts.

$2,795 for Carlson Civil Suite (includes one year of maintenance) – Retail price is $3,954.50

$2,295 for Carlson Survey 2013 with embedded AutoCAD – Retail price is $2,995

$5,000 for Carlson Takeoff 2013 with IntelliCAD – Retail price is $9,000

$6,500 for Carlson Takeoff T6 (2013) with embedded AutoCAD – Retail price is $9,000

$875 for Carlson Survey 2013 with IntelliCAD and one-year Maintenance for anyone who already owns SurvCE, Fast Survey or Triton. A valid serial number is required prior to purchase. Retail price is $1,754.50.

Carlson Software Self-Study Manuals

December 16, 2016

In order to reduce the amount of time I've been spending in online training, I'd been considering putting together Carlson Software training manuals. But, in order to truly offset the majority of the training I do, the first book had to be more than a standard software training manual that covers a broad range of topics.

So, I've just completed and started shipping the first 2 books that I'm calling **Self-Study Manuals**. They will be a great substitute for training for beginning users of Carlson Software and also as "fill-in-the-blanks" training for more experienced users. The lessons are very detailed, down to every pick and click. You do not even need to know AutoCAD or IntelliCAD to complete them. I think you will find them very beneficial if you're new to Carlson or even to help bring your field crew up to speed as office help.

At this time, there are 3 lessons available: **Carlson**

That CAD Girl

Configuration and CAD Settings (about 0.5 hours of instruction), **Getting Started with Points for Survey or Civil** (about 4.5 hours of instruction) and **Field to Finish** (about 6.5 hours of instruction). I've combined the **Carlson Configuration and CAD Settings** **and** **Getting Started with Points for Survey or Civil** into the first book and the **Field to Finish** is a separate book. Additional books are on the way… some will be detailed, self-study manuals and others won't. I will be focusing on the ones that most closely follow the demand for training.

The books can be purchased separately or as a **bundle from my online store**. Introductory pricing is available through the end of 2012.

View a sample of the Getting Started with Point Self-Study Manual here

View a sample of the Field to Finish Self-Study Manual here

Carlson Configuration and Settings

Approximately 0.5 hours of instruction

When first launching Carlson Software, you can make changes to the configuration and options that will apply to the current and future drawing sessions. Some of the settings and options are specific to Carlson Software and some are specific to AutoCAD® or IntelliCAD®.

Part 1 of this lesson contains Carlson Software-specific settings and is applicable to anyone using Carlson with either an AutoCAD or IntelliCAD platform.

Part 2 contains AutoCAD-specific settings.

Part 3 contains IntelliCAD-specific settings.

Appendix A explains how to use the Project Folder method of Project/Data File Setup as an alternative to the Drawing Folder method.

Appendix B explains the use of Carlson Quick Keys and how they interact with AutoCAD and IntelliCAD command Aliases.

Carlson Survey Getting Started with Points

Approximately 4.5 hours of instruction

This lesson starts by loading a configuration file with recommended settings and options for the program. We will also open a few toolbars that may be needed for the exercises.

We will then start a new project and new drawing from a text/ascii file and will draw the points with the Draw-Locate Points command. Various point editing and reporting commands and features will be used. Some of these features include: Point Groups, Tag Non-Surface Points, Translate Points and Rotate Points. In wrapping up Part 1, we will export points to a new text/ascii file and also export the point data to a LandXML (.xml) file. Please note that Carlson's Field to Finish is covered in a separate lesson.

Appendix A covers, as a separate exercise, the new Esri-powered command Search Published Control that allows you to search published control data that is freely available on the National Geodetic Survey (NGS) website and then store the

retrieved information to the active Coordinate File.

Appendix B provides a separate, in-depth, explanation of the Carlson Point Block entity and how its Symbols and Point Attributes (Point Number, Elevation and Description) are controlled with respect to Layers.

Carlson Field to Finish

Approximately 6.5 hours of instruction

This lesson starts by loading a configuration file that contains recommended settings and options for the program. We will also open a few toolbars that may be needed for the exercises.

Part 1 provides an overview of the Field to Finish feature of Carlson® Survey. We will start a new project and new drawing from a text/ascii file. The text file is very similar to the one used in Lesson 2a – Getting Started with Points except that it has been slightly modified to include special

linework coding. We will use Field to Finish so that the points, symbols and linework are automatically generated and drawn on their proper Layers. Field to Finish will also create Point Groups and tag some points as Non-Surface so they can be easily excluded when we build a surface model.

In Part 2 we will create a new Field to Finish Code Table that includes a variety of Codes that can be used to create Symbols, 3d and 2d Linework.

In Part 3 we will simulate collecting more than 70 survey points in the field and then processing them with the Field to Finish Code Table created in Part 2. With this Code Table, we will collect points for features such as roadways, buildings, trees and property corners. We will also demonstrate the use of Special Codes for labeling descriptive information such as ½” Iron Pipe
and 12” Oak Tree.

In Part 4 we will use the Separate Attribute Layers functionality within Field to Finish so that Symbols and Descriptions for points we process can be used to label features on printed plans.

In Part 5 we will go through the steps required take some of your existing point files to make a new Field to Finish Code Table for your company.

Carlson Geoid12 files for SurvCE

December 16, 2016

For those who have been waiting, patiently or not, for a Carlson update that will allow you to create a Geoid 2012 file for your Carlson SurvCE collector – here is the update from Carlson.

Carlson SurvCE and Field to Finish Training with Jeremy Taylor PLS

December 16, 2016
Join us on Monday, May 7th when Jeremy and I will be presenting this part-field and part-office training with SurvCE.

Topics for the day will include:

- Set up and configuration of SurvCE with your equipment
- Managing data files and import/export options between the field and the office
- Field collection for boundary, features and topo including GIS collection
- Working with the Map Menu to import and export .dwg, .dgn, .mxd and shapefiles
- Stakeout techniques

That CAD Girl

- Overview of Field to Finish

Register Here

SurvCE and Field to Finish Training Announcement