End of Year Workshops – New format for 2013

After several years of the same format for our end of year workshops, we've changed it up a bit this year.

For the first time, we will have one full day in both Statesville and Raleigh NC dedicated to Surveying and GIS topics and an additional day focusing on Civil and Hydrology topics. Each day will also include a unique presentation of the popular CAD Tips & Tricks session that, hopefully, sends everyone home with something they can use the next day.

In addition, we're conducting 1/2-day events in Wilmington and Hendersonville (Asheville area) covering a variety of topics.

Each full-day class will give NC licensed surveyors and engineers 8 PDH credits and the 1/2 day events are eligible for 4 PDH credits. All events include lunch, software pricing specials and giveaways.

November 11th, Hendersonville NC – $49 for 4 PDH credits
Download Hendersonville (Asheville) Announcement Here
Register for Hendersonville (Asheville) Workshop Here

November 12th, Survey & GIS Workshop, Statesville NC – $99 for 8 PDH credits
Download Statesville Survey/GIS Announcement Here
Register for Statesville Survey/GIS Workshop Here

November 13th, Civil & Hydrology Workshop, Statesville NC – $99 for 8 PDH credits
Download Statesville Civil/Hydro Announcement Here
Register for Statesville Civil/Hydro Workshop Here

December 9th, Wilmington NC – $49 for 4 PDH credits
Download Wilmington Announcement Here
Register for Wilmington Workshop Here

December 11th, Survey & GIS Workshop, Raleigh NC – $99 for 8 PDH credits
($89 registration thru 10/31/2013)
Download Raleigh Survey/GIS Announcement Here
Register for Raleigh Survey/GIS Workshop Here

December 12th, Civil & Hydrology Workshop, Raleigh NC – $99 for 8 PDH credits
($89 registration thru 10/31/2013)
Download Raleigh Civil/Hydro Announcement Here
Register for Raleigh Civil/Hydro Workshop Here

That CAD Girl Newsletter | September 2013

Click here for the September 2013 issue of my newsletter…

Professional Surveyor Magazine

– Assorted CAD Tips & Tricks

I’m a bit late pointing this out, but here’s my latest Picks ‘N’ Clicks article for **Professional Surveyor Magazine**

CAD Tips & Tricks

CAD Standards Manager 2013

Updated: Next live webinar will be on Wednesday, April 10th

You can sign up here: **https://www3.gotomeeting.com/register/859901974**

Sooo…. **This is pretty intriguing**.

Anyone who has attended one of my CAD Standards Round Table classes has heard me say, ***“To have an effective CAD Standard, you must make it easier to do things the right way than it is to do it the wrong way.”***

Well, I’m not finished with my research yet, but the **CAD Standards Manager** developed by **CAD Masters** may be just the application to make that happen. It can be installed on top of your AutoCAD-based programs to help organize your standardized layers, symbols, linetypes, dimension styles, etc. One of the best parts, to me, is that it supports multiple standards. If

you have a client that requires you deliver your work product to their particular standard, this program can accommodate that too.

You can check out a pre-recorded webinar demonstrating their 2013 release here or **download this flyer detailing the highlights of the program**.

Or, better yet, sign up for their next live webinar here: ~~https://www3.gotomeeting.com/register/621720174~~ **See Above**. It will be held on ~~Tuesday, March 12, 2013 from 10:30 AM – 11:30 AM PDT (2:30-3:30 PM ET)~~ **See Above**. Since this is a live presentation, you will have a chance to ask questions to see if the program will support your specific needs.

I have a simple request… If you sign up for the live webinar, please let them know you heard about it from **That CAD Girl**.

Workshops, Technology Days, Breakfast & Training – Oh My!

It's that time of year again… Early registration for our end of year workshops in North Carolina.

This year we will have day-long events in **Statesville** and **Asheville** in November and then in **Raleigh** and **Wilmington** in December. We have several new classes that have been developed in response to requests we received last year. Seats are limited and early registration discounts are available now.

In addition, we are also holding two Technology Days in

Charleston and **Myrtle Beach**, South Carolina. These October events are 1/2 day sessions that will cover Carlson Software and data collection offerings.

And, for those in **Wilmington NC** on October 10th – join us for a Free **Technology Breakfast** at the Cracker Barrel just off S College Road. The event is FREE but registration is required.

You can register or find out more about all of these events here.

Did you know… About the Flatten Command?

FLATTEN is an Express Tools command in AutoCAD and a standard command in IntelliCAD. It allows you to quickly convert 3d objects to a 0-elevation, flat version of itself.

Most of us in the civil/survey world have gotten frustrated when we've received a drawing from someone who used lines more than polylines and apparently snapped to everything in the drawing that had an elevation! The result is that you have lines drawn on a slope and with which it's nearly impossible to inverse distances or even perform simple drafting commands.

So, next time that happens, try the FLATTEN command and see if that helps get things back where they're supposed to be!

Did you know… about all the different selection methods in CAD?

Anyone who has used AutoCAD or IntelliCAD for any period of time will be familiar with a few of the selection methods available to you during editing commands… although you may not know the "official" name of the method.

When your Command: line prompted reads "Select Entities:", you can use the following methods to add entities to the selection set:

A **Single** selection is when you use a "Pickbox" to select one entity at a time.

An **Implied Window** selection is when you drag a rectangular area, from left to right, around the entities to be selected. This method will select any entities that are fully enclosed within the area. To force a **Window** selection, you can also type "W" at the Command: line when prompted to "Select Entities:". **Window** selections are indicated by the solid outline of the rectangle and a color shading within the rectangular area.

An **Implied Crossing** selection is when you drag a rectangular area, from right to left, around or across the entities to be selected. This method will select any entities that are fully enclosed or touch (cross…) the outline of the rectangle. To force a **Crossing** selection, you can also type "C" at the Command: line when prompted to "Select Entities:". **Crossing** selections are indicated by the dotted or dashed outline of the rectangle and a color shading within the rectangular area.

So, these are the ones you probably know about. But, what about these?

Again, when prompted to “Select Entities:”, you can do any of the following:

Hold the SHIFT-key down while selecting objects using **Single**, **Implied Window** or **Implied Crossing** selection methods will un-select any objects previously selected.

Type “P” at the Command: line to use the **Previous** selection method. This method will automatically select the same objects that had been selected for the most recent editing command. This obviously doesn’t work if the **Previous** selection set has been ERASEd from the drawing.

Type “L” at the Command: line to use the **Last** selection method. This method will automatically select the entity most recently added to the drawing. The entity must also be visible on the drawing screen in order to be selected.

Type “ALL” at the Command: line to use the **All** selection method. This method will automatically select all entities visible in the current space.

Type “F” at the Command: line to use the **Fence** selection method. This method allows you to drag a line (by picking points) across the entities to be selected. When picking the points for the **Fence**, the sketched line is dashed or dotted. This method is similar to a **Crossing** selection as it will select anything that touches the **Fence**.

Type “WP” at the Command: line to use the **Window Polygon** selection method. This method allows you to sketch an irregularly shaped area (by picking points) around the entities you wish to select. Any entities that are completely inside of

the non-rectangular area will be selected. This is simply a non-rectangular version of the **Window** selection method. **Window Polygon** selection areas are indicated by the solid outline and color shading of the irregularly shaped area.

Type “CP” at the Command: line to use the **Crossing Polygon** selection method. This method allows you to sketch an irregularly shaped area (by picking points) around or across the entities you wish to select. Any entities that are completely inside of the non-rectangular area or touching its outline will be selected. This is simply a non-rectangular version of the **Crossing** selection method. **Crossing Polygon** selection areas are indicated by the dashed or dotted outline and color shading of the irregularly shaped area.

If you have a complex selection set and need to un-select several entities, you may find it impractical (and frustrating) trying to un-select everything by using SHIFT+<select> to do so.

Another way to un-select a bunch of entities is to use the **Remove** selection mode. When prompted to “Select Entities:” at your Command: line, type “R” to change your Command: line prompt to “Remove Entities:”. Now, any entities you select, using any method, will be **Remove**d from the selection set. You do not have to hold SHIFT and you can use **Fence**, **Last**, **Window Polygon**, etc. to remove those items.

After Removing entities from the selection set, type “A” at the Command: line to return to the **Add** selection mode. This changes the Command: line prompt back to “Select Entities:” and you will once again be able to **Add** objects to the selection set.

Did you know… About the Change Space Command?

Some of us are old enough to remember life without the CHSPACE command… and what a great addition it was when the command was finally introduced to AutoCAD several years ago. And, with the release of IntelliCAD 7, it's now in that program as well.

CHSPACE is a command that allows you to move one or more entities from Model Space to Paper Space (or vice versa) very easily. In AutoCAD, the operative word there is "MOVE". You have to be a little careful because the command does exactly that: It MOVES it from paper to model or from model to paper. In IntelliCAD, you are given the option of COPYing the selected entities from one space to the other.

The command actually does more than just move or copy selected entities, it also scales the entities by the viewport scale so they're correct size-wise. For instance, let's say that you have a drawing in model space that's been rotated so that it more easily fits on a sheet of paper. Also in model space, you've inserted a North arrow. And, in paper space/layout view, you have inserted a title block at a scale of 1:1 (18″ x 24″, etc.). Inside of the title block, you've created a viewport you've scaled to 1″=40′.

For drafting purposes, it's desirable to have the North arrow in paper space to that it can be moved around and positioned outside the viewport. If you're in AutoCAD, the first step is to make a copy of the North arrow. If you're using IntelliCAD, this step isn't necessary. Then, while in paper space/layout view,

double-click inside the viewport to make it active. Type CHSPACE at the Command: line. Follow the various prompts within the command and Voila! Your North arrow is now in paper space and it's been scaled down by 40 times so that it fits properly on your title block.

Did you know… that you can print your CTB files?

Several years ago when I started my business, my first contract was as an outside CAD manager for a civil & land planning firm. In trying to document their pen weights, screening, etc. I found a utility available on Autodesk's website that allowed me to export all the values in a CTB file to a .csv file that could be opened (and printed) with Excel.

Here is the old Autodesk Knowledge Base article – it still works for anyone using AutoCAD-based programs version 2007-2008.

Unfortunately, I haven't been able to find a more current version of this utility until recently. Govert's Tools has a program called PlotStyleViewer. You can download it here.

In his words,

> *This inspired me to create a CTB/STB view/print application that works completely **independent of AutoCAD and Autodesk tools**! The program consists of just one executable file, there are no other exe's or dll's needed. It should work with CTB's/STB's from AutoCAD 2000 upto the latest version. The purpose of this tool is that you can **view** CTB's, **print** them*

*and **save as** text file that you can open in Excel etc.*

It’s a handy little utility and doesn’t seem to be limited to a particular version. Hope you get as much use out of it as I do.

Esri GIS Starter Kit for Carlson’s IntelliCAD Users – Repost

[This offer ended on 12/31/2013]

Since there’s a renewed interest in IntelliCAD with the improvements to 7.0, I’ll re-post this…

Those currently using Carlson with IntelliCAD are eligible for a FREE “GIS Starter Kit” from ESRI. The Kit includes:

- ArcGIS ArcView desktop software
- A copy of the book *A to Z GIS: An Illustrated Dictionary of Geographic Information Systems*
- A copy of *GIS Tutorial: Workbook for ArcView 9*, Third Edition
- A 10% discount for the ESRI Survey & Engineering GIS Summit ($325 – standard registration price)

To take advantage of the offer, call 1-800-GIS-XPRT (1-800-447-9778) and request the **Carlson-IntelliCAD GIS Starter Kit** and **please have your Carlson Serial Number available**.

You can read more about ESRI’s commitment to survey and

engineering services by visiting http://www.ESRI.com/engineering.