

Overstock Pricing Specials – Carlson Civil Suite and Survey/Civil Bundles

I've decided to try to clear out the Carlson Software stock that I have on my shelf right now. So, while they last, I have a few seats of the Carlson Survey/Carlson Civil 2011 bundles that were available last December and several Civil Suites that I am also selling at 2010 prices.

I'm not permitted to advertise the price, but you can call 919.417.8351 or ContactUs@thatcadgirl.com to find out more.

As of January 26th, I have 7 Civil Suites and 3 Survey/Civil bundles available at these prices. Check out our Carlson Pricing page to keep track of how many are left.

January 2011 – Upcoming Training

The classes listed below may be used for 2010 or 2011 NC PDH credit hours:

- Overview of Carlson Survey \$149 for 8 hours hands on training, includes lunch
- Surface Modeling with Carlson Software \$149 for 8 hours hands on training, includes lunch
- SurvNet & Least Squares with Donnie Stallings \$249 for 8

hours hands on training, includes lunch

Seats are limited so call 919.417.8351 or email ContactUs@thatcadgirl.com to reserve your seat today.

Please review our Training Policy [here](#).

That CAD Girl – January 2011 Newsletter

Our January 2011 Newsletter can be downloaded [HERE](#)

New Carlson Software Pricing

Since the Year-End-Special pricing on Carlson Software has now expired, see our new advertised Carlson Software Pricing [here](#). Please ContactUs@thatcadgirl.com or call 919.417.8351 to request our current price sheet (effective 1/1/2011).

Picks and Clicks: Dynamic

Blocks

This article originally appeared in the December 2010 issue of Professional Surveyor magazine.

Welcome to the first installment of this new column highlighting favorite AutoDesk, IntelliCAD, and Carlson Software features. My goal is to help you reduce your number of “picks and clicks” while using these pieces of software so you can be more efficient, saving time and money.

Because many of us are hanging onto our current software versions for as long as possible these days, I will try to avoid reviewing features that were released in “last week’s” version and will instead write about commands and features that have been around for at least a few years.

First: A little about my background and experience. My first CAD class was with AutoCAD 9 and DCA software as part of my Surveying Technology coursework in college. After graduating, I worked for various consulting, engineering, and surveying companies where I used mostly the Autodesk family of products: AutoCAD, AutoCAD Map, Land Desktop, and Civil Design with brief detours into the MicroStation, GeoPak and Eagle Point worlds.

It was during this time that I started teaching basic CAD and civil/survey CAD classes at local community colleges. I then joined a local Autodesk and Carlson Software reseller to help start and build their training division. In 2004 I stepped out to begin working for myself as That CAD Girl. I offer Carlson Software sales; training and support for Autodesk, Carlson and IntelliCAD; and associated consulting services while specializing in CAD standards development and surface modeling training. My website is at www.thatcadgirl.com. And my surveying column is now here!

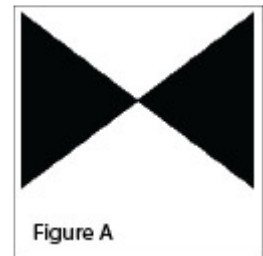


Figure A

Water Valve

(Figure A)

One of my favorite, fairly new AutoCAD features is Dynamic Blocks, which was first introduced in AutoCAD 2006. A Dynamic Block is simply a standard block that has been enhanced with additional functionality. You may have seen examples of complex Dynamic Blocks that allow you to change the size (by stretching) or the orientation (by mirroring) only pieces of a block without having to EXPLODE it. But, you can also save many picks and clicks by giving your existing blocks a facelift with some simple Dynamic functionality. Let's start with a standard symbol or block that most everyone will already have saved in a block library somewhere: a Water Valve.

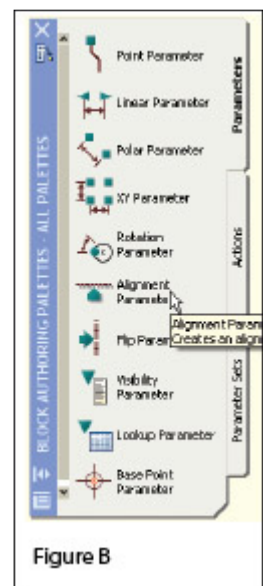


Figure B

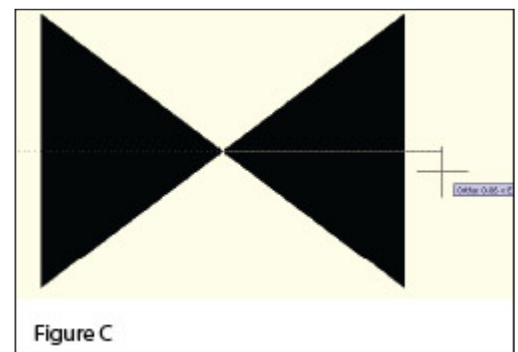
To use the standard version of this block in a drawing, we

usually have to:

1. Use the INSERT command to bring the block into the drawing.
2. Use a NEArtest OSNAP to position the block on a line representing a waterline.
3. Use the ROTATE command with the Reference option to align the block with the line.
4. Whew!

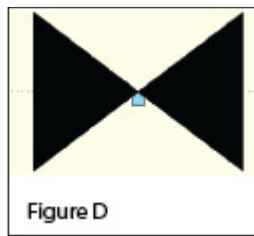
Two minutes (or less) in the Block Editor will eliminate steps 2-4 (**at right.**)

1. Insert the standard Water Valve block into your current drawing.
2. Left-click to select the block.
3. Right-click and open the Block Editor from the shortcut menu.
4. On the "Parameters" tab of the Block Authoring Palette, select the tool to create an Alignment Parameter. [**Figure B**]
5. The Command: line prompts you to, "Specify base point of



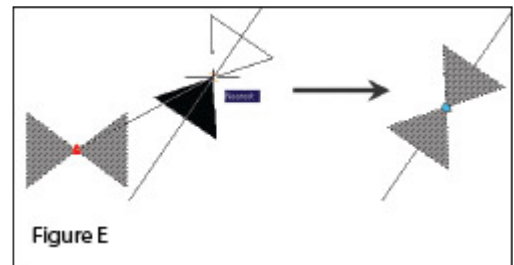
alignment or [Name]:". Use your INTERsection OSNAP to specify the insertion point for the block.

6. Next, you are prompted to "Specify alignment direction or alignment type [Type] <Type>:". [**Figure C**] Turn Ortho On and pick a point directly to the right of the insertion



point.

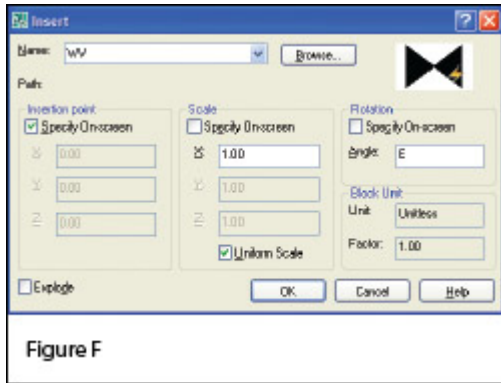
7. When finished, the block with its new Alignment icon will look like this in the Block Editor: **[Figure D]**
8. Pick the Close Block Editor button at the top of the screen and then pick “Yes” when prompted to save the block definition.



Using the Dynamic Block

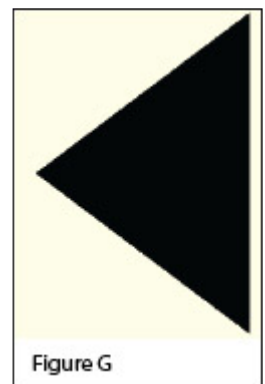
Once you are back in the main drawing screen, the original instance of the block will have been updated.

1. Left-click the block to see the new Alignment icon.
2. Left-click on the blue Alignment icon. This allows you to “pick up” the block and move it. **[Figure E]**



3. Drag the block on top of a line in your drawing that represents a waterline. You will notice that, once your crosshairs are positioned over the line, the block automatically aligns itself to the line, and, in addition, the NEArest OSNAP is enabled allowing you to position and snap the block directly onto the line.
4. Use the Insert command to draw additional copies of the block into the drawing. Notice that the thumbnail image of blocks with Dynamic parameters displays a lightning bolt icon so as to differentiate Dynamic Blocks from standard blocks. [Figure F]

Waterline Reducer

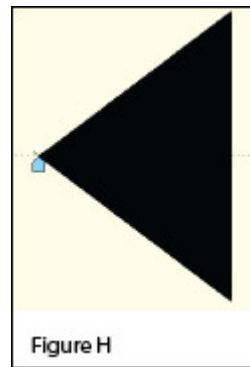


[Figure G]

Another often-used water-utility symbol that can benefit from

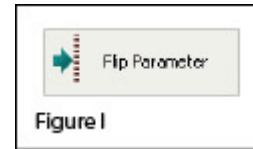
the addition of Dynamic properties is the waterline Reducer. This symbol is used to indicate a change in the size of a waterline. In addition to an Alignment Parameter, this symbol needs a Flip Parameter that allows us to easily mirror it to change its direction. Unlike an Alignment Parameter, adding a Flip Parameter to a block also requires that you add a second Dynamic Block component called an Action. Giving a block “flip-ability” requires a few more steps, but is still rather easy.

1. Repeat steps 1-7 as described for the Water Valve to insert the “Reducer” block into the drawing and add an



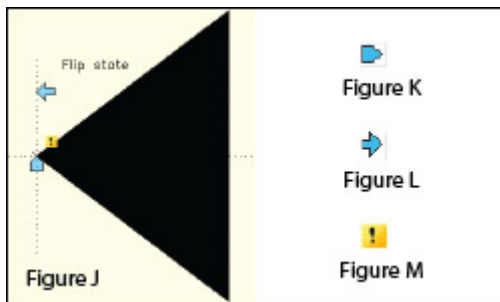
Alignment Parameter to it. The Reducer with its Alignment icon is shown at left: **[Figure H]**

2. Turn Ortho On.
3. Pick the Flip Parameter icon on the Block Authoring Palette. **[Figure I]**
4. The Command: line prompts you to “Specify base point of reflection line or [Name/Label/Description/Palette]:”. Use your ENDPoinT OSNAP to specify the insertion point for the block (use the same point as for the Alignment Parameter).
5. The Command: line next prompts you to “Specify endpoint of reflection line:”. With Ortho On, pick a point directly above the “Base Point” specified in the previous step. These two points define the “reflection line” for mirroring.
6. You are then prompted to “Specify label location:”. Pick a



point somewhere just above the Reducer symbol. The label reads, “Flip state”.

7. Use the MOVE command, with Ortho On, to slide the Flip icon above the block.
8. The Reducer [Figure J] with its Alignment [Figure K] and Flip icons [Figure L] are shown at right. A Warning icon [Figure M] is also displayed indicating a missing



Action component.

9. On the “Actions” tab of the Block Authoring Palette, select the tool to create a Flip Action. [Figure N]
10. The Command: line prompts you to “Select Parameter:”. Select any part of the Flip Parameter including the label, the Flip icon, or the Warning icon.
11. Next, you are prompted to “Specify selection set for action. Select Objects:”. Select the Flip icon and all entities that make up the block/symbol.
12. You are then prompted to “Specify action location:”. Pick a point somewhere near the “Flip state” label. The label

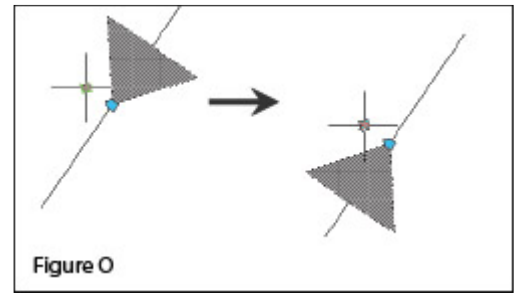


has a lightning bolt icon and reads, “Flip”.

13. Pick the Close Block Editor button at the top of the screen and then pick “Yes” when prompted to save the block definition.

Using the Dynamic Block

As before, once you are back in the main drawing screen, the original instance of the block will have been updated.



1. Left-click the block to see the new Alignment and Flip icons.
2. Left-click on the blue Alignment icon to move it onto a line representing a waterline.
3. Left-click on the blue Flip icon to mirror the block along the line.
4. Use the Insert command to draw additional copies of the block into the drawing. **[Figure 0]**

Note that the steps change the block definition in the current drawing only. The WBLOCK command must be used to save the block out as an external Drawing (.dwg) file.

This article originally appeared in the December 2010 issue of Professional Surveyor magazine.

Carlson Software – Year-End Specials

As they do every year, Carlson Software has announced their End-of-Year Software specials. If you'd like to purchase or have any questions, please call 919.417.8351 or email ContactUs@thatcadgirl.com.

Software Specials this year:

- » \$1,495 for Carlson Survey + Carlson Civil (Retail \$3,000)
 - » \$ 3,495 for Carlson Point Cloud 2011 (Retail \$5,000)
 - » \$ 6,885 Carlson Takeoff 2011 with IntelliCAD or Takeoff T3 with embedded AutoCAD (Retail \$9,000)
 - » \$ 750 Carlson Survey 2011 with IntelliCAD if you provide an active and valid SurvCE serial number.
 - » \$ 2,625 for Carlson Civil Suite (Retail \$3,500)
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That CAD Girl & Carlson End of Year Workshops – Wilmington, Raleigh and Statesville, North Carolina

It's that time again! This is our 4th annual series of workshops geared specifically for NC licensed surveying, engineering and construction professionals.

Like in years past, we will have a morning session where an overview of Carlson Software and CAD Tips & Tricks will be presented. Then, for the afternoon session, you will be able to attend two sessions (from a total of 6) on a variety of topics.

This year's **Morning Session** will cover:

- » IntelliCAD Overview, AutoCAD/IntelliCAD Tips & Tricks, Getting Started with CAD Standards

- » Preview of Carlson Software, Data Collection, GPS, Integration with Esri and IntelliCAD

The **first Afternoon Session** provides a choice of 3 topics:

- » **Carlson Fundamentals** – Deed Processing, Working with Points, Field to Finish, Surface Modeling & Site Grading, RoadNet, Hydrology preview, Finding and Using Freely Available GIS Data in North Carolina
- » **Seamless Civil Data Conversion – No Problem!** – This session will show how Carlson's seamless data conversion enables users to go back and forth from Land Desktop, Civil 3D and other software packages. If your concern is in continuing to take good care of your clients and keeping the lines of communication open, you'll see that this is actually no concern at all.
- » **Carlson Point Cloud 2011** – For those who have seen this product in the past, you'll be impressed with all the improvements in 2011. This session will present many of the new & improved routines in Carlson's Point Cloud 2011 including how to clean a cloud to remove cars and other physical features so as to make it smaller and easier to work with, how to get volumes for a stock pile, how to use Carlson Field to Finish for symbols and breaklines from the cloud and how to generate a surface and contours in your CAD file.

The **second Afternoon Session** provides a choice of 3 topics:

- » **Demonstration of Carlson's All-In-One Surveyor+ GPS & Data Collector** – See this office and (weather-permitting) field demonstration of Carlson's new Surveyor+ GPS System. This equipment provides a dual frequency RTK GNSS receiver and field controller and comes loaded with Carlson SurvCE. This system is versatile with Network RTK, Base/Rover RTK and static capabilities. It's also flexible and works with

almost every brand of total station and robotic instrumentation. This demonstration will include Carlson's Field to Finish feature.

- » **Collecting Survey Data for Direct Import into Esri** – In this session you will learn how to export a GIS feature/attribute structure from a client's Esri GIS, use SurvCE or SurvPC to collect additional survey-grade data to that schema, and then write it back to ArcGIS in a single seamless workflow.
- » **Carlson 2011 Updates and Advanced Design and Grading** – In this session you will learn many of the new features in Carlson's 2011 product offerings for surface modeling, grading and Hydrology. One of the most exciting features is Carlson's ability to make edits to contours and apply the changes back to the underlying TIN surface file. Updates to Carlson's Civil & Hydrology packages (including design criteria for NCDOT, City of Greensboro and others) will be covered.

The cost for the 1-day workshop is \$99. Early bird pricing is available through October 31, 2010 for \$89 per person. Lunch will be provided and NC licensed professional surveyors and engineers will receive 8 PDH credits for attending.

Tuesday, Dec 14th in Wilmington NC – Find out more [here](#) or [click here](#) to register

Wednesday, Dec 15th in Raleigh NC – Find out more [here](#) or [click here](#) to register

Thursday, Dec 16th in Statesville NC – Find out more [here](#) or [click here](#) to register

Civil Suite Pricing to Increase on 9/15/2010

UPDATE As soon as I heard about the Civil Suite price increase (originally set for 9/1/2010), I announced it here because I'd been asked about it so frequently. Now, it appears that the date has been extended to 9/15/2010 for the lower pricing. So, I've updated my advertising where possible. The cutoff date is apparently still in flux... all I can say is to keep checking. I plan to keep \$1,995 on Civil Suite at least until Carlson raises their prices and hopefully beyond that.

As expected, Carlson Software has decided to end their "Recovery Special" and take the price of Civil Suite back to its original \$3,500. Carlson's price of \$2,500 will remain in place only through September 1, 2010 [Now 9/15/2010 – See Above].

As a reminder, prices listed above and on our Carlson Software Pricing page are Carlson's Retail Pricing and do not reflect **discounted pricing** available from That CAD Girl. Additionally, That CAD Girl includes **one-hour FREE online training** with each purchase of Carlson Software.

Carlson 2011 Launch Parties! – Atlanta, Columbia & Richmond

With the expected release of Carlson 2011 products in September, come join us for a day-long workshop presenting the newest features of Carlson Survey, Civil, Hydrology, GIS and Point

Clouds. We will also spend time in the afternoon demonstrating Carlson's new Surveyor+ RTK GPS System with SurvCE data collection.

The price for the session is only \$25 – this includes lunch and your entry for several door prizes.

Tuesday, Oct 5th in Atlanta GA – Find out more here or click here to register

Wednesday, Oct 6th in Columbia SC – Find out more here or click here to register

Thursday, Oct 7th in Richmond VA – Find out more here or click here to register

That CAD Girl – June 2010 Newsletter

Our June 2010 Newsletter can be downloaded [HERE](#)