

# Another Twist for World

I'd like to offer a few other arguments for the use of the DVIEW TWIST routines discussed in North Rotation: Using Twist Screen. The four Carlson DVIEW routines cited:

1. **Standard** – *This option allows you to select a rotation angle using the mouse.*
2. **Line, Polyline or Text** – *This option allow you to select an object to set as a view baseline. It is the most useful when trying to match views to objects such as property lines or road centerlines.*
3. **Surveyor** – *This option prompts for the manual entry of a bearing or azimuth for the rotation angle.*
4. **Restore Due North** – *This option returns the screen to the orientation where North is straight up.*

fall right in line with remarks made by ESRI's Brent Jones at the 2009 Carlson User Conference who said:

*"GIS changes the whole domain for surveyors," Jones added, "And surveyors need to be ready for what's coming next – high accuracy GIS. The key is geo-referencing," he said. "We can use our data to communicate to our world with greater precision over greater areas."*

In my opinion, a **User Coordinate System** (UCS, by its very definition), takes the data one step further away from being geo-referenced. There are those that would probably argue that having data in a World Coordinate System (WCS) and at assumed coordinates of something like 5000,5000,100 is no better than using a UCS to shift this same data to a proper geo-referenced coordinate system. From a holistic stand-point, I'd tend to agree. However, what sets the WCS vs. UCS argument apart is this

simple statement:

*All drawings must have a WCS yet not all drawings have a UCS.*

When one considers the longevity of information represented in drawings created to this point in time and then reflects on how this information might also be used in the future, I feel it is important to model that information (and subsequently allow that information to be easily extracted) in a consistent and reliable fashion. A **User Coordinate System** is typically only understood and used by its creator which in turn, limits its use and subsequently increases the risk of liability when the **User Coordinate System** isn't known or understood by a "downstream" recipient of the drawing (survey stake-out, machine control excavation, etc).

**Side note observation...** Is it me or are there some parallels between UCS and custom ARX objects used in other products? When I look at how long the DVIEW vs. UCS arguments have been made, I can only surmise the length of time that will be involved to bring the non-proprietary vs. proprietary data argument to a close. I suspect it's going to be a long, tough road.

In any event, it is my opinion that standardizing on a single WCS should provide more consistent deliverables when the drawings/projects span multiple people, offices and/or disciplines. When properly adopted, using a "twisted view" of geo-referenced data in a World Coordinate System should provide more feature-rich information now and into the future when our data is mapped onto the Earth.

Originally posted on **Carlson Connection** by Ladd Nelson

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# Working with Land Desktop or Civil 3D Contours in IntelliCAD-based Carlson Programs

If you are working in an IntelliCAD version of Carlson Survey or Civil and need to bring in surface entities (contours) from a Civil 3D (C3D) or Land Desktop (LDT) drawing, it's actually very easy to do. However, it's not necessarily easy to find on your own. And, unfortunately, it's in a slightly different place depending on whether you're using the Carlson Survey or Civil menu.

FYI – If you simply try to “Open” a drawing that has AECC Contour Objects with an IntelliCAD-based program, it may look correct, but the entities will only be the dreaded “ACAD PROXY OBJECTS” that have bogus elevations. These are only good to look at... not work with.

Whether you're using Survey or Civil, the only thing you'll need is a drawing file (DWG) containing the C3D or LDT contours for the surface. It doesn't even need to be opened, you just need to have it and be able to find it. (hey, I'm getting old!).

First, start a new drawing in Carlson.

Then, if you're using Carlson Civil:

1. Go to the “Surface” menu,
2. Select “Import/Export Surface”
3. Then, select “Convert LDT/Civil 3D Surface Drawing”.

If you're using Carlson Survey:

1. Go to the "Surface" menu,
2. Select "Import/Export Surface Data"
3. Then, select "Convert Civil 3D Surface Drawing".

Next, you're prompted to "Select the LDT/Civil 3D Drawing to Read". After browsing to and selecting the LDT or C3D file, pick "Open".

Next, you're prompted to "Select Converted Drawing to Write". This will be a new DWG file containing the converted data. After browsing to a new location and specifying a new file name, pick the "Save" button.

You'll see the conversion process in the text window. Once finished, you can open the converted drawing.

What you will find in the new drawing are all of the entities from the original LDT/C3D drawing except that any AECC Contour Objects have been converted to elevated PLINES and LINES.

The first step you'll probably want to take after opening the new drawing is to join together all of the contour PLINES and LINES. You may want to "Isolate" the layers for the contours first.

Then use the "Join Nearest" command under the "Edit" menu. Like most cases, make sure to have the "Join Only Common Elevations" and "Join Only Common Layers" options selected.

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# Carlson + ESRI = Wow!

So, how cool is this?

At the Carlson User Conference this week in Lexington, KY, Brent Jones of ESRI announced a new grant program in coordination with Carlson Software. The program will bring ESRI products to every IntelliCAD-based Carlson program.

Speaking with Brent on Tuesday, he said that a few of the details have yet to be worked out, but Carlson IntelliCAD users should be hearing details in about a month.

Originally posted on **Carlson Connection** by Jennifer Dibona

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## Carlson Software Expands Carlson College™

Carlson Software recently expanded their expert level training program, Carlson College™, and started the Carlson College Training Program. This new program will allow individuals and companies to get training direct from Carlson Software or through the members of the Carlson College Training Program. New members of the Training Program include Harken-Reidar Inc. of Front Royal, Va.; Carlson Desktop Solutions (CDS), based in Austin, Texas; That CAD Girl, located near Raleigh, N.C.; and, for C&G products only, Larry Phipps of the Land Surveyor's Workshop in Jefferson, N.C. Membership in the Carlson College Training Program is available to any person or organization that

makes a commitment to providing quality training on Carlson Software products.

For more information on the Carlson College Training Program or training, please contact Carlson Software at 800-989-5028, email [training@carlsonsw.com](mailto:training@carlsonsw.com) or visit [www.carlsonsw.com/training](http://www.carlsonsw.com/training). Members of the Carlson College Training Program are independent entities from Carlson Software.

Read the entire Press release [here](#).

Originally posted on **Carlson Connection** by Karen Cummings

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## Welcome!

Thanks for taking the time to visit us at Carlson Connection.

The site is a little bare right now, but keep checking back. We hope to make it an active community with lots of good information and discussion.

If you'd like to be a Contributor to the site, please **email me here**.

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