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AUGI® Tips and Tricks

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GD32-3 Did you know you could do that? is the question you will be asking each other in this class. Short cuts, some basic LISP routines, speed tips, variables, and ways of using some AutoCAD® commands you might not have thought of ... That is what this class is all about. I have been collecting tips and tricks for years and AUGI is my favorite place to find them. In this class you will see some of the latest tips and tricks as well as a few old favorites. You may even have time during class to share some of your own!

Who Should Attend?

Beginning through intermediate-level users of AutoCAD and AutoCAD-based applications

Topics Covered

- * Keyboard shortcuts
- * Some short LISP routines
- * Unusual ways to use some commands
- * Some right-click shortcuts
- * A variety of other tricks and techniques

About the Speaker:

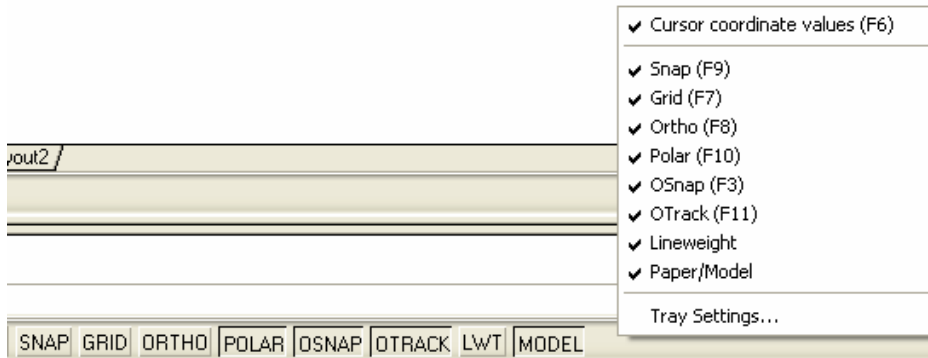
Donnia Tabor-Hanson has been using AutoCAD® since release 1.4. She has taught college-level courses and was the manager of an Autodesk® Authorized Training Center for several years. Donnia has experience using AutoCAD in a variety of fields, including architecture, material handling, atomic waste removal and containment, and civil engineering. She currently works with MossCreek Designs, a log home design group. Donnia has been working with AUGI since 1995 and has contributed to AUGI's WorldView and AUGIWorld magazines. Collecting tips and tricks is her passion! She earned her A.S. in architecture, from Cleveland State Community College and her B.S. and M.S. in Technological and Adult Education from the University of Tennessee.

Tip #1 – Set your own Status

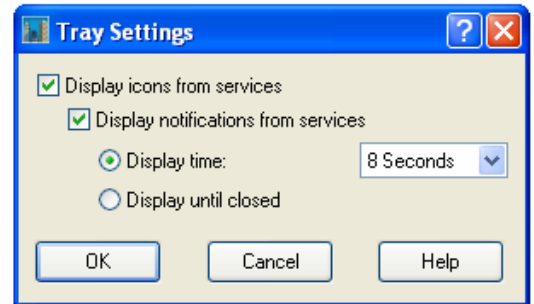
You can start by turning your coordinate value off if you would like. As for me, I like to know where I am sometimes. This is my own version of AutoCAD GPS.

Set the “Status Bar” is so that you only view what you want in the status area. CAD Managers will love turning off some things that they do not want their cad operators “messing” with. (See Figure Tip # 1A)

You might also want to set the “Tray Setting” timer for those pop up messages in the tray. (See Figure Tip # 1A)



Tip # 1A

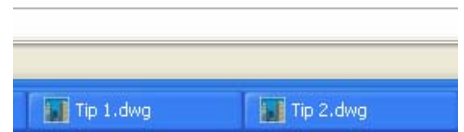


Tip # 1B

Tip #2 – Cycling through drawings

There are several ways you can cycle through drawings that you have open. You need to choose a method of cycling.

You can go to the menu bar at the top of the screen and under “Window” you will find a list of all open drawings. You can also do a “CTRL+TAB” to cycle through open drawings. BUT if you are someone that really likes the Windows configuration where the Icon is in the Windows taskbar now for each open drawing you can have that option turned on. Set the system variable TASKBAR to “1” to have each open drawing to be displayed in the Window’s taskbar area for easy accessibility.



Tip #2A

Tip #3 – Express fun with SUPERHATCH

Really have some fun putting in some great hatch patterns using SUPERHATCH from the Express Tools. This will let you do a hatch pattern with an image, block, xref or WIPEOUT object. This is great for putting your logo for example on a product!

Command: SUPERHATCH (Choose Block option)

HATCHBLOCK Specify insertion point or (Choose insertion point)

[Scale/X/Y/Z/Rotate/PScale/PX/PY/PZ/PRotate]:

Enter X scale factor, specify opposite corner, or [Corner/XYZ] <1>: (Choose X factor)

Enter Y scale factor <use X scale factor>: (Choose Y factor)

Specify rotation angle <0>: (Choose rotation angle)

Command:

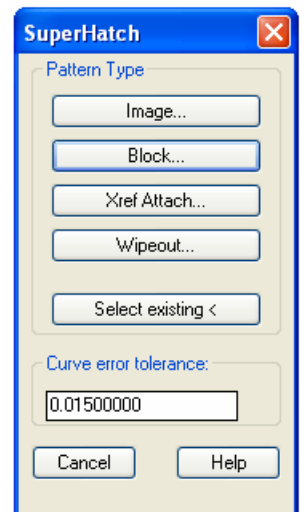
Is the placement of this BLOCK acceptable? {Yes/No} <Yes>: (Automatically comes up with this)

Specify fillet radius for rectangles <0.0000>: (Default out of this until asked to select Internal point)

Specify line width for rectangles <0.0000>:

Specify thickness for rectangles <0.0000>:

Select a window around the block to define column and row tile distances.

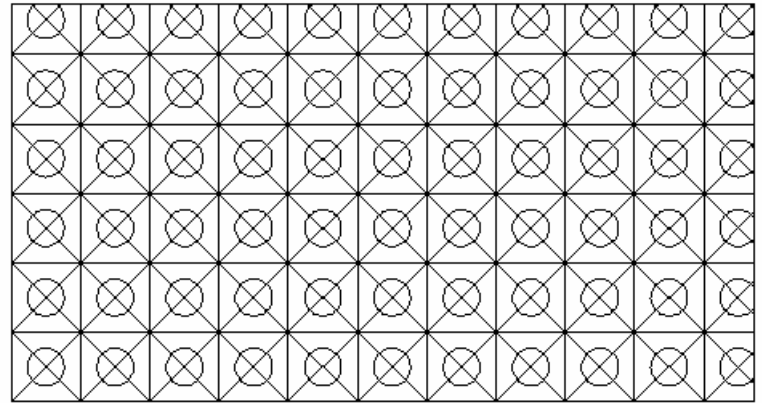


Tip #3A

Current rectangle modes: Width=0.0211
 Specify block [Extents] First corner <magenta rectang>:
 Current rectangle modes: Width=0.0211
 Specify fillet radius for rectangles <0.0000>:
 Specify line width for rectangles <0.0211>:
 Specify thickness for rectangles <0.0000>:
 Selecting visible objects for boundary detection...Done.
 Specify an option [Advanced options] <Internal point>:
 Specify an option [Advanced options] <Internal point>:
 Preparing hatch objects for display...
 Done.



Block



Hatched area

Tip #3B

Tip #4 – Here is a routine we’ve been waiting for, for a long time – Express Tools’ Flatten

What happens when you have a drawing with objects on ALL kinds of Z-axis locations? It can make linetypes with dashes look so wrong. Does it make you crazy getting to endpoints? Well – I want you to be very careful with this one. This routine flattens according to the current view! Make sure you are in the view that you wish to have the objects flattened.

Now, I’m going to suggest a better way. Go to the AUGI Exchange and search for the following:

Submission #: EX001339

Submitted: 5/14/203 7:53:00 PM (by R. Robert Bell)

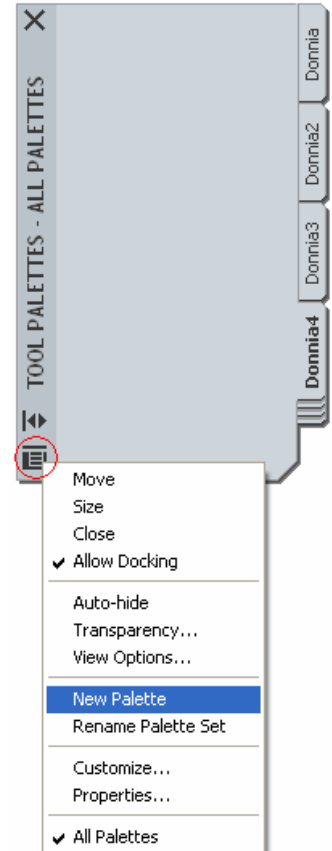
Filename: EX001339.Flatten.LSP

Tip #5 – Your Blocks from Your Tool Palette

The first thing to do is get your blocks into a reference drawing. It is best never to move that reference drawing and therefore keep your blocks all in one place.

The next thing you would want to do is to open that reference drawing and create your tool palette from it. Go to the bottom of the Tool Palette and right-click on the bottom icon on the side bar to bring up the menu. Use the “New Palette” to create your block palette. (See Figure #5A.) At this point you will be prompted for a name for you palette.

You can select your blocks and place them on your palette now. To do this select a block, then right-click and hold down on the block while you drag it to your Tool Palette.



Tip #5A

AUGI® Tips and Tricks

Now the other thing you will want to do is set the controls for your blocks for consistency when placing them in your drawings. Right click on your block in your Tool Palette and go to the “Properties...” option. (See Figure #5B.)

Going through the “Insert” options you will see the “Name”, “Source file” and the “Scale” of the block. Usually CAD Managers will put the blocks all in one source file for convenience sake.

Let’s start by inserting this block the same way in every drawing. First set the “Auxilliary scale”. When you click on the default “None” you will be given the options in a pull-down for “Dimscale” and “Plot scale”. Choose which ever would best suit your purposes.

Next you will find the “Rotation” of “0.00” set as the default. Most of the time you would want to allow the rotation to be chosen by the user so you would go to “Prompt for rotation” and change the default of “No” to “Yes”.

The last thing in the “Insert” area is the option to “Explode.” I will leave that up to the CAD Manager because different blocks will need to be acted on different ways. But at least you have the option.

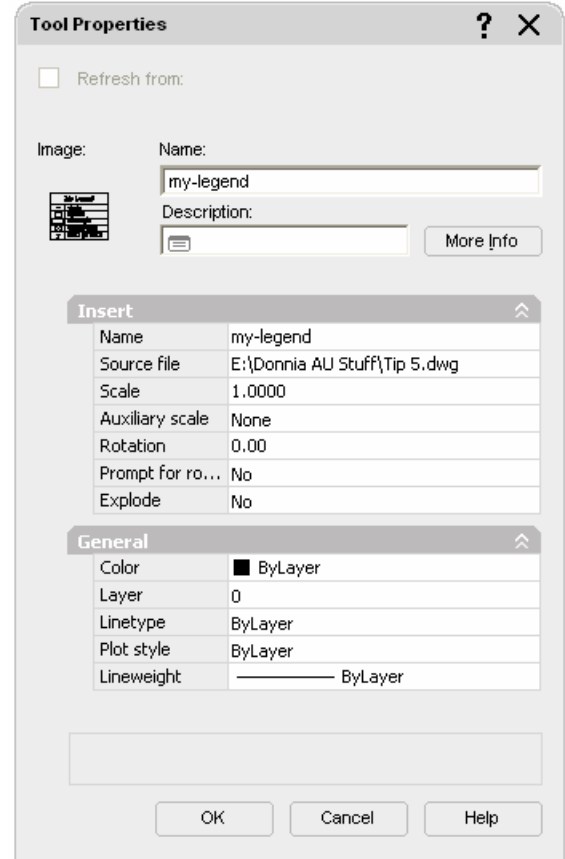
Now let’s look at the “General” section. “Color” gives you the complete set of color options such as “ByLayer” and “ByBlock” and all the colors offered in AutoCAD.

“Layer” will allow you to choose which layer the block will be placed on. Your options will always include “0” and “Defpoints” and “—use current” along with all of the current drawing’s layers. So if it is important if you want the block to be placed on a layer called “Symbol” then that layer must be in the drawing where the block has been created.

“Linetype” and “Plot style” gives you the options of “ByLayer” and “ByBlock” as well as “—use current.” Then the currently loaded “Linetype” and Plot style” would also be listed.

“Lineweight” gives you options of “ByLayer” and “ByBlock” as well as “—use current” also “Default” along with a listing of lineweights to choose from.

Creating your own block library has never been easier.



Tip #5B

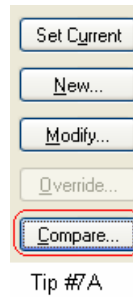
Tip #6 – Hands off the CAD Manager’s Tools

Are you the CAD Manager? Do you wish your CAD operators would leave your tools alone? If you want to make it so that your CAD operators cannot customize the Tool Bars set the TBCUSTOMIZE system variable to “0” (zero). This makes it so that no one but the CAD Manager can change these. This will NOT keep them from customizing the Tool Palettes, however.

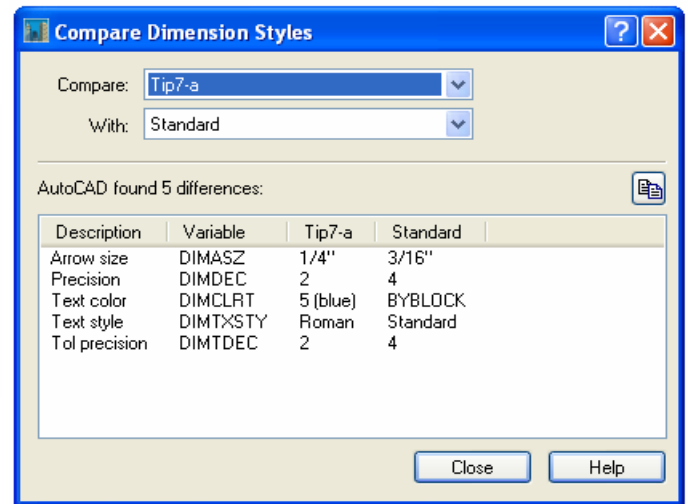
I know that CAD Managers are all control freaks – so I know you will like this one. (Did I tell you I was a CAD Manager also?)

Tip #7 – Different Dimension Styles

If you have two dimension styles in a drawing and you want to know just what the difference is between the two of them – do a “Compare...” You can compare any two dimension styles in a single drawing. (See Figure Tip #7B.)



Tip #7A



Tip #7B

Tip #8 – Express Tools Layer Un-Isolate???

Man – just when you think you’ve got it good – BAM – something changes. What happened to Layer Un-Isolate in the Express Tool bars? I used it ALL the time. In 2005 it is just GONE!

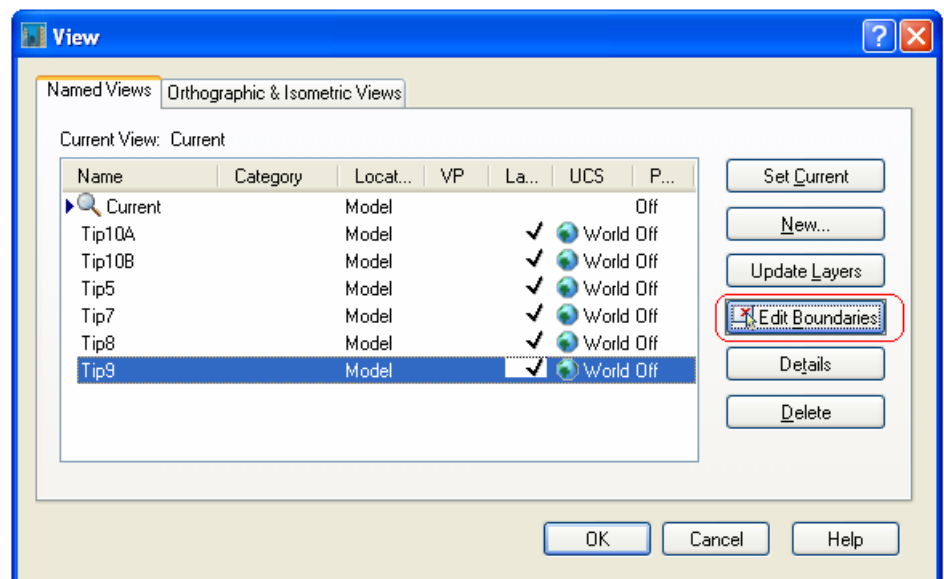
Ok – so maybe they want us to start using the “Layer Previous” option in AutoCAD 2005. So I have put my Express Tools for Layers near my Layer Tool bar for ease of use. It does take a few times to get used to, however.



Tip #8

Tip #9 – View Boundaries

Do you find you are using the View command a lot more now? Sometimes when you pick a view you may not always get what you want in the end. Try the “Edit Boundaries” button to redefine your view.



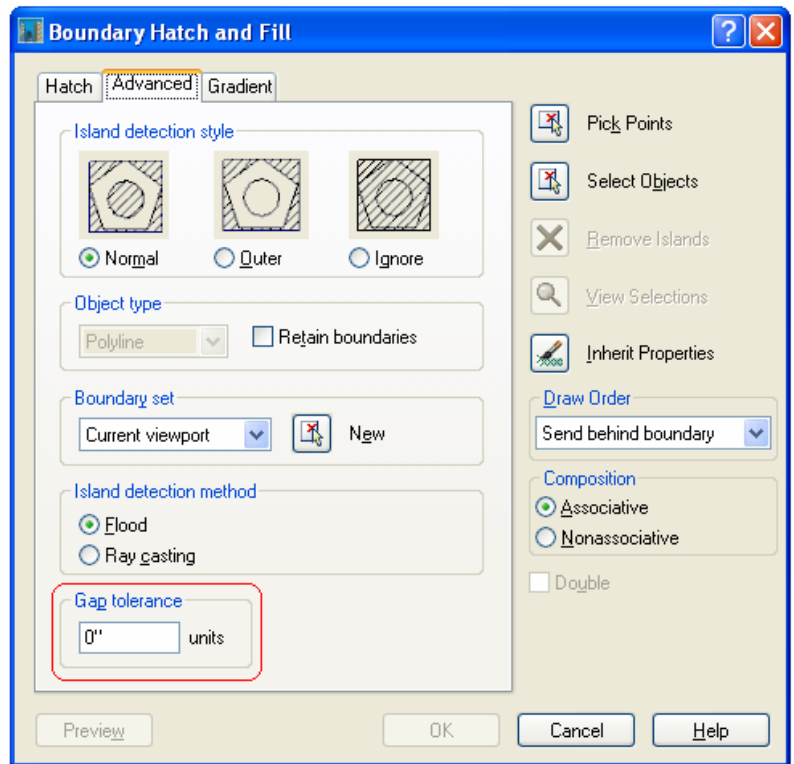
Tip #9

Tip #10 – The Great Hatch Plug - HPGAPTOL

Finally you can plug all those holes to keep your hatch patterns from bleeding over.

You can find the “Gap tolerance” on the “Advanced” tab of the BHATCH dialog box.

Set the tolerance for your minimum setting and hatch away.



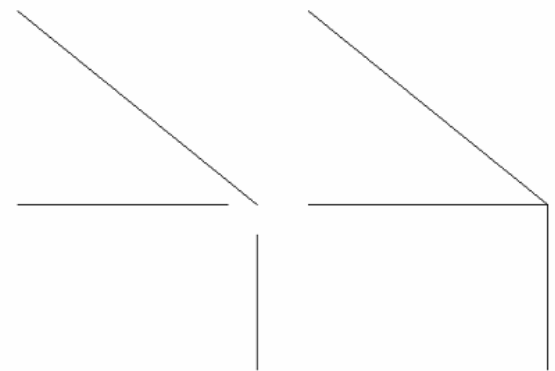
Tip #10

Tip #11 – But what if you are just REALLY to Fastidious for GAPS

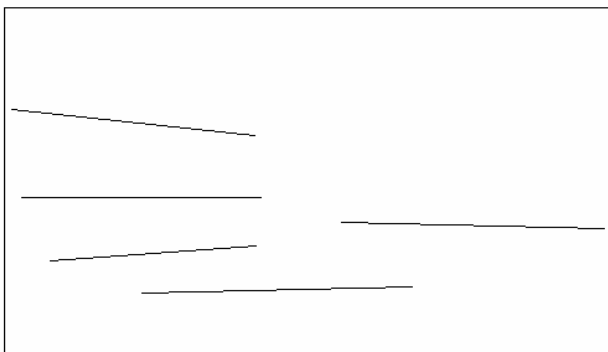
Have you ever wanted to FILLET several lines at once? You know where they should all meet but you just don't want to have to FILLET them two at a time.

Try this for a change, the CHANGE command. If your ORTHO is off you can change several lines' endpoint to a specific point all at one time. (See Figure #11A.)

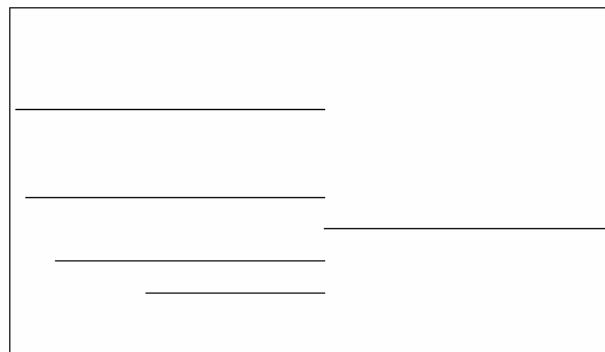
Another little tid bit about using the CHANGE command is that if ORTHO is on you can use it just as if you were doing a TRIM or an EXTEND command but you do not have to have an object to TRIM or EXTEND to. (See Figure #11B.)



Tip #11A



From This




To This

Tip #11B


Tip #12 – No More Guesswork in XREF

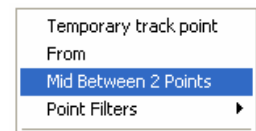
New in 2005 you can predetermine the XREF type. You can set your system for either “Overlay” or “Attach.” Use the command XREFTYPE and set it to “0” for a default of “Attach” or set it to “1” for a default to “Overlay” your XREF’s.

Tip #13 – ZOOM to Objects

 This button on the “ZOOM” toolbar will allow you to pick an object or a group of objects and “ZOOM” to them. You will find all of the “ZOOM” options on the pull-down “ZOOM” button on the “Standard” toolbar. The only exception is the “ZOOM” with the “PREVIOUS” option. It is beside the “ZOOM” pull-down button.

Tip #14 – My Favorite Button Gets IN

 For years this has been my favorite button. I have shown this in my classes at AU. It is my calculator button to find the midpoint between two endpoints. You may now access this option using Shift+Right-Click menu while drawing. (See Figure #14.)



Tip #14

Tip #15 – Scaling Text All at Once

You can change the height of selected text or all the text in a drawing according to its own insertion point at one time by using the “SCALETEXT” command.

Command: SCALETEXT

Select objects: (select all the text for scaling)

Enter a base point option for scaling

[Existing/Left/Center/Middle/Right/TL/TC/TR/ML/MC/MR/BL/BC/BR] <Existing>: (enter to keep the Existing insertion point for each piece of selected text)

Specify new height or [Match object/Scale factor] <3/16">: (choose the height)

OR – you can select from one of the options such as “Left” to re-justify each selected piece of text to it’s insertion point. Then you can choose from the options:

Specify new height or [Match object/Scale factor] <3/16">: (choose the height)

OR – at the prompt to “Specify new height” you can also select to “Match object/Scale factor” to another piece of text.

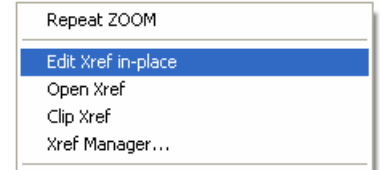
Tip #16 – No More Searching for that XREF Path

Use XOPEN to open an XREF'd drawing for editing.

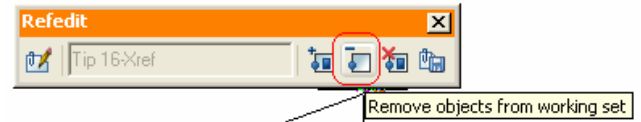
Tip #17 – Use REFEDIT to Copy Objects from an XREF

Select an XREF and invoke the “Edit Xref in-place” option from the Right-Click menu. You will then be given the dialog box identifying the Xref – just click the “OK” button.

Next you should select the objects you wish to copy to the current drawing. Use the “Copy Selection” option from the Right-Click menu. Once you have placed the objects where you would like to copy them you should remove them from the selection set. (See Figure #17B.) Then you can close the Xref without saving it.



Tip #17A



Tip #17B

Tip #18 – Rotate that Paste

Did you know that you can type “R” when using the “Paste” option to pre-select the rotation angle of the objects to be pasted?

Tip #19 – Make Sure You Keep Your AUGI Contact Information Up to Date

You want to be contacted by AUGI? You want your AUGIWorld magazine? You want your Hot News? Check out your “My AUGI” section of www.augi.com.

Tip #19

Tip #20 – Have You Chosen Your Preferences?

If you live in the US or Canada AUGI can mail you a hardcopy of AUGIWorld as long as you have chosen to receive it. Outside the US or Canada you can download the PDF file of the magazine for free. There are two PDFs – Low-resolution and High-resolution versions.

The screenshot shows the 'My AUGI – Update Profile and Preferences' page. At the top, there is a navigation bar with links: Home | Search | About AUGI | My AUGI | Logout | Edit. The date is Sunday, November 14, 2004. The main header says 'My AUGI'. Below this is a menu with links: Product Communities, Forums, Publications, Education, Exchange, LUGs, Surveys, Volunteering, Autodesk University. The left sidebar contains 'My AUGI' with links: Change Email Address, Change Password, Update Profile / Preferences, Update Mailing Address, Terminate Membership. The main content area is titled 'My AUGI – Update Profile and Preferences'. It has the following fields: First Name: Donnia, Last Name: Tabor-Hanson, Country: United States, State: Tennessee, Industry Affiliation: Architecture/Engineering/Construction/FM. Below these are 'Preferences' sections: 'AUGIWorld' with radio buttons for 'Inform me by email...' (selected) and 'Do not inform me...'; 'AUGI HotNews' with 'Subscribe' (selected) and 'Unsubscribe'; 'AUGI Bulletins' with 'Subscribe' (selected) and 'Unsubscribe'; and 'Email Format' with 'HTML Format' (selected) and 'Plain Text Format'. At the bottom are 'Apply' and 'Cancel' buttons.

Tip #20

Tip #21 – Make Sure you are an AUGI Member!

AUGI! AUGI! AUGI!

(Hang around and at the end of class we will find the Easter Egg in 2005!)