

## **CADD NOTE 8**

The purpose of this CADD Note is to provide some instructions on added commands to AutoCAD. Many of these commands serve as tools to accomplish tasks that you do on a regular basis. Their purpose is therefore to automate and thus simplify these tasks. The commands are fairly simple and straightforward to use. Commands that are more involved (i.e., require more steps and thus more explanation) will be issued as separate CADD Notes.

### **AVAILABLE TOOLS**

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The commands you will now be able to use are listed below. An explanation of each command follows the list. To use a command, simply use one of the methods listed with the command explanation.

<u>Command</u>	<u>Description</u>
<b>ACRES</b>	Compute the area of a polyline in acres
<b>BSCALE</b>	Insert a bar scale
<b>CHARROWS</b>	Change the size of multiple arrowheads
<b>CHOBL</b>	Change obliquing angle of multiple text items
<b>CHSPACE</b>	Move an entity from model to paper space or vice-versa
<b>CHT</b> <sup>1</sup>	Change properties of multiple text items
<b>DOTGRID</b>	Insert dots in a grid to serve as fine gridlines
<b>HECTARES</b>	Compute the area of a polyline in hectares

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Layer related <sup>2</sup>:

<b>CL</b>	(Change Layer) Change the layer of selected entities
<b>CPL</b>	(CoPy Layer) Copy selected entities to another layer
<b>LF</b>	(Layer Freeze) Freeze a layer by selecting an entity
<b>LISTLYR</b>	List layers and layer info to Notepad
<b>LM</b>	(Layer Make) Make a new layer and specify its color
<b>SL</b>	(Set Layer) Set current layer by selecting an entity
<b>WL</b>	(What Layer?) Query the layer of an entity

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<b>NORTHARROW</b>	Insert a north arrow
<b>WELEV</b>	Query the elevation(s) of an entity
<b>XPTS</b>	Extract points from polyline to file
<b>Z9</b> <sup>1</sup>	Zoom to 90% of extents (ZOOM E then ZOOM .9X)

<sup>1</sup> These commands are included with AutoCAD. They are simply automatically loaded now.

<sup>2</sup> Most of these layer commands were obtained from CADENCE magazine, April 1994.

# TOOLBOX OF ADDITIONAL COMMANDS

## USING THE TOOLS

Following are comments and instructions for each of the commands.

### ACRES

MENU: NRCS\_MO, Tools, Acres

COMMAND: acres

ICON: 

Select the desired polyline. The area will be computed and given in acres as well as square feet. It is assumed that 1 drawing unit = 1 foot.

### BSCALE

MENU: NRCS\_MO, Insert, Barscale

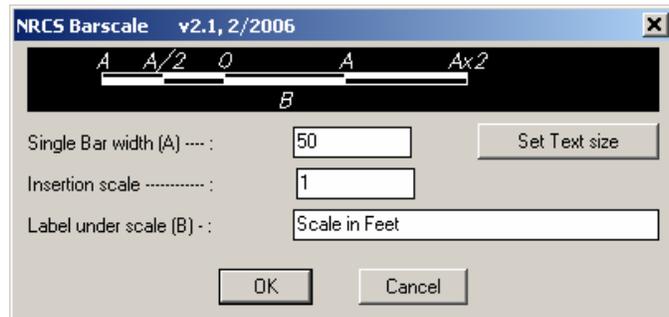
COMMAND: bscale

ICON: 

A dialog window appears asking for

“*Single Bar width:*” Enter the value representing the 1 unit length on the bar scale. Used to set the numbers above the scale.

“*Insertion Scale:*” Enter a scale factor to use when inserting the bar scale. For example, a 2 would result in a bar scale doubled in size.



“*Label under scale:*” Enter the text that you would like placed under the barscale.

If you want to change the size of the text, click on the "Set Text size" button.

Click OK to place the bar scale.

Note: To modify the text of the bar scale, use DDATE .

### CHARROWS

MENU: NRCS\_MO, Tools, Change, Arrows

COMMAND: charrows

“*New size for arrows:*” Enter the desired size that you wish to make the arrowheads. This command only works on arrowheads created as a solid (i.e., the default arrowhead for leaders and dimensions). Note: For dimensions that have not been exploded, you should change arrow size in dimension variables and then update the dimensions.

### CHOBL

MENU: NRCS\_MO, Tools, Change, Oblique

COMMAND: chobl

“*Select Objects:*” Select the text using normal selection methods.

“*New obliquing angle (deg.):*” Enter the desired obliquing angle.

## TOOLBOX OF ADDITIONAL COMMANDS

### CHSPACE

MENU: **NRCS\_MO, Tools, Change space**                      COMMAND: **chspace**

This command is the same command found in Express Tools.

*“Select Objects:”* Select the objects you wish to switch to the other space.

Press Enter to end the selection.

### CHT

MENU: **NRCS\_MO, Tools, Change, Text**                      COMMAND: **cht**

This command lets you edit multiple text entities.

*“Select Objects:”* Select the text to change. Press Enter to stop selecting.

*“Height/Justification/Location/Rotation/Style/Text/Undo/Width:”*

Select the desired property to change by entering the capital letter.

Answer the prompts for the selected property.

Press Enter to exit the command.

NOTE: The capabilities of this command can now be accomplished via the Properties command.

### HECTARES

MENU: **NRCS\_MO, Tools, Hectares**                      COMMAND: **hectares**

Select the desired polyline. The area will be computed and given in hectares as well as square meters. It is assumed that 1 drawing unit = 1 meter.

### DOTGRID

MENU: **NRCS\_MO, Insert, Dotgrid**                      COMMAND: **dotgrid**                      ICON: 

*“4=4x4x9 grid or 9=9x9x9 grid <9>:”* Enter a 4 for 4 rows and 4 columns of 9 dots each or enter 9 for 9 rows and 9 columns of 9 dots each.

Select the text to change. Press Enter to stop selecting.

*“Insertion point:”* Click on a point that will be the lower left corner of the grid.

*“Enter scale (or select unit width):”* Enter the dimension for one “square” of dots or select a second point graphically to set this dimension.

*“Upper right corner of grid area:”* Click on a point that will be the upper right corner of the grid of dots.

## TOOLBOX OF ADDITIONAL COMMANDS

LAYER commands:

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### CL

MENU: **NRCS\_MO, Layers, Change layer**      COMMAND: **cl**      ICON: 

*“Select objects:”* Select the objects that you wish to change the layer of.

*“Pick an entity on the target layer:”* Pick an object that is on the desired layer.

### CPL

MENU: **NRCS\_MO, Layers, Copy layer**      COMMAND: **cpl**      ICON: 

*“Select the entities you want to copy:”*

*“Select objects:”* Select the objects that you wish to copy.

*“Enter destination layer name”* Enter the layer name.

The entities will be copied (you will have 2 of each object right on top of each other but on different layers).

### LF

MENU: **NRCS\_MO, Layers, Layer freeze**      COMMAND: **lf**      ICON: 

*“Pick entity on the layer you want to freeze”* Select the entity and the layer it is on will be frozen.

### LISTLYR

MENU: **NRCS\_MO, Layers, List layers**      COMMAND: **listlyr**      ICON: 

*“Enter layer name(s) to list <\*>”* Enter desired layer names or use \* to list them all.

*“Fixed width/Tab delimited/Comma delimited ? <F>”* Select the format you wish to use.

Layer list is created and opened in Notepad. You can then print it or save it to a text file.

### LM

MENU: **NRCS\_MO, Layers, Layer make**      COMMAND: **lm**      ICON: 

*“Enter the layer name:”* Enter a new layer name.

*“Enter the color for the new layer:”* Enter the desired color for the new layer.

### SL

MENU: **NRCS\_MO, Layers, Set layer**      COMMAND: **sl**      ICON: 

*“Pick entity on the layer you want current”* Select the entity and the layer it is on will become the current layer.

### WL

MENU: **NRCS\_MO, Layers, What layer?**      COMMAND: **wl**      ICON: 

*“Pick entity on the layer you want listed”* Select the entity and the layer it is on will be displayed in the command area.

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## TOOLBOX OF ADDITIONAL COMMANDS

### NORTHARROW

MENU: **NRCS\_MO, Insert, North arrow**      COMMAND: **northarrow**      ICON: 

*“Enter scale factor:”* Enter the insertion scale factor.

*“Specify insertion point:”* Place north arrow by clicking on desired location.

Note: It may need to be rotated if it is not pointing in a north direction.

### WELEV

MENU: **NRCS\_MO, Tools, What elevation?**      COMMAND: **welev**

*“Pick an entity to list elevation(s) of”*

*“Select object:”* Select the entity and its elevation (or elevations for 3d lines) will be displayed in the command area.

### XPTS

MENU: **NRCS\_MO, Tools, Extract points from polyline to file**      COMMAND: **xpts**

*“Select objects:”* Select the desired polylines.

Press Enter to finish selecting.

Enter a filename to save points.

They are exported in an x,y,z comma delimited format. You can then look at the points in a text editor like Notepad or import them into Excel or another program.