

## MicroSurvey CAD Pro. 3.1

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### DID YOU KNOW?

- ⇨ Object Snaps are available from either the middle mouse button or by pressing CTRL and the left mouse button at the same time, while in a command.
- ⇨ To do a line inverse in COGO simply type the 2 point numbers separated by 2 periods (e.g. 34..62).
- ⇨ To do a curve inverse in COGO, enter 3 point numbers in a row each separated by 2 periods (e.g. 45..34..12). The distance from 45..34 must be equal to the distance from 34..12, in this example.
- ⇨ If you do not want the Foot symbol shown on your dimensions then go to Defaults Distance Labeling and deselect the Foot symbol option.
- ⇨ You can have up to 4 jobs open at the same time. Simply open a second, third, fourth job and the one your cross hairs are displayed in is the current and active job.
- ⇨ There is a new AutoSave feature that saves both the drawing and the database. It is available in the System Toggles.
- ⇨ New CAD Lines and CAD Curves commands now allow you to pick a line or curve, without any command being run, and have their information displayed. Further calculations can be done from this point.
- ⇨ The Assistant is the newest method of working through a job. It will offer you a series of commands in an order that most people will work. This saves going to the pull-down menus all the time.
- ⇨ Quick commands and toggles have been placed on the Option Bar directly above the drawing area. These are available any time no commands are running.
- ⇨ A new Log File offers direct printing of the textual data you have calculated or displayed. Pick the View Log button on the Options Bar to enter the command.
- ⇨ If you wish to orient your job so that North is NOT directly up the screen then try the Drawing View Rotation MSCAD Surveyor View command.
- ⇨ When placing Text on a diagram through one of the Leroy options (or other styles provided), we now ask you for the Rotation of the text after you have placed it on the screen.
- ⇨ The new AutoMAP command allows you to place symbols on points, set the layer, set the linetype, set the color, draw lines or polylines, change descriptions, trim lines and much more.
- ⇨ The new Graphic Point Editor allows you to select and edit a group of points in almost any way imaginable. Shift, Scale, Rotate, Change Elevation, Change Description, Place on QuickSurf surface directly, and much more.
- ⇨ A new fast method of calculating an area allows you to select all the linework enclosing the area, no numbers required, no trimming required, and the area is calculated.
- ⇨ You can now use the UNDO BACK command to undo calculations as well as drawing errors. The database is updated automatically.
- ⇨ Special Fence, Text and Tree line routines have been provided under the Design menu.
- ⇨ Direct serial port communications is available for SMI, Topcon, Sokkia, TDS, Nikon and other data collectors via the Generic option, found under Data Collector Communications.
- ⇨ To place a Cul-de-sac on the end of a street, you must first use the, Streets - Create From Centerline option. A Cul-de-sac can not be generated on a normal line or polyline.
- ⇨ You can now reset the defaults back to Factory Standards. This is in case you mess things up when customizing your defaults. A quick Factory Reset and you are back to normal.
- ⇨ 8 additional linetypes are now loaded on startup. Additional linetypes can be loaded by using the command Linetype. Standard Linetype files from AutoCAD can also be loaded directly.
- ⇨ The SAVE AS command allows you to change the name of a job or save the drawing in an AutoCAD R12, R13, R14 or DXF format.
- ⇨ In the Print Dialogue box under Color/Width, be sure to pick the correct switches in the top left portion of the dialogue box to control whether the lines will have a width, or a colour when plotted, or both when plotted.
- ⇨ There is a Reference North toggle in the Bearing Default Configuration that controls the format of the bearing or azimuth so that it can be displayed in several ways. Check the Help for more details.
- ⇨ Bearing and Azimuths can be rounded to the nearest number of seconds you specify, for display, by setting the rounding option in the Bearing Default Configuration.
- ⇨ Distances can be rounded to the number of decimal places you choose, for display, by setting the decimal places in the Distance Default Configuration.
- ⇨ Elevations can have a different number of decimal places displayed in the job than distances, set this in the Elevation Default Configuration.
- ⇨ The points in MSCAD are true 3D points and will be drawn in 3 Dimensions. This means that you must inverse between them to get the horizontal distance. Using the DIST command with object snaps

will give you the 3D slope distance between the 2 points.

- If the Trim or Expand command will not work, check to see if the trimming line or the lines to expand to, are drawn as 3D lines. If so then simply draw new 2D lines to use in these commands as Trim and Expand can not use 3D lines as boundaries. You could also convert 3D lines to 2D by running the SCALEZ command with a scale factor of zero.
- Using the Line command and the Object Snaps to join between 2 points will result in a 3 Dimensional line being drawn which may result in other commands such as Offset, either not working or giving unexpected results.
- The Offset and MSCAD Offset commands will only work properly on 2D line work. 3D line work will give unexpected results and will appear to not honour the distances you have set.
- We can add points to any existing

lines, curves and points in any drawing by running the Auto Add Points To Objects command found under the Coordinate Point Utility menu. Or type AUTOP at the command prompt.

- Bore hole information can be read into QuickSurf by using the Read ASCII Table option under Import Data. This allows for multiple Z values for each X,Y coordinate, each on it's own surface.
- Label North/East of Point will use the last text style used in the drawing. If there is no style used prior to this command then the Default Text Style set in the MicroSurvey Job Defaults, will be used.
- When trying to locate a point on screen in a mass of points, try using the Zoom to a Point command (ZOOMP) under the Coordinate Point Utility menu. It will place the point in the middle of the screen with a defined distance shown above and below the point.

I hope that some of these short tips will help you make the most of the

MicroSurvey CAD Pro. 3.1 program. *"Tips and Tricks" has been brought to you by Glen W. Cameron, C.E.T. Glen is the Technical Support Manager at MicroSurvey Software, Inc., working out of Corbeil, Ontario, Canada. Glen is providing support North America wide (and now into Australia), for the entire MicroSurvey product line. Glen has been instructing on and supporting these products now for over eleven years while traveling from Yellowknife to Bermuda, Newfoundland to Oregon, and extensively throughout Ontario. Glen graduated from St. Lawrence College - Kingston, Ontario, with honours in Civil Engineering Technology in 1985, and worked in the field surveying for several years. With his practical experience as well as the extensive professional training and technical support he provides, his "Tips and Tricks" will undoubtedly assist even the most experienced users!*

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