

Improvements to Carlson Survey for 2009

- **Move Point Attributes with Leader** – Added settings for arrow size, offset of leader head from the point and option to draw leader tick mark at label end.
- **Edit Multiple Point Attributes** – Added setting for parent layer of point attribute block and method to size all of the attributes at once.
- **Export Text/ASCII File** – Added method to select multiple coordinates file and batch process exporting them.
- **Legal Description** – Added option to always report in clockwise or counter-clockwise direction.
- **Visual COGO** – Added option to not draw points, only linework.
- **Best-Fit Circle** – Added method to use points in 3D by projecting the points onto a best-fit plane, calculating the best-fit circle and projecting the resulting circle back to world coordinates. Applies to circles for tunnel sections.
- **Field-to-Finish** – Added fixed parameter coding method for special codes in set order in the point description such as for tree shots where the first part of the description is the tree code and the second part has the size. Added special codes for Offset Left (OFL), Offset Both Left/Right (OFB) and split multiple codes (MULT). For drawing text as attributes, added settings to control the text rotation. Added method to output point notes for the special codes and the drawing description. Improved creation of 3D polylines from points on an arc that projects the points onto a plane to get the true 3D arc. Added ability to output points to multiple point groups per code.
- **Edit-Process Raw File** – Added option to Direct & Reverse report to show horizontal distances. Added horizontal distances and point descriptions to the Check Points report.
- **Edit-Process Level Data** – Added support for importing SurvCE differential-level TLV files.
- **SurvNET** – Added EDM calibration function. Added support for NGS G-Files and for OPUS reports for importing GPS vectors. Added functions to save and load project settings to a file. For 1D/2D models, added the ability to assign standard errors to benchmarks for elevation adjustment. Added import/export of standard errors. New option to draw error ellipses.
- **MText Annotation** – Added the option to create angle-distance labels as MText.
- **Area Labels** – Added ability to fix label overlaps by applying specified rules as well as a separate routine to find overlaps and then step through them to fix manually. Added controls per label field for size, style, decimals, prefix, suffix, color and justification. Added method for automatic placement along the edge of the area. Added alignment methods for by twist screen and by lot sides. Added options to draw labels as Mtext and to draw a symbol around the labels.
- **Area By Closed Polyline** - For multiple polylines, added methods to label each area or the total only
- **Area Table** – Added controls per field for style, justification and background color. Added settings to tag labels for size and layer. Added option to draw final row of area totals. Added setting for table title to draw as top row.
- **New Area Table: Create New Table, Set Active Table** - New commands to add support for multiple area tables in the drawing.
- **New Area Table: Edit Properties** – New command to edit any of the settings for the selected area table.
- **New Area Table: Remove Row** – New command to remove the selected row and associated label tag and update the table.
- **New Area Table: Consolidate Table** – New command to renumber area tables to remove any numbering gaps.