O-Calc Pro Line Design 6.0.1

New Features

◇ LiDAR(Light Detection and Ranging)

● LiDAR Map Overlay
‣ The Map View in the Line Design Tab is now able to read and display map tiles created from formatted LiDAR data. This new feature can be found under the Map tab in the auxiliary area of the Line Design Tab.

● LiDAR 3D View Overlay
‣ There is a now LiDAR Overlay Plugin available that allows formatted LiDAR files to display as point clouds in the 3D view. These point clouds can be used to obtain measurements when performing Pole Loading Analysis. This new plugin can be activated under “Manage Plugins.”

◇ Clearance Analysis – Added Features

● Ground Line Clearance Obstruction
‣ A clearance obstruction based off ground line elevations between poles can now be created in the clearance analysis tool of the Line Design Tab

● Create Obstructions from CSV data
‣ Obstructions can now be created from a list of locations and measurements stored as a csv file. The file can be imported into the Clearance Analysis tool in the Line Design tab.

● Bulk Selection of Obstructions
‣ Ability to select obstructions in bulk in the clearance analysis obstructions tab instead of only one at a time.

◇ Linked Spans – Added Features

● Split Span and Insert Jumper
‣ The Split Span tool now works with a wider range of insulator types and there is now an option to split spans without inserting a jumper.

● Restring Span Bundles
‣ Linked Span Bundles now can be restrung using pre-built span bundles from a catalog. A restring context menu will appear if a span bundle is dragged and dropped onto an existing linked span bundle.

● Taps on Messengers
‣ Flying Taps can now be added to messengers as well as bundled spans.

● Link Spans on Taps
‣ Spans attached to taps can now be linked to other spans.

● Description of Link Spans

‣ Editing the description of a linked span will now also edit the description of the associated span on the adjacent pole.

◇ O-Calc Pro Catalogs – Enhancements

● Catalog Prompt on Delete
‣ The user can choose if they want to be prompted or not when deleting items from your User Catalog. The default is to always prompt the user.

● Catalog Hotkeys
‣ Hotkeys can now be defined and added for various User Catalog commands.

● AT&T Master Catalog
‣ The AT&T Master Catalog is now available for download through the Download Catalogs option inside the Catalog Manager.

● PUPI Cross Arms
‣ There is now a PUPI Cross Arms catalog available for download through the Download Catalogs option inside the Catalog Manager.

◇ Plugins

● StreetView
‣ This Plugin can open the pole location in street view, map view, or satellite view on the Google Maps website.

● CSV Preview
‣ This Plugin opens a CSV in preview mode to allow review of csv data or overlaying of pole locations in the Map View of the Line Design Tab.

● Batch Set Pole Location
‣ This Plugin updates the latitude, longitude and elevation of a list of pplx files using a CSV.

● PPLX to SPLIF
‣ This Plugin exports a pplx file as a SPLIF(Standard Pole Loading Interchange Format) file for use with other pole loading software.

● STL Generator
‣ This Plugin exports a pplx file as an STL(Standard Tessellation Language) file for use with CAD software.

◇ General

● Modeling a Flying Dutchman

‣ While working within O-Calc Pro Line Design, sometimes it is necessary to connect spans together that are not connected at the pole, but the spans are connected at a location between the poles. This is commonly called a Flying Dutchman and there is a new object within O-Calc Pro to aid in this modeling.

● Multithreading of calculations for better performance

‣ O-Calc Pro Line Design now has the option to use multithreading when performing calculations on various poles within a Line Design. This enables the user to continue modeling the structures/Line design while the calculations are run in the background.

● **‘Face’ Attribute added to Crossarm**
‣ The Crossarm object now has a new attribute called ‘Face’ that enables the user to easily switch the pole face of the crossarm from “Front” to “Back”.

● Bundle Diameter displayed in Inventory
‣ The total bundle diameter of a communication bundle is now displayed within the Inventory panel. The messenger object, by default will display the description, direction, length, and total bundle diameter.

● Batch Reports for Line Design
‣ Batch Reports can now be run on multiple Line Design Files (.ppld).

● Fix Span Rolls Cross Arm Options
‣ There is now an option to choose whether to rotate cross arms or not when using the fix span rolls tool.

● Height Labels
‣ Attachment heights are now displayed for all default inventory descriptions of elements attached directly to the pole.

● Whole Line Solver – GO95 Rule 46
‣ The Whole Line Solver now accounts for GO95 Rule 46 (additional vertical load for linemen).

● Minimum Anchor Distance
‣ Minimum Anchor lead length has been adjusted to 2 feet from the pole face to allow for use of 3-foot struts.

● Clear all DMT Image Labels
‣ Added the ability to clear all labels for a given image within the DMT measure tab.

● Label Backgrounds in Line Design Map
‣ Added backgrounds for Line Design Map labels so that the labels will be visible regardless of the displayed map back drop. These label backgrounds are an user option.

● Line Design Batch Reporting
‣ When running a batch report for all the poles within the Line Design, the user can now include all versions of the pole and/or load cases for each pole.

Corrections/Improvements

◇ Line Design

● Insert Pole
‣ Defect: Split spans and insert pole was not adding a Load Case to the newly created pole when this tool was used to add a new pole to a Line Design.
‣ Improvement: Split spans and insert pole now adds a default load case to the newly created pole.

● Horizontal Scale
‣ Defect: On some machines, after changing the horizontal scale, focus would remain on the Horizontal Scale tool. This could cause an unintended change in Horizontal Scaling the next time an action was performed in the 3D view.
‣ Correction: Changing Horizontal Scale will no longer be changed if another action is performed in the 3D view.

● Move Here
‣ Defect: In some circumstances, using the Move Here context option when dragging and dropping an insulator could cause the spans attached to this insulator to become unlinked.
‣ Correction: Using Move Here context menu is no longer able to sometimes break span links.

● Sag in Profile Viewer/Chart
‣ Defect: In some circumstances, the sag would be drawn incorrectly in the profile viewer or chart function. The sags were being drawn/displayed as having too much sag.
‣ Correction: The correct amount of sag is now being displayed.

● Zero Length Insulator
‣ Defect: In the circumstances when a user changed the length of the insulator to a length of zero inches, the calculations where fail to converge properly.
‣ Correction: This calculation issue has been corrected.

● Multipole Structures
‣ Defect: In some circumstances, spans and guys could not be linked between legs of a multipole structure or from a multipole structure to other structures in a Line Design.
‣ Correction: Multipole Structures should now link correctly between legs and other structures.

● Merge/Jumper to Catalog Items
‣ Defect: Some catalog items would give the option to merge with or jumper too inventory items when dragging and dropping.
‣ Correction: Dragging and dropping an item from the catalog to the inventory should no longer give the option to merge or jumper these items.

● Clearance Analysis
‣ Defect: Sometimes items outside the clearance distance could trigger clearance failures erroneously.
‣ Correction: Objects outside clearance distance should no longer occasionally trigger erroneous clearance failures.

● Pole Lean
‣ Defect: Sometimes adding lean to the active pole would cause the other poles in 3D View to display as having the same lean.
‣ Improvement:For Line Design models, pole Lean is now shown as a ghost pole superimposed over the pole model in 3D View.

● Display/Refresh Issues
‣ There were a few display errors and display refresh issues that have been correct. These include the following:
    Crossarm Braces not rotating correctly with crossarm rotation.
    Span diameters appear smaller in 3D View depending on camera angle.
    Corrected clipping issue if the 3D View ground area was too large.
    Corrected display issue with span guys not showing up in 3D View

Several items corrected to refresh 3D View and/or LD Map when operation was performed.
Corrected obstructions drawing incorrectly in 3D View.

◇ Catalogs

● Unable to Save Changes
‣ Defect: Having a broken catalog path for one catalog could cause changes made to other catalogs to not save when closing O-Calc.
‣ Improvement: Having a broken catalog path for one catalog will no longer prevent changes made to other catalogs from saving.

● 5.03 Compatibility
‣ Defect: Some items created in O-Calc Pro Line Design could cause an error which would prevent the catalog from loading in O-Calc Pro 5.03.
‣ Improvement: O-Calc Pro 5.03 has been updated to allow all catalogs created in O-Calc Pro Line Design to open in 5.03. To upgrade 5.03 please download the manual patch file from the 5.03 download page and copy it to the bin folder in your O-Calc Pro install location.

◇ Reports

● False Assert Error Message
‣ Defect: Some reports would incorrectly send an error message when opened or printed to file.
‣ Correction: Reports should no longer send an incorrect error message when opened or printed.

● GIS Data showing in Scientific Notation
‣ Defect: Some GIS data would show in scientific notation in the latitude and longitude section of the analysis reports.
‣ Correction: Reports will no longer display GIS data in scientific notation.

◇ DMT and Images

● Linked Images Lost
‣ Defect: In certain circumstances, links to image locations could be lost upon creating a new version of a pole or closing O-Calc.
‣ Correction: Linked Images should never be lost as long as the image file location is valid.

● Image Labels not showing in DMT
‣ Defect: In some circumstances, Image Labels would no longer show up when performing measurements in the DMT tool.
‣ Correction: Image labels should now always show up correctly.

● Image Manipulation Errors
‣ Defect: On some machines, performing various image manipulations would cause display errors to occur in the DMT tool.
‣ Correction: Image manipulation should no longer cause occasional display errors.

● Images Added on Cancel
‣ Defect: Images could sometimes be added to a pole even if Cancel was selected during image selection in the Select Pole Images tool.

‣ Correction: Selected images will no longer be added when cancel is selected in the Select Pole Images tool.

◇ Plugins

● O-Calc LE Missing Images
‣ Defect: In some instances the O-Calc LE Management Plugin would fail to download images associated with a pole.
‣ Correction: O-Calc LE Management Plugin should now always download any images associated with a collected pole.

◇ General

● Data Entry Display
‣ Defect: In some circumstances, when the data entry tab was hidden, the data entry tab could fail to display selected elements.
‣ Correction: The Data Entry Tab should now correctly display any selected elements.

● Davit Arms
‣ Defect: In some instances, davit arms could reverse rotation values, preventing the davit arm from having a davit angle greater than 90°
‣ Improvement: Davit arms should now have a full 180° arc of rotation for the davit angle.

● Damage and Decay Error message
‣ Defect: In some instances, when adding damage or decay to a pole, an error message would be incorrectly displayed.
‣ Correction: An error message should no longer be generated when adding damage or decay to a pole.

● Ally Arm Load
‣ Defect: In some instances, alley(offset) arms were not calculating correctly, resulting in slightly incorrect load calculations on the pole.
‣ Correction: Alley arms now calculate loads correctly.

● Active Load Case
‣ Defect: In some instances, pole versions that share the same load case were not maintaining the active load case when switching between versions.
‣ Improvement: Shared Active Load Cases between pole versions should now be maintained when switching the active version.

● Junctions/Drip Loops
‣ Defect: When adding a Junction Box or Drip Loop to a linked span, the Junction or Loop could show up as offset from both ends of the same span.
‣ Correction: Adding a Junction Box or Drip Loop to a linked span will now display as offset from the correct pole.

● Guy Tension Flags
‣ Defect: In instances where guys were overloaded at the worst wind angle for the guy, they could still be listed as passing in the 3D view if they were not overloaded at the worst wind angle for the pole.
‣ Improvement: Guys will now flag as failed in 3D view if they fail at any wind angle.

● Sidewalk Strut Height
‣ Defect: In instances when a pole with a sidewalk guy was substituted for a different length pole, the height of the sidewalk guy strut was not being maintained.
‣ Correction: Sidewalk Guy Strut heights are noted and maintained on pole substitution.

● Insulators on Pole Top Extensions
‣ Defect: when insulators were attached to pole top extensions, the angle and side values were not fully allowing for attachment locations.
‣ Correction: Updates to how insulators are placed on pole top extensions now function as intended.