2024 Virtual Workshops: Session #3-4 Continuation of Adjusting YOUR Datasets with SurvNet
Presenter: Donnie Stallings

A Virtual Workshop Using Carlson Software – Review Least Squares Reports and Survey Control

This session from That CAD Girl's 2024 Virtual Workshop series features Donnie's in-depth training on Carlson's Least Squares Adjustment tools for survey data analysis. The workshop covers interpreting reports, identifying blunders, understanding statistical tests and applying best practices for boundary and DOT survey adjustments.

Key Topics:

- Carlson Least Squares Adjustment fundamentals
- Error analysis and residual interpretation
- Chi-square testing and blunder detection
- ALTA/NSPS accuracy standards
- Practical examples: boundary and DOT survey data

Descriptions, transcripts and other details of this recording ha ve been AI-generated and may contain errors.

This session was presented by Donnie Stallings on 12/10/2024.

2024 Virtual Workshops: Session #3-3 Adjusting YOUR Datasets with SurvNet Presenter: Donnie Stallings

A Virtual Workshop Using Carlson Software – Adjust Survey Networks with SurvNet Least Squares

This virtual Carlson Survey workshop, led by Donnie Stallings and hosted by That CAD Girl, introduced surveyors to the principles of least-squares adjustment and the use of Carlson Survey's SNET module. The session covered theory, workflow setup and practical examples combining total-station and GPS data.

Key Topics:

- Introduction to least-squares adjustment theory
- History and development of Carlson Survey's SNET (Survey Net)
- Practical setup and configuration of SNET projects
- Combining total-station and GPS vectors
- Error analysis, blunder detection and ALTA/NC DOT workflows

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This session was presented by Donnie Stallings on 12/17/2024.

2024 Virtual Workshops: Session #3-2 Continuation of Advanced Carlson Survey and Field to Finish
Presenter: Doug Aaberg

A Virtual Workshop Using Carlson Software – Refine Field-to-Finish Survey Coding

This advanced Carlson Software workshop, led by Doug Aaberg, explored powerful Field to Finish tools and workflows for surveyors, including annotation automation, tree and pipe features and special coding techniques. The session offered practical demonstrations and Q&A to help users streamline drafting, labeling and data collection processes.

Key Topics:

- Carlson Field to Finish advanced features
- Annotation and MText automation
- Tree and pipe feature configuration
- Special codes, offsets and templates

- Real-world Q&A on survey workflows

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This session was presented by Doug Aaberg on 12/10/2024.

2024 Virtual Workshops: Session #3-1 Advanced Carlson Survey and Field to Finish

A Virtual Workshop Using Carlson Software – Automate Survey Drafting with Advanced Field-to-Finish

This virtual training session, led by Carlson Software expert Doug Aaberg, provided an in-depth walkthrough of the Field to Finish feature in Carlson Survey. Attendees learned how to automate drafting from field data, manage code tables, apply special codes and streamline survey workflows from data collection to finished CAD drawings.

Key Topics:

- Introduction to Carlson Field to Finish
- Creating and editing code tables
- Using special codes (begin, end, PC/PT, jog, rectangle, jo in point number)

- Managing layers, linework and symbols
- Handling point groups and reprocessing efficiency
- Q&A on practical field coding and data management

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This session was presented by Doug Aaberg on 12/10/2024.

2024 Virtual Workshops: Session #2-4 Continuation of Overview of Carlson Takeoff Suite modules
Presenter: Jennifer DiBona

A Virtual Workshop Using Carlson Software – Elevate 2D Plans into 3D Takeoff Models

This advanced Carlson Software workshop covered 2D-to-3D conversion tools, drawing cleanup and CADnet functions for converting and merging raster and vector PDFs. Attendees learned practical workflows for elevating contours, creating 3D polylines, digitizing plans and integrating geotechnical data into construction modeling.

Key Topics:

- Carlson Civil and Takeoff 2D-to-3D tools
- Elevate and 3D Data menus: contour and polyline elevation
- CADnet for PDF import, raster/vector conversion and image merging
- Geotech module for strata modeling and volume calculations
- Practical cleanup and modeling workflows

Descriptions, transcripts and other details of this recording ha ve been AI-generated and may contain errors.

This session was presented by Jennifer DiBona on 11/20/2024.

2024 Virtual Workshops: Session #2-3 Overview of Carlson Takeoff Suite modules – CADnet, Construction, Trench, GeoTech
Presenter: Jennifer DiBona

A Virtual Workshop Using Carlson

Software – Start Takeoff and Site Modeling Workflows

This session from the 2024 Virtual Workshops series provides an in-depth walkthrough of Carlson Takeoff and Takeoff Suite, focusing on setup, layer management, surface modeling and quantity takeoffs. The instructor demonstrates workflows, cleanup strategies and practical tips for construction modeling and estimating using Carlson software.

Key Topics:

- Overview of Carlson Takeoff and Takeoff Suite modules
- Comparison with Carlson Civil Suite
- Layer management, cleanup and setup for takeoffs
- Creating and managing surfaces and subgrades
- Performing quantity takeoffs and topsoil calculations
- Using Carlson’s visualization and reporting tools

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This session was presented by Jennifer DiBona on 11/20/2024.

2024 Virtual Workshops: Session #2-2 Continuation of Overview of Carlson Precision

3D Topo and Hydrology Presenter: Bruce Carlson

A Virtual Workshop Using Carlson Software – Model RoadNet Drainage for Precision 3D Hydrology

This virtual workshop demonstrates Carlson Software’s Precision 3D Hydrology and RoadNet tools, showing how to design, analyze and visualize stormwater systems within a CAD-integrated environment. The session covers intelligent TIN creation, watershed modeling, gutter spread analysis and report generation for KYTC-compliant submittals.

Key Topics:

- RoadNet intelligent TIN and hydrology integration
- Dynamic CAD linking with Precision 3D Hydro
- Gutter spread and watershed analysis
- KYTC reporting and culvert design
- Training tools and hydrology simulation game

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This session was presented by Bruce Carlson on 11/20/2024.

2024 Virtual Workshops: Session #2-1 Overview of Carlson Precision 3D Topo and Hydrology
Presenter: Bruce Carlson

A Virtual Workshop Using Carlson Software – Design Drainage with Precision 3D Hydrology

This session from the 2024 Virtual Workshops features Bruce Carlson demonstrating advanced hydrology workflows using Carlson Precision 3D and IntelliCAD. The presentation covers terrain modeling, watershed analysis, culvert design and dynamic CAD integration for civil engineering and land development professionals.

Key Topics:

- Working with DGN and DWG files in Carlson and IntelliCAD
- Terrain modeling and hydrology setup in Precision 3D
- Automatic watershed and runoff coefficient calculation
- Culvert and storm sewer design with dynamic CAD updates
- Channel lining, headwalls and stormwater flow analysis

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This session was presented by Bruce Carlson on 11/20/2024.

2024 Virtual Workshops: Session #1-4 Overview of Carlson Civil and Hydrology Presenter: Mark Long

A Virtual Workshop Using Carlson Software – Understand Civil and Hydrology Design Workflows

This Carlson Software virtual workshop, led by Mark Long, provided an in-depth overview of civil design and hydrology workflows using Carlson Civil and Hydrology modules. The session covered surface modeling, roadway design, storm drainage and sanitary sewer network creation, highlighting practical tools and new features in the 2025 release.

Key Topics:

- Civil design fundamentals and surface modeling
- RoadNet and roadway profile creation
- Hydrology and storm sewer network setup
- Sanitary sewer design automation
- Integration of pre- and post-construction surface models

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This session was presented by Mark Long on 11/19/2024.

2024 Virtual Workshops: Session #1-3 Overview of Carlson Point Cloud and Carlson Photo Capture

A Virtual Workshop Using Carlson Software – Process Point Clouds into CAD Models

This Carlson Software virtual workshop focused on using Carlson Point Cloud and Photo Capture tools to process drone and LiDAR data for surveying and mapping. Doug demonstrated workflows for creating, cleaning, classifying and extracting data from point clouds to produce accurate surfaces, contours and CAD deliverables.

Key Topics:

- Carlson Photo Capture (cloud and standalone versions)
- Importing and managing LAS point cloud data
- Bare Earth filtering and classification
- Creating coordinate points, polylines and surfaces
- Automated feature extraction (curbs, parking lines, paint stripes)
- Integration with CAD and field-to-finish workflows

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This session was presented by Doug Aaberg on 11/19/2024.