

WELCOME TO THE CADD CONNECTIONS NEWSLETTER

I hope you enjoy our inaugural issue of our newsletter and find it very useful. This is the first newsletter in a series to be published quarterly. It is intended to keep CADD Users better informed of the latest developments in CADD software at VDOT. You will find topics such as "Training Schedules", "Tips & Tricks" and many others in this first issue. Each issue will have a "Spotlight" section where users can showcase how they have solved issues in their district or section. I also want CADD Users to get to know all of my support staff better and what services they have to offer. So take a look and let us know what you think. There is a link on the back page if you would like to send us comments.

Jeff Wyatt
CADD Manager

NEW SOFTWARE UPDATES

GuidSIGN 4.4 **GUIDSIGN**

GuidSIGN 4.4 is the latest sign design software package developed by Transoft Solutions Inc. as a tool for creating roadway and highway sign panels. The software fully automates the sign design process and allows users to create sign panels with little input and knowledge of standard signs. GuidSIGN has been adopted by VDOT as the official sign design software package for sign projects. GuidSIGN is fully compatible with MicroStation platforms and FHWA Series 2000 and TrueType fonts as well as the new Clearview Highway font. The program can be customized to fit your needs such as arrow sizes, shields, symbols, drawing symbols, etc. Once signs have been created, they can be easily modified. Sign Panel requirements such as borders, margins, text and symbol spacing, letter series, text heights and fonts, arrow sizes and route shield sizes, etc. are easily determined using the GuidSIGN Software. Cell Libraries are easily created in GuidSIGN. GuidSIGN is compatible with output files and cutters and plotters used in the sign creation process and district sign shops. The GuidSIGN software also comes in a Windows stand alone version for those not using CADD systems. A PDF copy of the GuidSIGN user guide is now available on the Inside VDOT website.

http://insiddevdot/sites/Location_and_Design/Location%20and%20Design%20Division%20Documents/GuidSIGN.pdf .



CADD Support Section

2007



AutoTurn 5.1 **AUTOTURN**

AutoTurn 5.1 is a CADD-based program that simulates low speed turning maneuvers for highway vehicles. This program operates within MicroStation. It is used to help the designer determine the turning radius required for a design vehicle. AutoTurn has a complete set of standard defined vehicles such as a large car, an RV with a boat trailer, or a Tractor and double trailer. User-defined vehicles can be created if none of the standard defined vehicles meet the specifications. The path of the vehicle, which is the center of the steering axle of the vehicle, can be determined by AutoTurn. The path can also be established in MicroStation using a combination of arcs and tangents. The program output is a drawing of the tire, body, and clearance of the defined vehicle in a Microstation file as well as a full motion animation. Each simulation is saved and can be recalled.

Some of the new features of the AutoTurn 5.1 are front and rear steering linkages, repeating simulation animation, offset simulation tool, over steer corner path tool, and the generate reverse corner tool. Users can create front and rear steering vehicles and specify the linkage ratios between front and rear steering. The user can toggle the loop option to have vehicle simulation animations repeat continuously. The place offset simulation tool allows the user to create vehicle simulations parallel to the travel way edge of the pavement at a specified offset. The over steer corner path tool allows the user to create and evaluate over steer scenarios. A PDF copy of the AutoTurn user guide is now available on the Inside VDOT website. http://insiddevdot/sites/Location_and_Design/Location%20and%20Design%20Division%20Documents/AutoTURN.pdf .

CADD SUPPORT SECTION

THE CADD SUPPORT SECTION IS RESPONSIBLE FOR PROVIDING TECHNICAL SUPPORT FOR CADD SOFTWARE TO ALL LOCATION & DESIGN PERSONNEL, AS WELL AS OTHER DIVISIONS, CONSULTANTS AND CONTRACTORS. THIS SECTION PROVIDES ASSISTANCE WITH ELECTRONIC MANUALS AND UPDATES TO INTERNAL AND EXTERNAL WEBSITES. WE ALSO COORDINATE THE TRAINING OF TRANSPORT PES, MICROSTATION AND GEOPAK.

CADD STAFF

JEFF WYATT - CADD Manager

SAM PERKINS - CADD Support Team Leader (GEOPAK, Plotting)
WILBERT LAMBERT - CADD Support Team Leader (GEOPAK, MicroStation)

VALLARIE GRAY - CADD Support Team Leader (Web, Manuals)

VICKY COLE - CADD Support Specialist (Falcon)

THERESA WILSON - CADD Support Specialist (TRNS-PORT, Training)

LAWRENCE LEED - CADD Support Specialist (Falcon, Licenses)

WENDY CLINGER - Application Analyst (Manuals)

AUFAIT FRAZIER - Application Analyst (Visio)

JEFF FREEZE - Application Analyst (Databases)

BONNIE TRENT - Application Analyst (Web)

VICKIE GULLET - Application Analyst (Falcon Access)

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MANUALS & GUIDES

<http://www.virginia.gov/business/manuals-default.asp>

CADD SUPPORT HELPDESK NUMBERS

(804) 786-1280
1(888) 683-0345

VDOT customers that are having problems with CADD software products (MicroStation, Falcon, GEOPAK, IGrds, Caice, eQuorum, Plotting, etc.) call CADD Support Helpdesk at (804) 786-1280 or e-mail at colndhelpdesk@vdot.virginia.gov.

Consultants and VDOT staff can also call Bentley Systems directly with problems at 1 (888) 436-7251.

GET INVOLVED

Submit Your Suggestions & Comments

Get involved - Be the next **In The Spotlight**. We welcome all comments and responses.

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Location and Design

2007 TRAINING SCHEDULE

The CADD Support section is responsible for training in the following applications – Basic MicroStation V8, GEOPAK Road, Survey, Drainage and TRNS•PORT PES. This training is available free of charge to all persons required to use these applications while doing business with VDOT. Register for a class by using the link below.

<http://www.extranet.vdot.state.va.us/locdes/training/schedule/aesschedule.htm>

It should be noted that the dynamics of some of the classes have changed since outside sources are conducting/teaching the MicroStation and GEOPAK classes.

In addition to the established classes listed above, CADD Support is also coordinating training in the software:

Phase 1 - Webinar Basic Training

April 12 Basic GuidSIGN Training (2 hours) 1:30pm -3:30pm Eastern Time
April 17 Basic GuidSIGN Training (2 hours) 1:30pm -3:30pm Eastern Time

Phase 2 - On-Site Hands on Training You have to attend the Phase 1 Training to be eligible for Phase 2

Northern Virginia District Office PC training room for May 8th (Chantilly, VA)
Richmond District Training Center for May 9th (Colonial Heights, VA)
Salem District Office PC training room for May 11th (Salem, VA)

TRNS•PORT PES- NGT (Next Generation Transport)

Look for changes in TRNS•PORT in the Fall of 2008. TRNS•PORT will become a totally web based application. A dedicated group of employees from VDOT is currently working closely with InfoTech and other users nationwide to develop and migrate the Client Server version of TRNS•PORT to a web version.

FALCON WEB SUITE

What's New with Falcon?

Consultants can now access Falcon through the web to load and update their files. There's a new Environment called Consultant Files under Central Office. To get consultant access to falcon, have them fill out the LD-443 Form: <http://www.virginia.gov/business/const/CII-CriticalStructureInformation.asp>

The project manager should submit the forms to the Central Office CADD Support Group. If consultants want access to work on VDOT projects have them fill out the "VDOT Falcon Access Request Form".
<http://www.virginia.gov/business/const/>

You can access the Plan File Room and Current Drawings on the internal Website:
http://insidvdot/sites/Location_and_Design/Lists/Falcon/AllItems.aspx

MICROSTATION TIP

Reference Files

Nested Attachments – Copy Attachments

A Nested Attachments menu comes into play when the directly-attached reference also contains reference attachments. This determines how nested references are handled.

- Select **No Nesting** to display only the directly-attached reference.
- If **Copy Attachments** is selected, nested references in the attached reference are attached to the active design file.
-

The **Depth** edit field sets the number of levels of nested references that are recognized.

Nested Attachments: Copy Attachments Depth: 1
 Display Raster References
OK Cancel Options...

TIPS & TRICKS

FYI On Superelevation Diagram

Drawing a Superelevation Diagram on the Profile Cell using a custom 3PC application:

- Step 1.** Open the MicroStation file that contains the Profile Cell.
- Step 2.** Open Design and Computation Manager. Double click item **Road Design > Special Applications > Super Diagram**.
- Step 3.** Populate the dialog box. An example is shown below. Click **OK**.

NOTE: Use the **Identify Cell** button to populate the upper left portion of the dialog box.

- Step 4.** Click **OK** when the prompt appears.

These instructions can be found in the GEOPAK V8 Road 1 Manual on page 11-30.
http://www.extranet.vdot.state.va.us/locdes/GEOPAK/r1vdot_print.pdf

IN THE SPOTLIGHT RICHMOND DISTRICT



Brown Bag Lunch

Richmond District L&D has set aside the 2nd Thursday of each month to hold a brown bag lunch to share problems and resolutions of situations faced by designers on projects. Topics range from requesting Materials survey for Pavement buildup/overlay to maintaining GEOPAK reports through the phases of a project. Interaction between designers and engineers provides an opportunity for everyone to develop their knowledge of design techniques and CADD software applications. It is a forum for individuals to share their knowledge and experience with others in order to provide a better finished product.