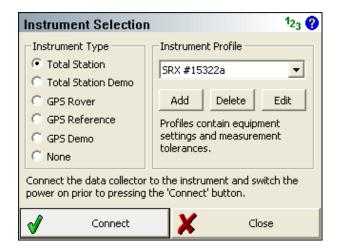
# FieldGenius 2007 – 3.1.2 Release Notes

Released on July 6, 2007

### New Features

**Instrument / GPS Manager** – A new instrument and gps manager is now included in this release. You can now create and edit profiles for all you equipment in one convenient screen.

When you open and existing or create a new project, you will see the new instrument selection manager.



Note: All total station settings are saved in the MSURVEY.INI file, while gps settings are stored the GPSPROF4.DBF file.

#### Fixed

**Edit Raw File –** A bug was introduced in an earlier version that would add extra spaced between the raw file records if the user edited their raw file with FieldGenius.

**Manual Entry** – If an active connection existed to an instrument, and the user choose the Manual Entry" measurement mode, FieldGenius would not correctly update the target height on the Store Point dialog.

AutoMap Editing - If multiple AutoMap entries were edited (30+), FieldGenius would crash.

**Topcon 9000** – Modified the Topcon Robotic driver so FieldGenius can connect to this series of instruments.

**Topcon Reflectorless Short and Long** – FieldGenius always forced the reflectorless edm mode to short. FieldGenius will now recognize these two modes and display them to the user.

Sokkia Basic – Updated our Sokkia Basic driver so that it support older Sokkia models.

Sokkia SET 4010 - Updated the Sokkia Basic driver so it communicates with this instrument.

**Sokkia Advanced** – Updated the driver so that if the instrument is out of level "Out of Range", FieldGenius will report the error to the user.

## Improved / Updated Features

**Check Level** – This function was removed from the instrument settings screen. You can now access it when you connect to an instrument that support this feature, or by selecting the new Check Level button available in the instrument settings toolbar.

# FieldGenius 2007 – 3.1.1 Release Notes

Released on June 25, 2007

This was an internal test build and was not released to the general public.

# FieldGenius 2007 – 3.1.0 Release Notes

Released on May 23, 2007

## New Features

**Export Contours** – If you create contours you will now have the option of including them with the DXF export.

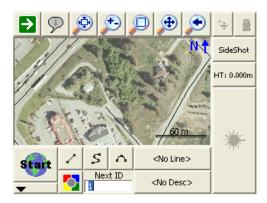
**Real time Surface Update** – When you manually edit the "Do not include" DTM attribute on a point, FG will now update the surface immediately.

**Save Surface** – Surfaces generated with FG can now be saved and opened in MSCAD, inCAD or in other FieldGenius projects.

**Surface Boundary** – User can now specify a boundary (closed figure) to constrain the volume calculations.

**Background Images** – User can load JPG and TIFF image file into FieldGenius for background viewing. FieldGenius will also automatically read world files. Please ensure that your JPG world files have a "ipw" extension, and your TIFF world files have a "tfw" extension.

Image files can be very memory intensive so we suggest using lower resolution images in your data collector, and higher resolution images in your desktop version. We find that if you can keep the image size at approximately 1 MB in size on the data collector you will be happy with the speed performance.



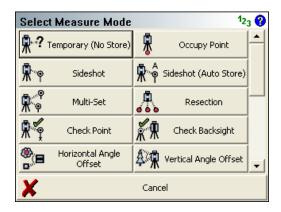
**DXF Layers State -** DXF layer state is now saved in the project ini file.

**Layer Support** – FieldGenius will now honor the layer names specified in the AutoMap library. Visibility is now controlled from the new Map Data Layers manager. DXF files will now also honor the layer setting specified in the current AutoMap file.

**Layer Color** – FieldGenius will now honor the color settings for points and lines as defined in the AutoMap library when DXF files are created.

**3D Arcs and Splines** – FieldGenius will automatically create 3D Arcs and Splines in any DXF that is created with FieldGenius. FieldGenius will segment the arcs and spline at 1 degree intervals.

**Survey Methods** – A new Survey Methods menu is now available that lists all of the measurement modes available when connected to an instrument or GPS receiver. The measurement mode on the instrument toolbar will always display the same functions as the Survey Methods menu.



**Interior Angle Traverse** – A new method has been added to the Traverse / Intersect tool that allows you to specify a "setup" and "backsight" point, then specify an angle and distance. This was added to replace the old method of (#..# + or – angle). Positive angles are right and negative angles are left.

**Add Description** – A new Add button has been added to the AutoMap Description editor.

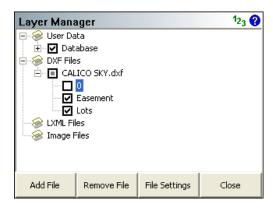
**Delete Description** – A new Delete button has been added to the AutoMap Description editor.

**Description Summary** – You can now edit the description summary from the description attribute editor.

**Map Data Layer Manager Shortcut** – Added Map Data Layers menu to the shortcut list, default shortcut assigned is Backspace.

Sokkia SRX - A driver has been built for the Sokkia SRX robot.

**Map Data Layers** - New option now available to control background images, DXF drawings, LandXML files and the point database. In the Data Management menu, there is a new option named Map Data Layers. All settings are persistent and saved in the project ini file.

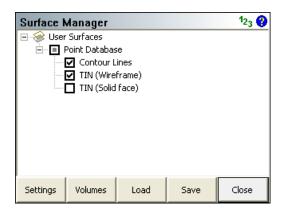


**Auto Search** – A new "Auto Search for Prism" option is now available in the Search Settings screen. When enabled, if FieldGenius is in a "No Lock" state, we will automatically search for the prism when the measure button is selected. After lock is acquired, FieldGenius will take a measurement.

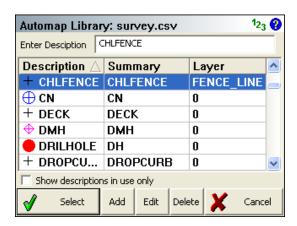
**Auto Center** – A new option is available in the instrument settings toolbar. When the Auto Center option is turned on, FieldGenius will automatically keep your current rod position centered on the screen when in robotic tracking mode.

## Improved / Updated Features

Surface Manager – New layout to make working with your surfaces easier.



**AutoMap Library** – A new layout makes it easier to add, delete and modify descriptions. The markers assigned to your description are now visible, plus a new column displays the layer assigned to the description.



AutoMap Library - Removed the Edit AutoMap icon and added a new button named "Edit".

**AutoMap Template** – When a new project is started, FieldGenius will now make a copy of the AutoMap library you select and copy it into the current project directory. All new description will be added to the "local" copy. This also allows you to add, delete, and modify the AutoMap library for your current project without affecting the original. The concept is similar to using a drawing template in CAD.

**Find Point** – Updated this function so that the coordinate database list will automatically scroll down to the found record. (Or in the case of multiple points being found, scroll to the first one.)

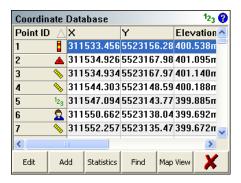
**Distance Offset** – This function will now store the setting for the offset "viewed from" option in the msurvey.ini file.

**Distance Offset** – Worked on the workflow so that pressing enter automatically scrolls to the next field properly.

**Feature File** – The last feature file loaded will now be saved in the msurvey.ini file so it is automatically loaded with each new project.

**Occupy Point** – If the occupy point routine failed, the measure button would change to the "ready" status allowing the user to press measure. This has been updated so that when the occupy point routine fails, the user cannot make any measurements.

**Point Database** – More graphic icons added for calculated, user entered and measured point types.



**Calculated Points** – Points that are calculated will automatically get the "Calculated" survey role. These points will now be displayed in the point database view with the following icon: 123

**User Entered Points** – Points that are entered or imported by the user will automatically get the "User Defined" survey role. These points will now be displayed in the point database view with the following icon:

**Measured Points** – Points that are measured will automatically get the "Measured" survey role. These points will now be displayed in the point database view with the following icon:

**Deschutes County** – Custom grid parameters added for Deschutes County in Oregon.

**FBK Export** – Added support for the MCS and MCE (Mutli-point curve) figure commands.

**Advanced Point Edit** – The user does not need to store the point before the changes are accepted when the survey roles are changed by the user. Survey Roles can be edited using the advanced button in the point edit screen.

**Stake Surface** – Updated this screen such that the user is now able to select a surface to stake to

**Menu Structure** – Made the following changes:

- Survey Menu renamed to Survey Methods
- Import and Export Menus combined into one menu named Import/Export.
- New Survey Tools menu.
- GPS Local Transformations moved from Settings menu to Survey Tools.
- Tape Measure command removed from Staking Menu.
- Import DXF file removed from Import Menu and can now be done in the Data Layer Manager.
- Import LandXML file removed from Import Menu and can now be done in the Data Layer Manager.
- Import ASCII Elevation files removed completely from the product.
- Import DTM Surface removed from Import Menu and can now be done in the Surface Manager.
- Raw File Viewer removed from Data Management menu and moved to Survey Tools.
- COGO History removed from Data Management menu and moved to Survey Tools.
- DXF Data removed from Data Management menu and moved to Data Layer Manager.
- CgPoints removed from Data Management menu and moved to Data Layer Manager
- Occupy Point, Check Backsight, Check Point, Observe Benchmark and Add Invert removed from Survey Menu and moved to Survey Methods.

**Instrument Measure Modes** – On the instrument toolbar, the measure mode button will now display all the same options as the new Survey Methods menu. For example, commands such as Occupy Point, or Check Point are now available directly from the instrument toolbar.

**Robotic Settings Toolbar** – This has been updated to have more intuitive icons.

**Joystick Control** – New graphical control of instrument servo motors.

**Staking Store Point** – FieldGenius will no longer try to be smart about creating a description for staked points. When you store the position, the Store Point dialog will let you choose the description from the AutoMap library. It will also retain this description for all consecutive stakeout points.

## **Fixed**

**Surface Datum –** FieldGenius will now honor the datum entered by the user for surface calculations.

**Target Height** – In the map point screen, if the user used the calculator function to compute the target height, the elevation of the point would not change.

**Coordinate Database** – Using the Map button in the coordinate database wouldn't always go directly to the map screen.

**Exported DXF** – Exported DXF files would sometimes fail when opened in AutoCAD.

**Multiset** – When performing advanced set procedures (more than 8 FS points), FieldGenius could crash. This is now resolved.

**Occupy Point** – Sometimes when switching between projects without disconnecting from your instrument, the Occupy Point routine would go to the Main Menu, instead of the Map Screen.

**Surface Staking** – Cut sheet records were not written to the raw file. The coordinate values will be recorded as undefined (-99999999.000), but the design and actual elevations will be saved.

**Max EDM Distance** – In some situations this would change to 1312', even if the user manually changed it to something different.

**Add Description** – FieldGenius will force a screen update when new descriptions are added, or description attributes are edited.

**Delete Point** – When deleting points from the Coordinate Database editor, if the points were sorted by description, the point would be deleted from the database but the Coordinate Database view would not refresh itself.

## Other Changes

**Visibility toggles** – These have been removed from AutoMap Library editor. Visibility for your codes now controlled in the Data Layers Manager.

**Dynamic View** – This option has been removed from the GPS staking options. It will be reimplemented in a future version.

**User Defined Descriptions** – The concept of user defined descriptions has been removed from the 3.1.0 version. When an AutoMap file is selected for a new project, a copy is made in the project directory. All unique descriptions added by the user will be inserted into the local copy, leaving the original unaltered.

If your template AutoMap file is named survey.csv, the local copy will be named survey\_project name.csv. This new method allows you add unique description and change their attributes such as color without affecting the template file.

We suggest you keep your template AutoMap files in the default MicroSurvey FieldGenius\FG Projects directory.

# FieldGenius 2007 - 3.0.1 Release Notes

Released: November 28, 2007

**Leica Disto** – FieldGenius now supports the Leica Disto. This can be selected in the Leica Total Station settings.

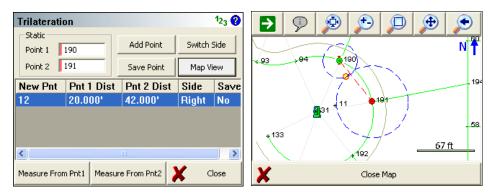
**Traverse / Intersect** – Distance fields in the traverse toolbar can now accept distances from the Leica Disto. When connected to the Disto, simply double tap the distance field which will display an option "Measure with Disto".

**Tape Measure Tool** – If a Leica Disto is connected to FieldGenius, the user can control the directions using the toggle keys on the Disto, plus send measurement back to FieldGenius.

This is perfect for those who want to measure the exterior or interior of a building using FieldGenius and a Leica Disto.

**Trilateration** – A new routine has been built that allows you to define a baseline between two points which allows the user to compute the positions of new points using distance | distance intersections.

The primary use of this routine is for GPS users so they can locate inaccessible points. They can locate two points with GPS, and then use the Trilateration routine to locate the inaccessible points. This routine also accepts distances measured with the Leica Disto.



**Leica GPS Configuration Sets** – FieldGenius now has an option available that allows the user to specify a specific Configuration Set to be used on startup.

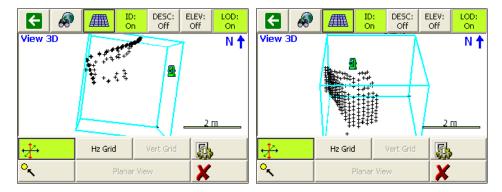
In the GPS Profile, in the Correction Link page you will now see a new selection named "Leica Config". If you press **Setup**, a new configuration screen appears and will do the following:

- 1) If you leave it blank, FieldGenius will load the default Configuration Set on the receiver.
- 2) If you specify a configuration set, then FieldGenius will automatically load it upon startup.

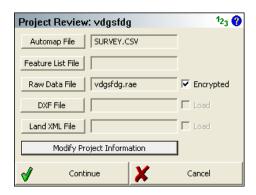
Raw File Encryption – FieldGenius now includes an option that will force FieldGenius to encrypt the raw file. Currently, only FieldGenius can read and use encrypted raw files. At the time of the application being released, no desktop software programs can read or use these encrypted raw files. Future versions of MicroSurvey inCAD, MSCAD, and MapScenes will be able to read FieldGenius encrypted raw files.

Encrypted raw files ensure that users can not accidentally or intentionally edit their raw files with text editors, or other software.

**Point Scanning** – FieldGenius now has a point scanning routine that allows you to collect a point cloud of points. This routine currently only works when robotic or servo driven instruments are connected to FieldGenius.



**Modify Project Information** – This is now available on the Project Review screen.

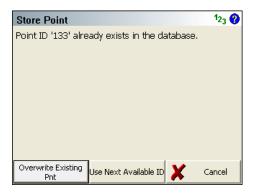


**Traverse / Intersect** – This has been updated so that the user can select a point id immediately off of the map screen, or type one in. Previous versions forced you to double tap the point id field first before being able to select it from the screen.

**Traverse / Intersect** – The information toolbar will no longer automatically open when a solution is found.

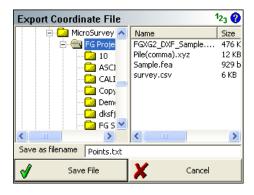
**Instrument Connection** – The instrument connection prompt will now display the total station model currently selected in the instrument settings.

**Duplicate Point Prompt** – This has been updated so the user can now exit and return to the previous screen. Previous versions forced you to overwrite the point id, or use the next available id.

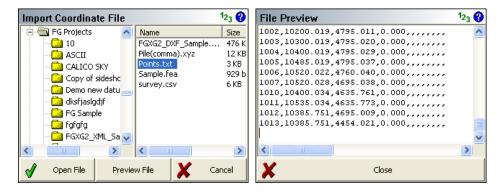


**Manual Mode** – Older versions of FieldGenius (pre 2004) used to have a "Use Previous Measurement" function. This functionality was removed from the product but we have now introduced similar functionality. When connected to a total station, the Manual measurement mode will now always display the last measurement values recorded by FieldGenius.

**Export File** – All functions that allow you to export a file now allow you to browse to all directories on your data collector. Previous versions only allowed you to export to the current project directory.



**Import File** – Import file routine now allows you to preview the file before import. For example, the ASCII file Points.txt was previewed using the Preview File option.



**Line Staking** – User can now define three modes that control how FieldGenius displays offsets. In the Staking Settings there are now three options, Auto, Online, and Offline.

Auto mode forces FieldGenius to display In and Out offsets only when the line of sight is equal to or greater than 45° to the line. If it is less, then FieldGenius displays left / right offsets.

In/Out Mode forces FieldGenius to always display In / Out offsets to the line.

Left/Right Mode forces FieldGenius to always display Left / Right offsets to the line.

**Leica 1200** – Double tapping the Lock button forces FieldGenius to turn to the next prism. This functionality stopped working after upgrading to the latest Leica firmware. This issue is now resolved and you will require GeoCom Version 1.00 and Software Version 4.10 for this to work correctly with FieldGenius 2007 - 3.0.1

**Leica 1200** – With older firmware version, if FieldGenius was pointed directly at the prism, pressing the No Lock button would force a search and immediate lock on the prism. This functionality stopped working with the latest Leica firmware. This issue is now resolved and you will require GeoCom Version 1.00 and Software Version 4.10 for this to work correctly with FieldGenius 2007 – 3.0.1

**Tape Measure Toolbar** – The deflection option is now disabled if the user didn't select a line before starting the command.

**Delete Last Saved Point** – On the Tracker Xtreme and Pocket PC versions of FieldGenius this command stopped working in FG 2007. This is now fixed.

**Delete Point on Spline** – Deleting the last point of a spline figure would cause the entire figure to be deleted. Now it will only delete the last segment of the spline.

**File Name with Dots** – Using dots in your filename could cause problems with opening the project after your current session was ended. Dots are now not accepted in the filename and an error message is displayed.

**Line – Distance Offset** – When the SIP was used on Pocket PC versions to enter offset values, when the SIP was closed part of the offset screen would disappear. This is now fixed.

**ASCII File Import** – Importing files that have both space and comma delimiters stopped working in FG 2007. This issue has now been resolved.

**ASCII File Import** – FieldGenius would not ignore the empty spaces for point ids when importing files with fixed width and comma delimiters.

**Zone Editing** – A zone has to be selected before one can be edited. A warning message is now displayed if the user tries to edit a zone without having one selected.

**Road Staking** – Switching back and forth between FieldGenius projects didn't always load the associated alignment files.

**Traverse / Intersect** – Increased the width of the point id field.

## Important Notes about 3.0.1:

## FieldGenius 2007 Tablet Edition

The Desktop Emulator is now called **FieldGenius 2007 Tablet Edition**. If the Tablet Edition has no activation code it will run in demo mode.

### No Activation Code (Demo Mode)

- Only ten points can be stored per session.
- User defined settings are not saved to the msurvey.ini file meaning you have to reconfigure FieldGenius every time it is started.
- Roads created with FieldGenius are not saved.
- All modules are activated Standard, Robotic, GPS and Advanced.
- Instrument Connection allowed in the Landscape, Portrait and Desktop modes.

When you purchase a copy of FieldGenius for your data collector you are entitled to an activation code for a desktop version. Activated desktop versions can not be connected to instrument or GPS equipment because this functionality is disabled.

#### **Activated for Standard**

- Unlimited points can be stored.
- User defined settings are saved to the msurvey.ini file.
- Roads created with FieldGenius are saved.
- Additional modules need to be activated, for example if you want to do roads then you need the Advanced module.
- Instrument connection is disabled in landscape, portrait, and desktop modes.

What is new for the 3.0.1 version is that we can now issue a special **Desktop Observation** activation code that enables instrument connections. The desktop observation mode is not <u>free</u>, contact your Technical Sales Representative for more information.

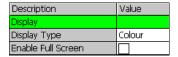
## Activated for Desktop Observation

If you purchase the Desktop Observations module you will be able to connect your Tablet or Desktop computer to a total station or GPS receiver via the computer's COM port.

# FieldGenius 2007 - 3.0.0 Release Notes

### Released - October 4, 2006

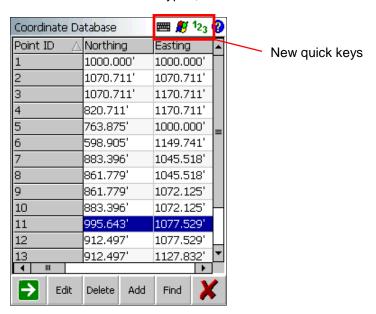
Landscape Pocket PC Devices – Devices such as the new Ranger would not display FieldGenius properly and many fields were cut off or covered up by other buttons. There is a new option in the Program Settings called "Enable Full Screen" which will force FieldGenius to occupy the entire screen.



Staking List - New advanced find option to help you select points to add to the staking list.

**Staking List** – New "Sort by shortest path" option. This will allow you to select a point in the list, then sort the order of the point based on the shortest distance to the next point.

**Pocket PC Build Quick Keys** – The Pocket PC build now include quick keys to common functions like the virtual keypad, calculator and Windows start menu.



**Calculator Quick Key** – All menu screens in FieldGenius will now display a quick key to the calculator on the top title bar. Pressing the "1 2 3" button will open the calculator.



**Coordinate Database Editor** – New **Add** function available to add new points into the point database.

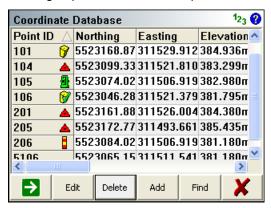
**Coordinate Database Editor** – New **Find** function available to help you do advanced searches. You can now search by point range, coordinate range and by description.

**Coordinate Database Editor** – New **Statistics** function will display a summary of the points in the database such as total points, points range used and point range un-used.

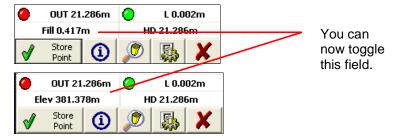
**Coordinate Database Editor** – New **Map** function allows you to preview points in the map based on the rows you have highlighted in the coordinate list.

**Coordinate Database Editor** – When sorting column by clicking on the column header, an arrow will appear in the column to indicate the sorting order.

**Coordinate Database Editor** – Icons are now displayed for your current setup, current backsight, points to be staked, points staked, and for control points.



**Point Staking** – You can now toggle between computed cut / fill or current rod elevation on the staking toolbar. Simply tap the cut/fill field to toggle between them.



**Default Measure Mode** – You can set the default measure mode in FieldGenius to either Sideshot or Sideshot (Auto). This is done in the Program Settings menu.

**EDM Mode Display** – Your current EDM mode is now displayed on the measure button.

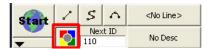
**Importing ASCII** – This routine will now compute grid coordinates from an ASCII file containing only geodetic information. FieldGenius will use the current defined coordinate system to compute grid (Cartesian) coordinates. See the help file or manual for more information.

**Geodimeter** – Added a second version of the Auto Trigger driver. This version has improved communication with the Geodimeter 600. Auto Trigger version 1 should be used for the Geodimeter 500 series instruments.

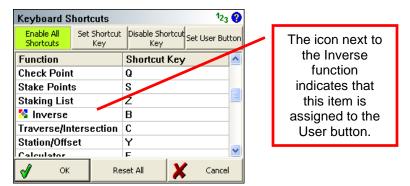
**Zoom Previous** – Added a zoom previous button to the main interface. You can now zoom back up to 10 previous views.



**User Defined Button** – Added a customizable user button on the main interface.



You can assign a function to this button by using the "Set User Button" option in the Keyboard Shortcuts menu.



Windows Mobile 5.0 – Installation files now available for Windows Mobile 5.0.

Windows CE.NET 5.0 – Installation files now available for Windows CE.NET 5.0.

**Thales Z-MAX** – New driver available for the Z-Max receiver.

Thales Z-MAX Cellular Connection – Added support for NTRIP, GPRS and Direct IP.

**Thales Z-MAX RTCM 3.0** – Added support for the new RTCM V3.0 communication protocol.

**Thales Z-MAX** – Added support for the new Thales Radio as well as support for firmware MD00.

**Leica Disto A6** – New support for the Disto A6 measuring device. You can now send measurements from the Disto to distance fields in the Traverse toolbar. More functionality will be coming soon in a future service pack.

## Improved Features or Functions

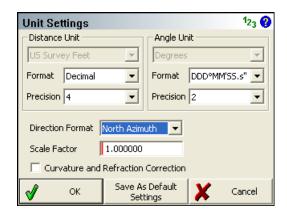
**Line Staking –** You can now stake past the beginning or end of a line or arc and FieldGenius will report to you the current station.

**Point Staking** – The staking toolbar has been improved to display a red circle when you have met your staking tolerance, and will display a green circle when you do. These visual cues are now always displayed.

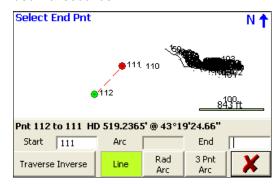
**Point Staking** – During stakeout, FieldGenius will now continue to display the current navigation distances for the left/right and in/out distances even when these distances are within the staking tolerance.



**Unit Settings** – FieldGenius now allows the user to specify format and precision values for distance and angular units. Support is included for Feet and inches.



Notice below how the distance is displayed to 4 decimal places and the azimuth to two decimal seconds.



**NEMA GPS Driver** - Added 57600 baud rate and added another GPS serial mode for the Mobile Mapper CE.

**Cut Sheet Generator** – Changed the Report screen so it only has a Close button, before it had an Ok and Cancel which were redundant options.

**Staking List** – Point descriptions now listed.

**Inverse Toolbar** - Results are now shown in a bold font for the inverse toolbar (landscape devices only).

**Template Editor** – This has been updated to force the user to select the vertical type for the zone to be either slope or vertical distance.

**Template Editor** – You can now define a name for the template zones by clicking the zone field. For example, below you can see that the zones are named Ditch and Slope.



**Template Editor** – A "View Zone Modifiers" toggle was added to allow the user to use the slider bar to scroll along the alignment to preview the zone modifiers.

**Advanced Zone Edit** – In the Advanced Zone Edit screen, several improvements have been made to make this routine more intuitive. In the slope modifier section, the user is now forced to select either slope or vertical distance for the slope type.

**Alignment Editors** – When using the desktop version of FieldGenius you can now resize the profile, template, and advanced zone modifiers screens.

**GPS Coordinate System** – This is now set in the settings menu in FieldGenius and has been removed from the GPS profiles. When you create a new project you will now be asked if you want to define a coordinate system. This new feature can be accessed by pressing the Coordinate System button in the Settings Menu.

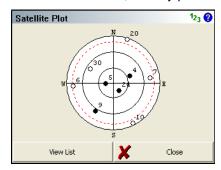
**Project Manager** – The sorting of projects by Date has been improved. Also some general enhancements were made to the appearance of this menu.

**Local Transformation** – When the "Use for local transformation" option is used during a GPS point measurement, it is now not necessary to store the point in the project database. If the user chooses not to store it, the current position that was measured will be automatically used as the local coordinates for the transformation.

**Extended Edit Fields** – If an extended edit field contains data such as a direction or distance, when the field is double tapped the value will automatically be copied into the calculator.

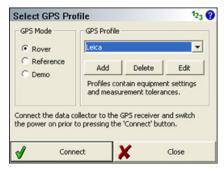
**World Button** – The world view button's state has been reversed. This function is enabled when the button is pressed and is not on by default. This functionality will automatically turn on and off depending on what procedure is currently active. For example, during stakeout this option is turned on automatically then turned off when the staking command is finished.

**Satellite Plot** – This has now been improved so when the satellite information button is selected on the GPS toolbar, the sky plot will be displayed in a separate dialog, not in the map screen.



**Satellite List** – This has been moved to the new Satellite Plot screen. To access it you need to press the View List button.

GPS Profile Manager - The GPS Profile manager has been updated to make it more intuitive.



Slope Staking – Added the ability to specify a vertical offset to be applied during slope staking.

**Template Staking** – Added the ability to define an offset from centerline and stake past the template edge.

**Coordinate Calculator** – This module is now enabled if either the GPS or Advanced module is licensed.

**Display Toolbar** – The display toolbar now includes a zoom previous function. It also now includes some of the functions from the visibility toolbar such as point label visibility control.



## Fixed Features or Functions

Shape Files – Deleted points would cause problems with exported shape files.

**Vertical Balance** - if the Traverse Definition is set as Foresight Pt closing the traverse, then the vertical adjustment routine would incorrectly set the last setup elevation to match the first setup.

**Control Points** – When you accidentally tried to overwrite a control point with a shot, FieldGenius would says the control point can not be updated, and the coordinate database would remain unchanged, but on the screen it would show the new shot until you exited and re-opened the project.

**Transformation Settings** – The vertical check box would always default to a "checked" state when you would use the point chooser button.

**Transfer Projects** – Fixed an issue that would cause an error message to appear when synching FieldGenius and the MicroSurvey Transfer program. The error message would appear if FieldGenius was installed on Windows Mobile 5.0 or WinCE.Net 5.0 operating systems.

**Coordinate Database Editor** – When deleting points from the coordinate editor, FieldGenius wasn't properly parsing the point number range entered by the user.

**Alignment Staking** – Improvements have been made to the way FieldGenius computes actual station and offset values during alignment staking.

**Alignments** - alignments made out of chained points in a spline figure did not always work correctly.

Raw file editor - In the desktop version of FieldGenius the reprocess button wasn't visible.

**Cursor tracking** – This option s now enabled for non-robot license and non-robot instruments.

Reset Shortcuts - When this was used, the Sideshot (Auto) shortcut was being set to Return.

Full screen Emulator - The sort by project name option did not work correctly.

**Transformation Settings** - If you are trying to reset the GPS localization by un-checking H and V from all control-measured pairs, then calculating parameters, when you went back to the transformation screen it would show Origin North and Origin East as -1.#IND. This problem is now fixed.

**Slope Staking** – Fixed a problems that would cause FieldGenius to behave poorly after storing the slope stake positions. On some devices it could eventually cause a crash.

**Allegro CX Install** – The "undo point" topic would install to the wrong directory.

**NEMA GPS Driver** - Fixed velocity for NMEA devices without velocity message.

**High RMS** - When measuring a point and the RMS value exceeded the values in the profile, we would show "328.08". This confused the user in thinking that the value was the actual RMS computed by the receiver so this has been fixed to show the actual computed RMS value by FieldGenius.

**Trimble R8 (5800)** – FieldGenius now supports reference mode with this receiver.

**Geodimeter 400** – The Geodimeter Manual trigger driver was updated to work with this instrument type.

**Slope Staking** – The HUD navigation text would sometimes display values that would take you back to the hinge point, not to the catch point.

**PPC Startup Program** – Fixed a problem that could cause extra program shortcuts for FieldGenius to appear in the Start | Programs menu.

## Important Changes

**Math Operators** - In this version you can no longer perform advanced distance or direction recall functions that include math operators. For example you can no longer enter values like 3..4+2.

We are now expecting the user to use the calculator to apply mathematical operations to distances or directions. Just remember that in the new version double tapping any field that has a value in it will automatically be copied into the calculator.

**Angle Recall** – Angle recall is no longer supported. For example 1..2..3 is no longer supported.

**Quadrant Codes** – Using numeric quadrant codes are no longer supported. You are now required to enter NE, SE, SW and NW before or after the angle. See the "Direction Entry & Recall" section in the FieldGenius 2007 manual for more details.

**Visibility Toolbar** – On previous versions there used to be a VIS "visibility" button on the main FieldGenius interface. This button has been replaced by a new User Definable button. Most of the visibility functions have been moved to the display toolbar. The Scale, Lines and Point options are now located in the Program Settings menu.