THALES NAVIGATION	**Technical Support Tips**		
Z-MAX	**NCSA: 2003** **Number: 05**	**Dec. 2003**	By: B.LeMoine Checked:

FAST Survey - Log Static Data

The following procedure outlines the steps for using the Z-Max GPS receiver together with the FAST Survey data collection software to collect Static, Rapid Static and Kinematic observations for post-processed GPS surveys. The logged GPS data files can be post-processed with Ashtech Solutions and/or GNSS Studio software's.

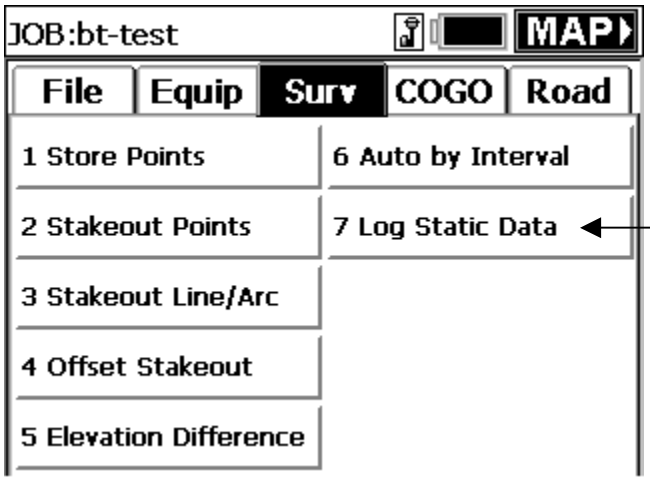
The raw GPS observations (B/E/S-files) are stored on the Z-Max receivers internal SD-Card. Z-Xtreme receivers store the raw GPS observations on the internal PCMCIA data card. Before any post-processing can begin, the raw GPS data files must be transferred from the GPS receiver internal storage memory over to the data processing PC via the Thales Navigation receiver download software.

The FAST Survey software, "Log Static Data" will create a D-file, (attribute information). The D-file is created and stored in the rover GPS receiver's internal memory. Attribute information stored in the D-file includes: time tag references, receiver ID, site ID, antenna HI parameters, site descriptor and site comment.

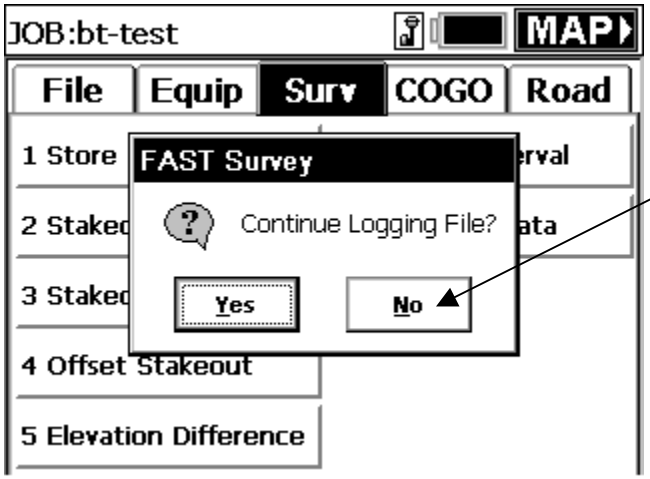
After completion of the field survey, the GPS receiver's raw data (B/E/S/D-files) are downloaded and imported in the GPS post-processing software, (Ashtech Solutions and/or GNSS Studio) for data reduction. The post-processing software will combine the receiver's raw data files B/E files together with the D-file for data reduction.

Start the FAST Survey software on the data collector…
User can communicate to the Z-Max GPS receiver with the Bluetooth and/or cable connection…

Z-Xtreme users communicate via a cable connection…



Equip | Log Static Data…

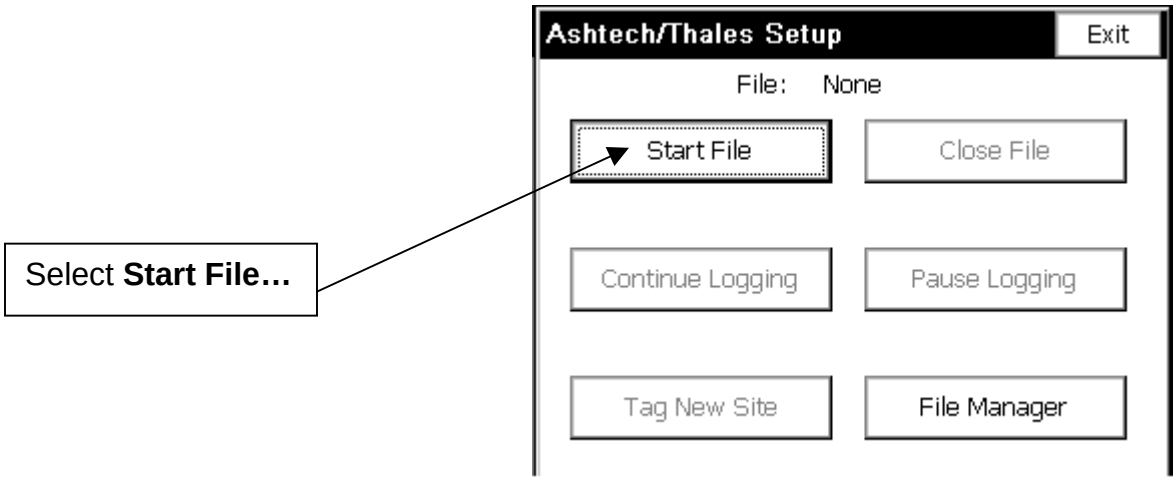


When prompted to **Continue Logging File ?**

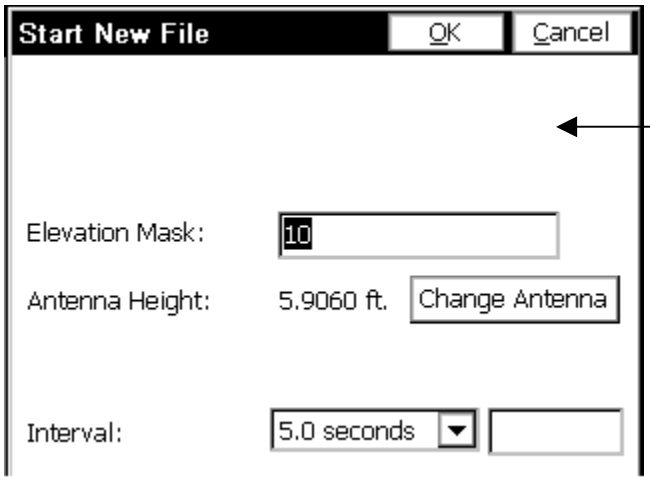
Reply with **No…**

By selecting No, the user has access to change data logging parameters including: Site Name, Site Attribute , Antenna Height, Antenna Model, Recording Interval, and Occupation modes.

If the User selects **Yes,**
Log Static data will use the last known data logging parameters.



Select **Start File…**



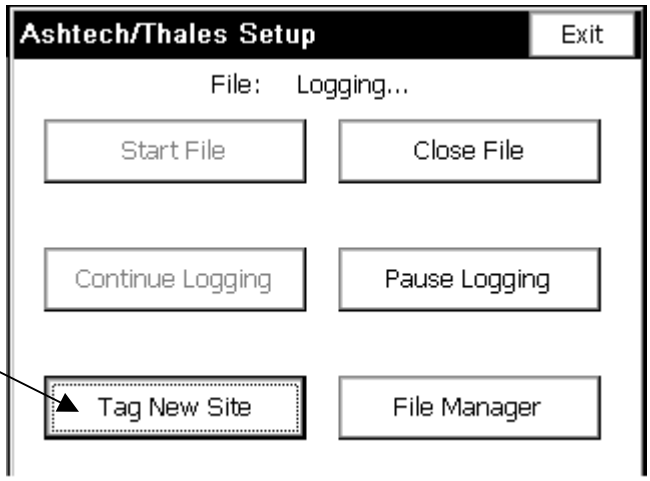
The default **Elevation Mask** Angle = 10 degrees…

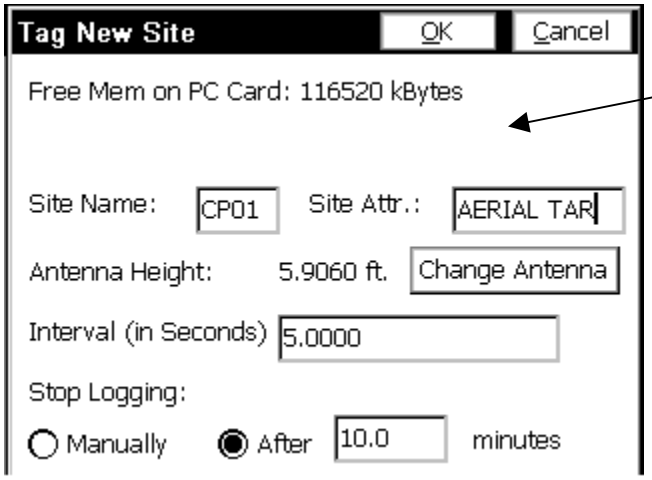
Select **Change Antenna** to Enter the Antenna HI…

Interval: Use the Vertical Browse menu to select the receiver's Recording Interval…

Tap **OK…**

Select **Tag New Site…**





Enter **Site Name, Site Attribute,**

If the Antenna Height needs revision, tap **Change Antenna…**

<u>Stop Logging:</u>

Manually = collect data until stopped by user.

After = User inputs a specific time span, measured in minutes…

Status screen…

Indicates Site Name that's currently being logged…

Site Duration
Timer Counts Up…

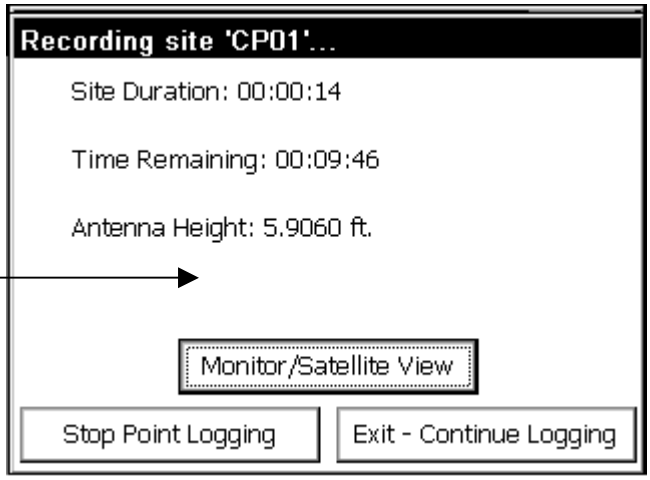
Time Remaining
Timer Counts Down…

Antenna Height
displays entered HI…

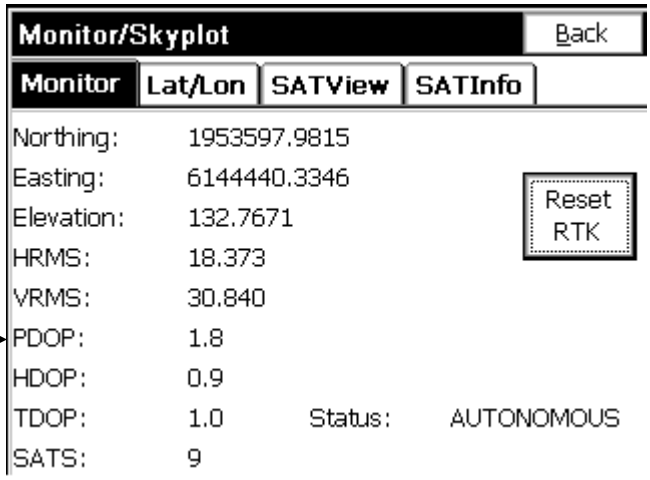
Monitor / Satellite View
User can monitor status Screens: Monitor, Lat/Long, SAT View, SAT Info screens.

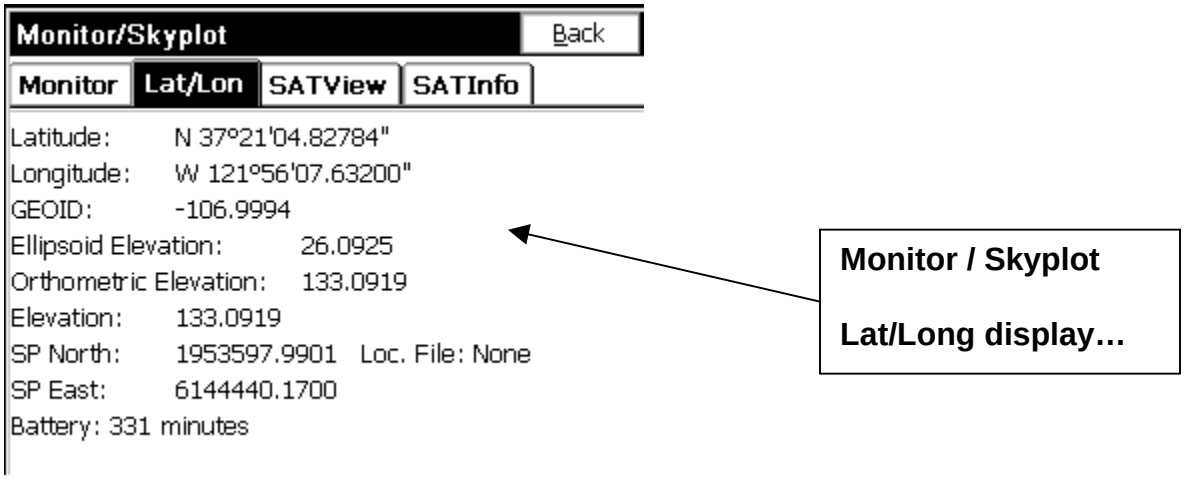
User can **Stop Point Logging** –or- **Exit and Continue Logging.**

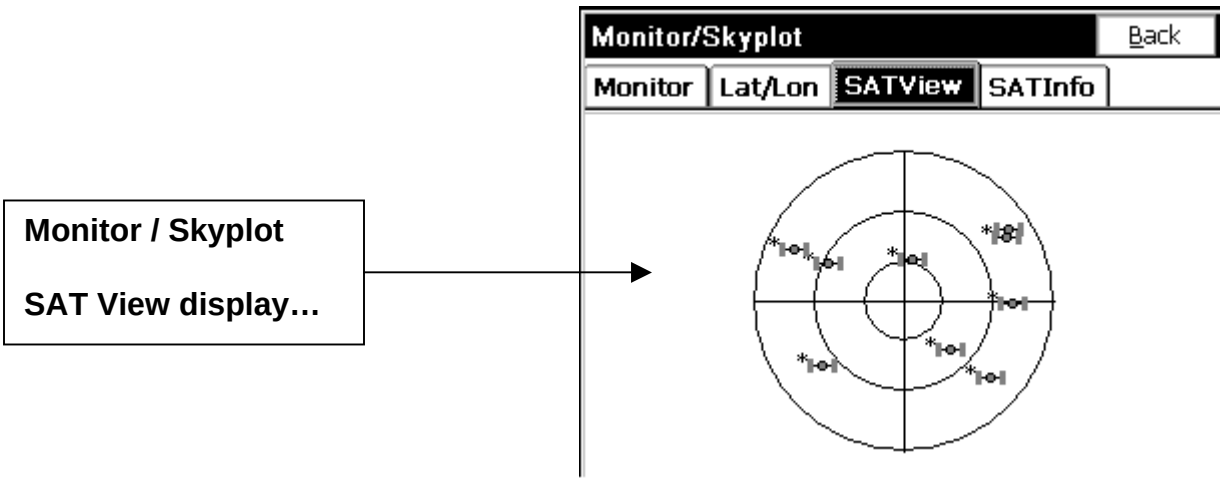
This last choice is commonly used for the Base receiver, User connects to the Base receiver, configures the receiver for Static survey, disconnects from the Base; then connects & configures the Rover receiver…

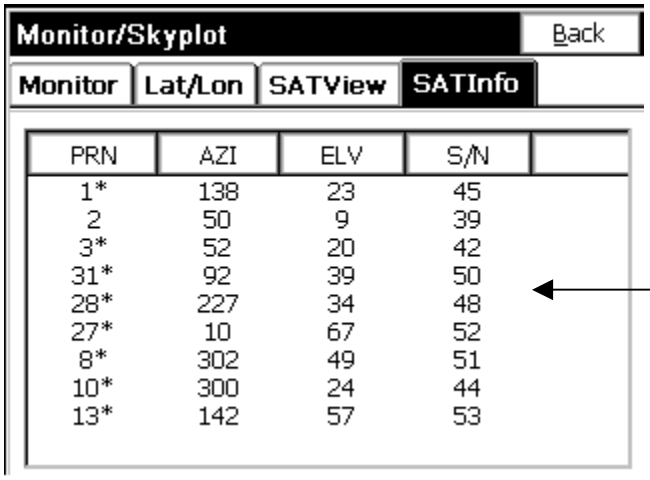


Monitor/Skyplot display




Monitor/Skyplot
Back
Monitor
Lat/Lon
SATView
SATInfo
Latitude: N 37°21'04.82784"
Longitude: W 121°56'07.63200"
GEOID: -106.9994
Ellipsoid Elevation: 26.0925
Orthometric Elevation: 133.0919
Elevation: 133.0919
SP North: 1953597.9901 Loc. File: None
SP East: 6144440.1700
Battery: 331 minutes
Monitor / Skyplot
Lat/Long display…

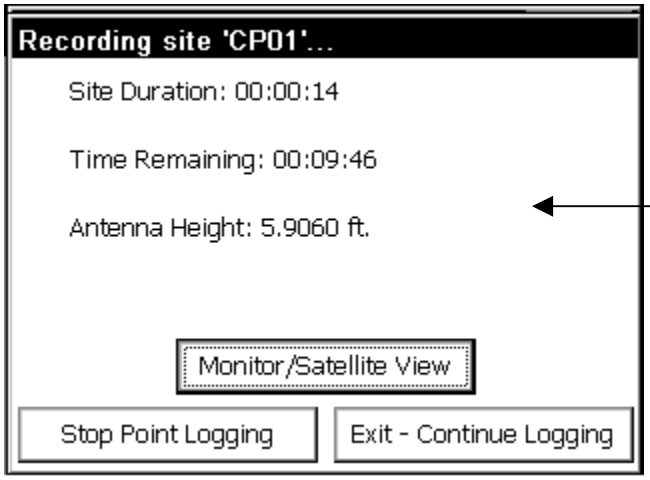

Monitor/Skyplot
Back
Monitor
Lat/Lon
SATView
SATInfo
Monitor / Skyplot
SAT View display…



Monitor / Skyplot

SAT Info display…

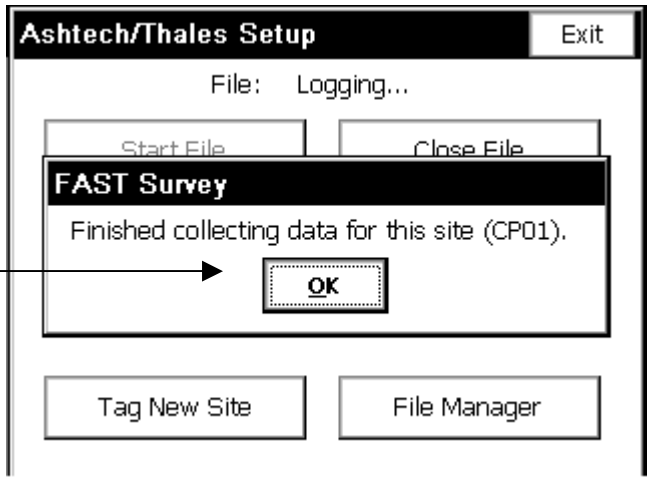
Tap Back to return To previous menu.



Recording Site “CP01”…

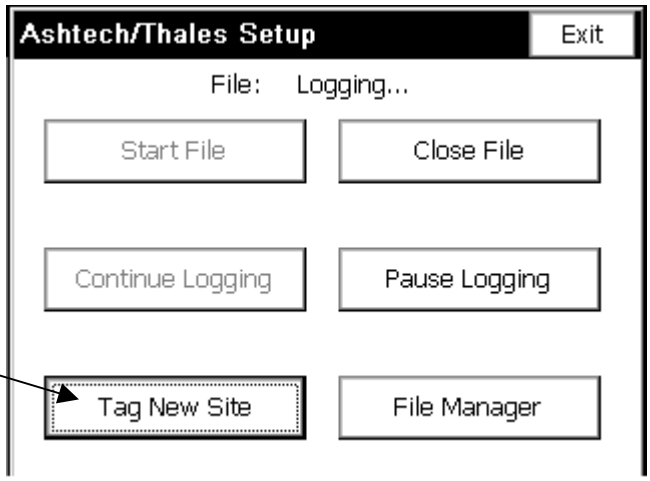
After logging 10-minutes of Static data, FAST Survey displays this message.

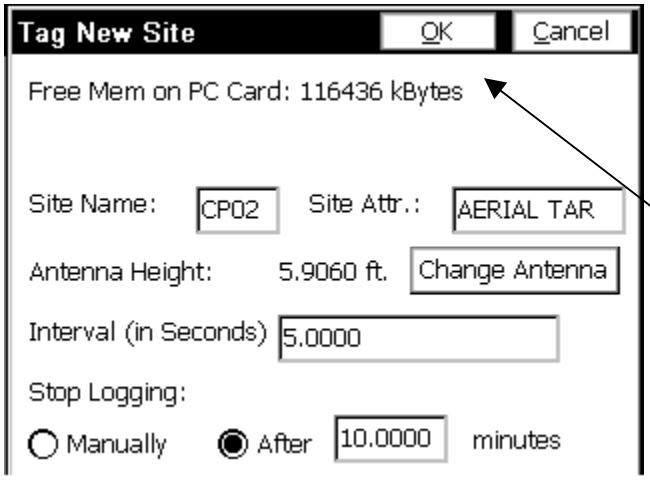
Tap OK to close the window and continue to the next point…



When setup over next survey point,

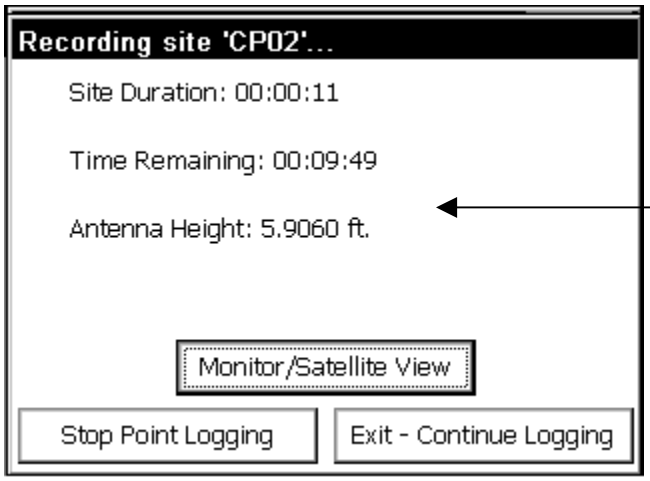
Tap **Tag New Site…**





Enter new **Site Name**, Change **Site Attribute**, **Antenna Height** and occupation timer as needed.

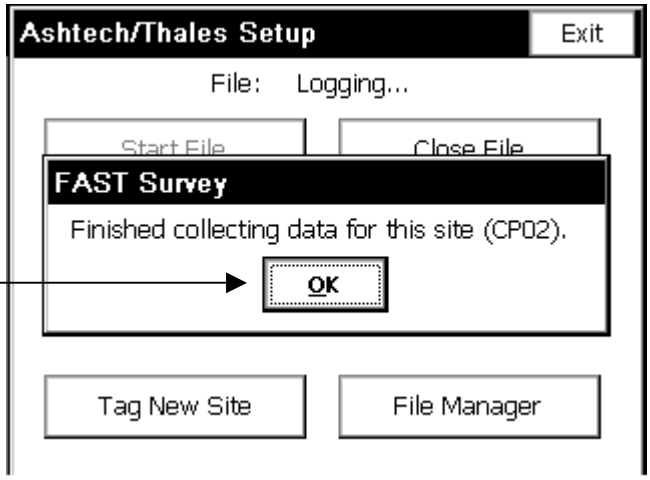
Tap **OK** to start occupation…



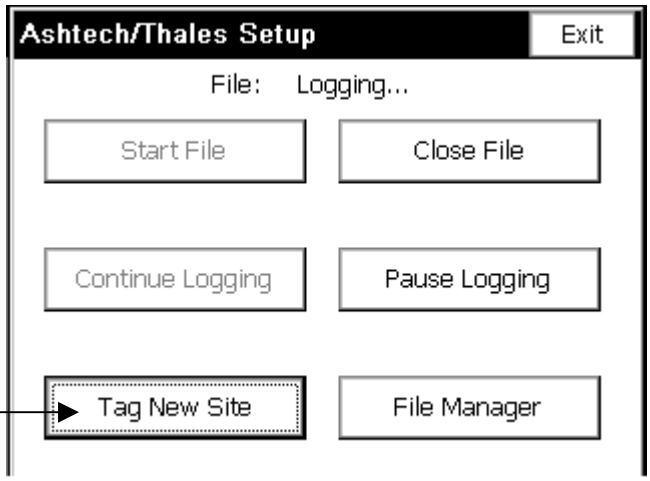
Recording Site “CP02”…

After logging 10-minutes of Static data, FAST Survey displays this message.

Tap **OK** to close the window and continue to the next point…

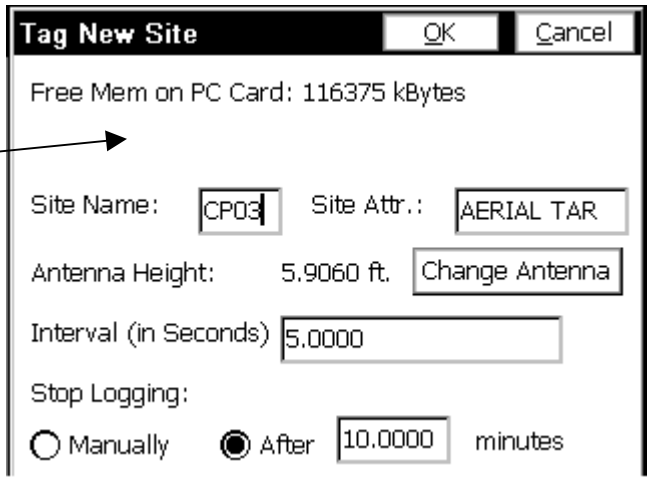


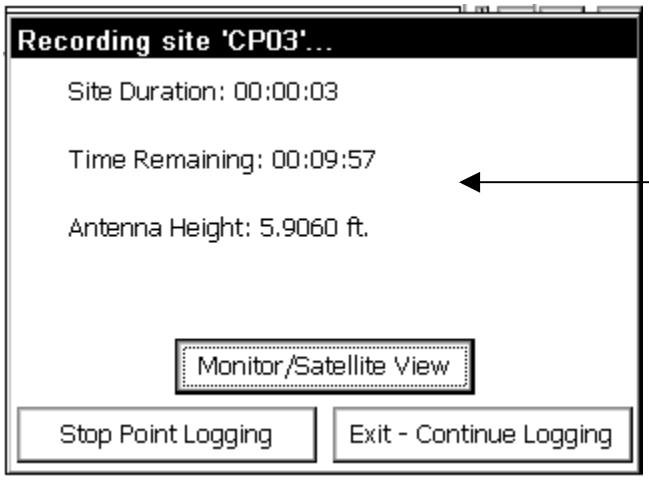
Tap **Tag New Site**



Enter new **Site Name**, Change **Site Attribute**, **Antenna Height** and occupation timer as needed.

Tap **OK** to start occupation…

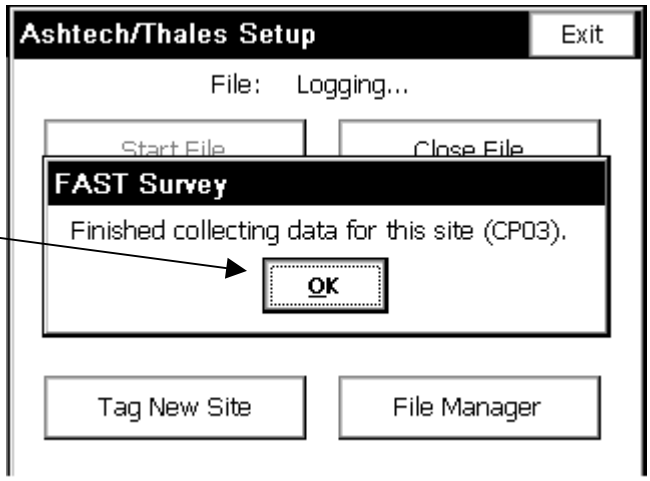


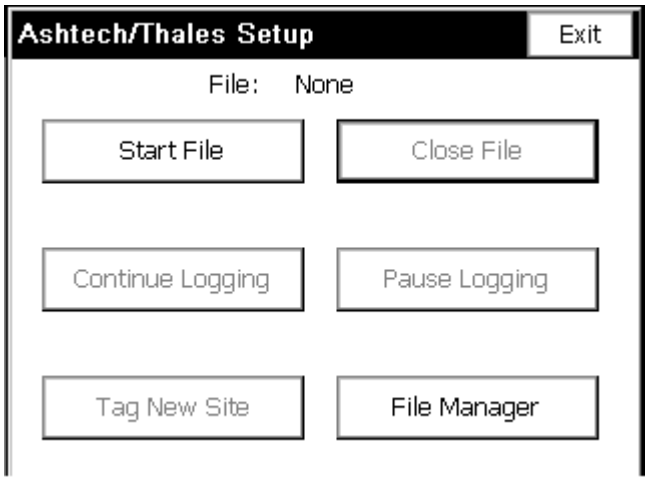


Recording Site “CP03”

After logging 10-minutes of Static data, FAST Survey displays this message.

Tap **OK** to close the window and continue to the next point…





After completing the occupation of all the intended survey points,
Tap on **Close File…**

Than tap **Exit…**

This will return you main menu of FAST Survey.
Download all the GPS receivers used during the Static, Rapid Static survey.
Post-process the GPS observations with Ashtech Solutions and/or GNSS Studio.

Filename: FAST Survey – Log Static Data.pdf

Prepared by: B.LeMoine 12/16/03