EXPANDING GARMIN GPS CAPABILITIES SHORT COURSE

Course Title

Expanding Garmin GPS Capabilities

Course Description

Handheld Garmin GPS devices provide additional capabilities aside from the ability to capture points and create tracks. This one-day course will familiarize geologists and field personnel with useful utilities that provide the ability to manage maps for your GPS unit and transfer custom maps (including Google Earth KMZ, free Open Street Maps, Topo Maps and Geologic Maps), BirdsEye Imagery, waypoints, tracks, and routes between your computer and Garmin device. The course consists of instructor-led lecture, "hands-on" software experience, and data collection exercises in the field.

Specific Objectives

Participants will:

- Review current Garmin GPS receiver capabilities, focusing on professional handheld data collection devices.
- Examine different software utility programs that integrate with the Garmin GPS.
- Install Garmin Basecamp mapping application on laptop.
- Connect GPS unit to computer and utility programs.
- Upload .gpx points and linework to BaseCamp and GPS device. Discuss different utility programs that create .gpx files.
- Review Garmin outdoor maps including BirdsEye Imagery.
- Use different utility programs to upload free Google Earth KMZ, Open Street Maps, Topo Maps and Geologic Maps to BaseCamp and GPS devices.
- Create waypoints, points of interest, tracks and routes in BaseCamp and upload to GPS.
- Use the GPS unit to navigate to loaded data.
- Collect both point, photos and line data in the field.
- Download to BaseCamp and evaluate collected data.
- Geotag photos.
- Export collected data to .gpx and .kml files.

Course Audience – Who Should Attend?

The course is recommended for any professional who wishes to learn how to expand the capability of their Garmin GPS device.

Estimated # of Pages of Course Notes

125 pages

Course Duration

1 day

Agenda

Day 1 - Morning	Day 1 - Afternoon
Review current Garmin GPS receiver capabilities	Create waypoints, points of interest, tracks and routes
Connect GPS unit to computer	Use the GPS unit to navigate to loaded data
Upload .gpx points and linework	Collect both point, photos and line data in the field
Review Garmin outdoor maps	Evaluate collected data
Use different utility programs to upload free Google Earth KMZ, Open Street Maps, Topo Maps and Geologic Maps to BaseCamp and GPS devices.	Geotag photos
	Export collected data to .gpx and .kml files

Prerequisites:

Windows familiarity is required as is previous experience with the users' specific GPS unit. Each attendee is required to provide their own laptop, mouse, USB cable and Garmin GPS receiver. Connection between GPS receiver and laptop must be verified prior to the course.

Special Features

The course provides each attendee with a workbook, documentation, and data sets.

Course History:

This course was developed in response to the requests of geologists and mining consultants who want to get more from their Garmin GPS devices.

Course Instructor

Barbara Carroll

Barbara Carroll is a Principal Consultant and Founder of GeoGRAFX. Her firm provides professional and technical geological services and products to the resource exploration and mining industries worldwide. Ms. Carroll is a certified Professional Geologist by the American Institute of Professional Geologists with over 30 years of wide-ranging international exploration experience in the mining industry. Immediately prior to forming GeoGRAFX, Ms. Carroll served as Project Manager for Phelps Dodge Mining Co.'s Jerome Project, a multi-million-dollar preliminary evaluation of the remaining potential of the United Verde Mine in Arizona which resulted in completion of a new geologic model and preliminary resource estimate. Prior to working for Phelps Dodge, she was Systems Geologist at Battle Mountain Gold Co., and responsible for resource evaluation and selection and support of software/hardware for all US Exploration offices as well as remote computer communications. She has extensive experience in construction of geologic models and resource/reserve estimation, as well as creation and management of GIS databases.