

## **Topics:**

### **Key Least Squares Concepts**

- Least Squares vs Traverse adjustment
- Field Data acquisition procedures (aliases, /# options)
- Redundancy/Degrees of Freedom
- Network Summary/ chi square test
- View Network examples

### **Instrument Standard Errors and Pre Analysis**

- Understanding Standard Errors

### **Conventional Networks**

- Looking at key manual entry codes
- Looking at inline options
- "Fixity"
- Using a conventional convertor

### **Troubleshooting Strategy:**

- "Sort Residuals by size" to identify outliers

### **Managing STAR\*NET Projects**

- Project and Company Settings
- Instrument Library
- Geoid Modeling
- Coordinate Systems
- Custom Output files

### **GPS Data**

- Opus Station Reports
- RTK Vectors
- Importing Vectors

### **Troubleshooting Strategy:**

- Finding blunders using data off/on inline options

### **Leveling data**

- Importing DNA data

### **Troubleshooting strategy:**

- Finding Blunders with "Loop Check"

### **Combining Data**

- Combine Levelling, Conventional, GPS and scanning data
- 
- |