

## GRID BEARING~SURFACE DISTANCE LOCALIZATION PROCEDURE

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- 1 Create job (J####\$) with first point (1,10K,10K,100,basename).
- 2 **Base Radio** ~ Check scanner for voice & select data channel for base transmitter, set to HI-power.
- 3 **Base Setup** ~ Set base point number (#1) & GET autonomous base receiver position.
- 4 **Rover Setup** ~ SET rover receiver to base position recorded in Huskey.
- 5 **Rover Radio** ~ Select data channel for rover receiver & check for data input.
- 6 Enter SPC coordinates(feet) of grid monuments to be used as control points in localization.
- 7 Localize on control points (3 horizontal) (4 vertical).
- 8 Do localization solutions (record rms values, base coordinates, scale & rotation) and evaluate.
- 9 Select the combination of control points that provide the most suitable solution (smallest rms values).
- 10 Upon selection of temporary solution, add base point(#1) to localization solution (H & V) & re-solve.
- 11 Check that final base coordinates, scale & rotation have not changed from temporary solution.
- 12 The computed base coordinates are SPC, the scale & rotation are the SPC transformation parameters.
- 13 Go to direct entry of transformation parameters change scale factor to 1.00000 & re-solve.
- 14 All further collections will result in surface coordinates relative to GPS base with SPC grid bearing.
- 15 Collect surface coordinates of a check point nearby GPS base receiver.
- 16 Collect surface coordinates of grid monuments used in localization for rigid body transform check.
- 17 Collect surface coordinates of project points as needed.
- 17 Collect surface coordinates of secondary base position & check point as needed.
- 18 **Move Base** ~ Base must occupy a point whose surface coordinates (*not SPC*) have been collected.