

1. Ground control delivered by the surveyor, will be assumed to be correct as verified by the quality control procedures used in the respective survey section. Input images/diapositives will be assumed to be quality-checked by the respective Photogrammetry unit, and ready for use in the aerotriangulation process.
2. The Photogrammetric technician performing aerotriangulation will verify that the correct camera calibration report is being utilized for the current project. Any discrepancies between the camera calibration report and the camera file utilized on the Photogrammetric instrument must be resolved.
3. Interior orientation of the images/diapositives must be 20 microns or less at each measured fiducial. Any value exceeding 20 microns must be brought to the attention of the shift supervisor, and a determination will be made to accept or reject the measurement and/or the corresponding image/diapositive. If the image/diapositive is rejected, then a new image/diapositive will be produced, and the quality control process repeated.
4. Relative orientation of the images/diapositives must be 5 microns or less at each measured point. Any value exceeding 5 microns must be corrected. If the point cannot be corrected by subsequent measurements, the problem must be brought to the attention of the shift supervisor. The shift supervisor will make a determination to either accept or reject the measurement, and what course of action will be taken to resolve the problem.
5. Absolute orientation measurement residuals for each control point on the images/diapositives must be .1' vertical and .2' horizontal or less for imperial-unit, 1:3000 scale photography. Any point measurement exceeding .1' vertical or .2' horizontal must be corrected. All points must be checked in stereo to assure consistency and accuracy. If the point cannot be corrected by subsequent measurements, the problem must be brought to the attention of the shift supervisor. The shift supervisor will make a determination to either accept or reject the measurement, and what course of action will be taken to resolve the problem.
6. The residuals of each control point listed on the Photogrammetric adjustment will not exceed .1' vertical and .2' horizontal from their originally submitted values (for imperial-unit 1:3000 scale photography). Likewise, the mean residuals for all control points must not exceed .1' vertical and .2' horizontal. Any points exceeding .1' vertical or .2' horizontal must be investigated and corrected. If the point cannot be corrected by subsequent measurements or troubleshooting techniques, the problem must be brought to the attention of the shift supervisor. The shift supervisor will make a determination to either accept or reject the measurement, and what course of action will be taken to resolve the problem.
7. The final aerotriangulation adjustment must be reviewed and approved by the shift supervisor. This adjustment, which will include input and adjusted control values, will be printed onto hardcopy format. The shift supervisor will sign and date the first page of the hardcopy printout, and maintain this hardcopy record at VDOT-Central Office indefinitely.

Note: All consultants performing aerotriangulation on a VDOT project will submit the final, approved, signed and dated aerotriangulation adjustment report to the State Photogrammetrist at VDOT prior to mapping, or as soon as feasible after the start of stereo-compilation work.[◇]

[◇] April 2014