

UESI LIDAR PRESENTATION OUTLINE

TITLE: LiDAR Technology and Applications- “PUSHING THE LIMITS”

PRESENTER: Todd Bates, PSM

- I. **LiDAR BACKGROUND/GENERAL INFORMATION**
 - A. Definition/acronym
 - B. Brief historical perspective
 - C. **TYPES**
 - 1-Mobile
 - 2-AERIAL
 - 3-TERRESTIAL
 - D. Brief explanation on the technology- “How it works”

- II. **Workflow procedure**
 - A. Mission planning
 - B. Field work
 - C. Control types, requirements and placement
 - D. Office Processing
 - C **QA/QC PROCESS**-zoom into control-TopoDOT XYZ report
 - E. Deliverables Recap file, raw, external hard drive, certified point cloud,
 - F. Benefits-safety, time/cost savings, economics
 - G. Examples

- III. **ACCURACY/LIMITATIONS**
 - A. AERIAL
 - B. MOBILE
 - C. TERRESTIAL
 - D. Supplemental need for conventional survey methods with examples

- IV. **Traditional applications**
 - A. Existing Conditions/ASBUILT Surveys.
 - B. Route Surveys
 - C. Interior and exterior of buildings
 - D. Power pole/Utility/Tree/Sign Locations
 - E. Visual displays

- V. **NON-TRADITIONAL/INNOVATIVE USES**
 - A. Finished floor elevations
 - B. Power line catenary/sag clearances
 - C. Sewage structure As-builts
 - D. Railroads
 - E. Visual displays

- IV. **AUDIENCE INPUT/GROUP DISCUSSION**
 - A. Needs specific to each discipline (Survey, SUE, Engineering)
 - B. Potential new applications
 - C. Future direction of LiDAR

- V. **Closing comments/questions**

