Laser Radar Imaging (LADAR)

(b)(1)
(b)(3)

Approved for Release: 2018/12/13 C05109701

(b)(1)
(b)(3)

Course Outline

- Introduction: (4 hours)
- Week 1: (May 15) Introduction –
- Design and major elements of laser radar system
- Historical development
- Applications
- Week 2: (May 29) The Range Equation and Scaling Laws – (b)(3)
- Performance analysis
- Design methods and trade space
- Study Overviews (4 hours)

(b)(1)
(b)(3)

(b)(1)
(b)(3)

Course Outline

- 3D Mapping Systems: (4 hours)
- Week 5: (June 19) The World in 3D: (b)(3)
- Digital Elevation Maps
- Coordinates & Datum
- Precision and Accuracy
- Week 6: (June 26) Comparative Mapping – Photogrammetry, SAR, Lidar
- Week 7: (July 3) Review and Live Demo
- Week 8: (July 10) Adv.
- Source and safety issues in class applications
- Week 9: (July 17) Adv.
- TargetsAtmospherics – (b)(3)
- Week 10: (July 24) Adv.
- Receivers
- Week 11: (July 31) Adv
- Systems Engineering

Course Outline

- Week 12: (August 7)
- Requirements and Trade Studies
- Week 13: (August 14)
- Intro to trade space
- Week 14: (August 21)
- Trade Space Studies
- Week 15: (August 28)
- Putting it all together – good and bad system designs
- Week 16: