Who we are…

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Our mission is to work with you as a partner and empower you to improve return on investment by implementing quality Mobile GIS and field data collection solutions.

Craig Greenwald leads the software development and Mobile GIS consulting team. He has worked in the GPS and Mobile GIS industry for over 10 years, including 7 years for ESRI. He is a highly experienced software developer, consultant, and trainer – specializing in Mobile GIS and field data collection applications and technology.

Rich Ash is the Business Development Director and a Mobile Technology Specialist. He has worked in the GPS and field data collection industry for over 20 years, building experience in technical sales and client hardware/software support. He is well respected for providing effective product training, including certified Trimble GPS training classes.

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Who we represent…

- ESRI Authorized Business Partner
  - Corporate Consultant
  - Software Reseller
  - Developer
  - Trainer
- Laser Technology Inc. Authorized Business Partner/Dealer
- Trimble Mobile Computing Solutions Authorized Reseller
- Landmark Systems Forestry Solutions Business Partner
- Garmin Recreational GPS Authorized Dealer
- Trimble GPS for GIS &Survey (Pacific Survey Supply Rep.)
- Bradshaw Consulting Exclusive Western State HyperPic.Mobile Reseller

ESRI Technology AUTHORIZED RESELLER

ESRI Technology AUTHORIZED DEVELOPER

ESRI Technology AUTHORIZED CONSULTANT

ESRI Technology AUTHORIZED INSTRUCTOR

LASER TECHNOLOGY Authorized Dealer

GARMIN

Trimble

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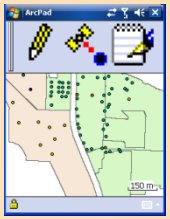
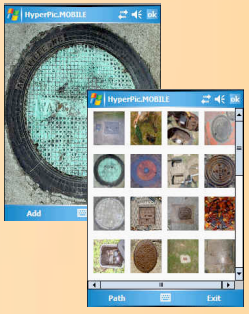
What we offer…

- ArcPad and Custom Mobile GIS/GPS Software
- Software development and consulting
  - ArcPad, ArcObjects, ArcGIS Mobile
- Hands-on software training workshops
  - ArcGIS Desktop
  - ArcPad
  - TerraSync
- Trimble Mobile Computing Solutions Field Data Collectors
- Trimble GPS Receivers and LTI Laser Range Finders
- BCS HyperPic.Mobile GIS Photo Inspection and Management Solution





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The Basics of GPS Technology

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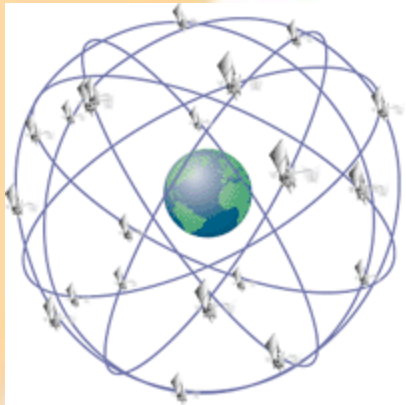
Global Positioning System (GPS) Overview

- Initiated in 1973, maintained by DOD
- A minimum of 24 satellites in the constellation provide world-wide “coverage” 24/7
- Minimum of 4 satellites need to be tracked and processed by a receiver for XYZ
- Various accuracy levels for receivers:
  - Consumer grade ~ 15 meters and better
  - Resource grade ~ 1 meter and better
  - Survey grade ~ Centimeter



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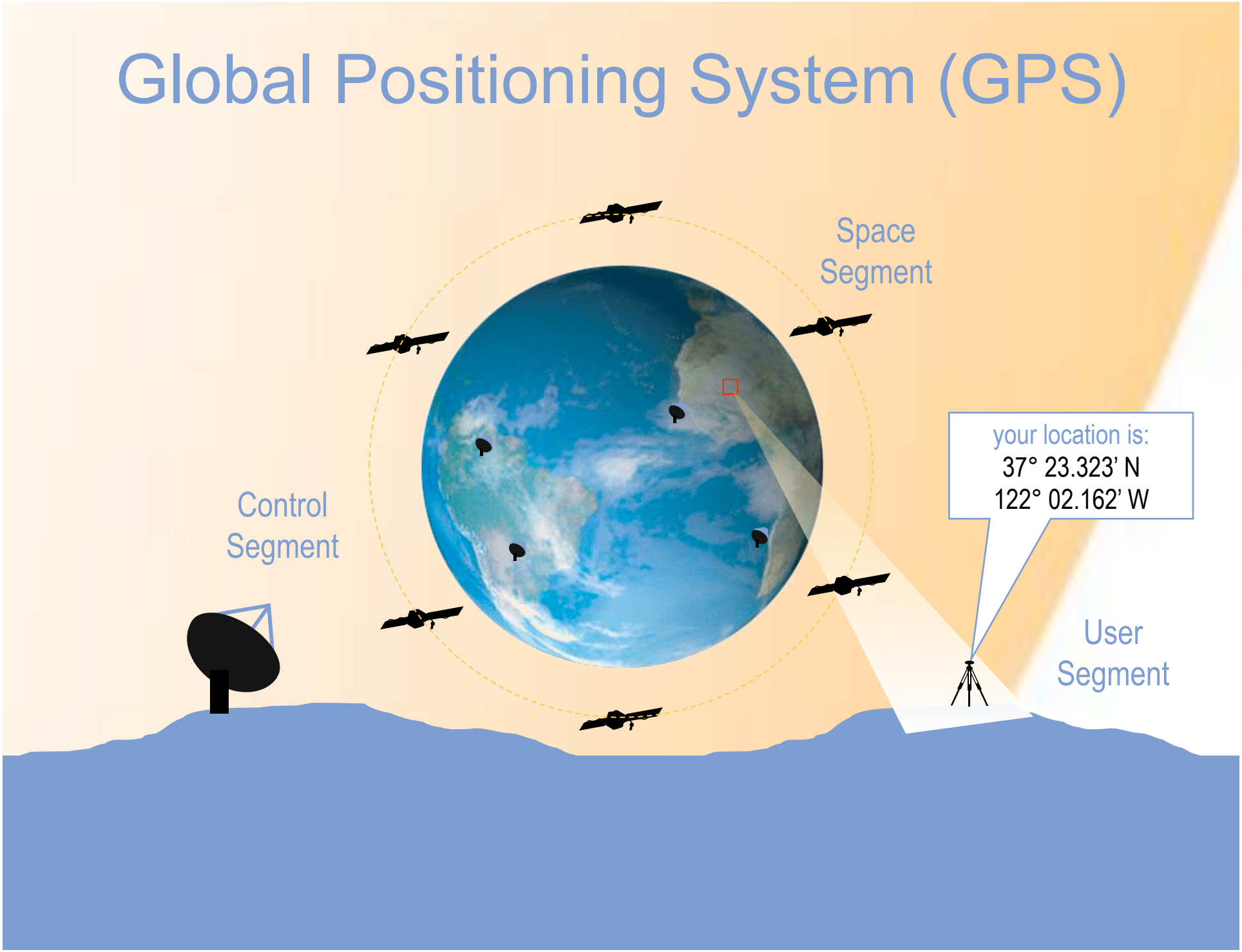
Global Positioning System (GPS)



GPS Applications

- Navigation
  - Fishing/hunting spot, geo-cache
  - Locate features or stake points
- Geospatial Data Collection
  - Recreational – Collect a waypoint!
  - Resource grade – Collect GIS features
  - Survey grade – Collect benchmarks and topo

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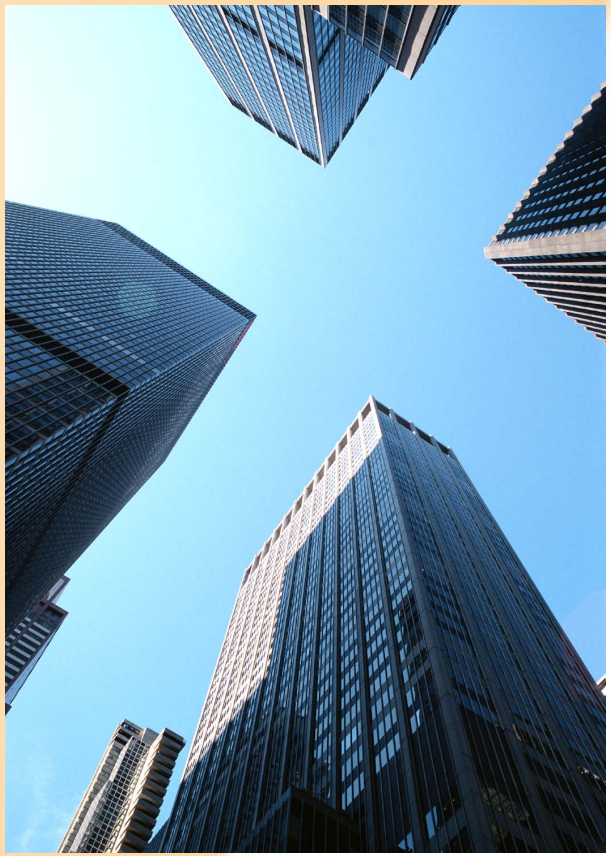
Errors in GPS

- **Obstruction**
- **Multi-path** (esp. off of chain-link fences)
- **Atmospheric conditions**
- **Clock bias**
- **Receiver hardware**
- **User**



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Key GPS Requirements

- Line of sight to satellites is critical
  - No visibility = no GPS positions
  - Poor visibility = poor GPS accuracy
- Antenna placed at feature to be captured
- Differential correction for accuracy
  - Correction sources depend upon receiver type and accuracy capabilities
- Vertical accuracy is ~ 1.5 – 2 X horizontal

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The Evolution of Laser and Compass Technology

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LASER TECHNOLOGY INC

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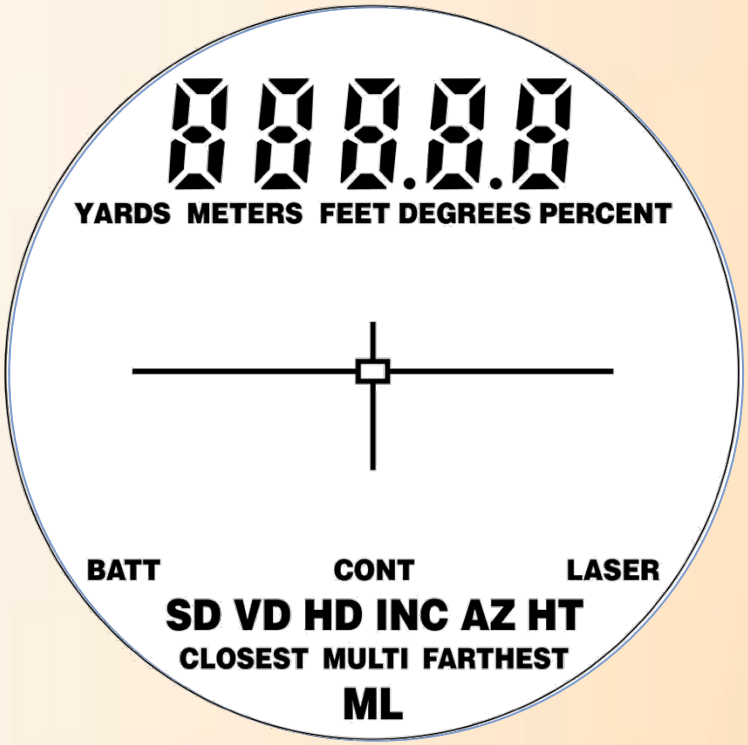
Lasers: Minimal Learning Curve

- 3 buttons: (1 Fire button) + (2 Menu buttons)
- Everything is displayed within sighting scope



SD= slope distance, VD=vertical distance, HD=horizontal distance
INC=inclination, AZ=azimuth, HT=height

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Laser Compatibility

TruPulse® 360 can be used with any device able to run ArcPad® and other GIS software

(RS232 Com Port or Bluetooth)

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Laser Mapping Applications – The Keys

- Map where satellites cannot be “seen” at all or where GPS reception is poor
- Map hard/impossible to reach spots
  - Across a river channel
- Map multiple features from a single position
- Add height, range and azimuth as attributes

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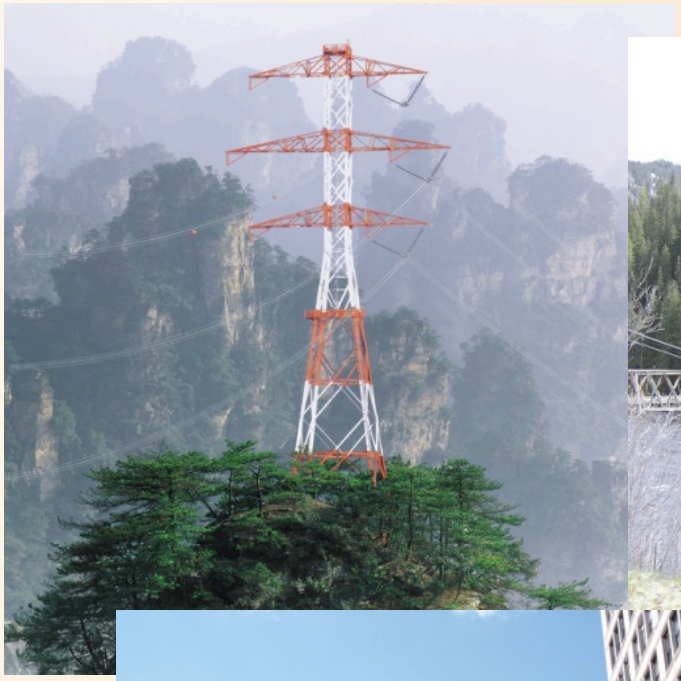
GPS This?



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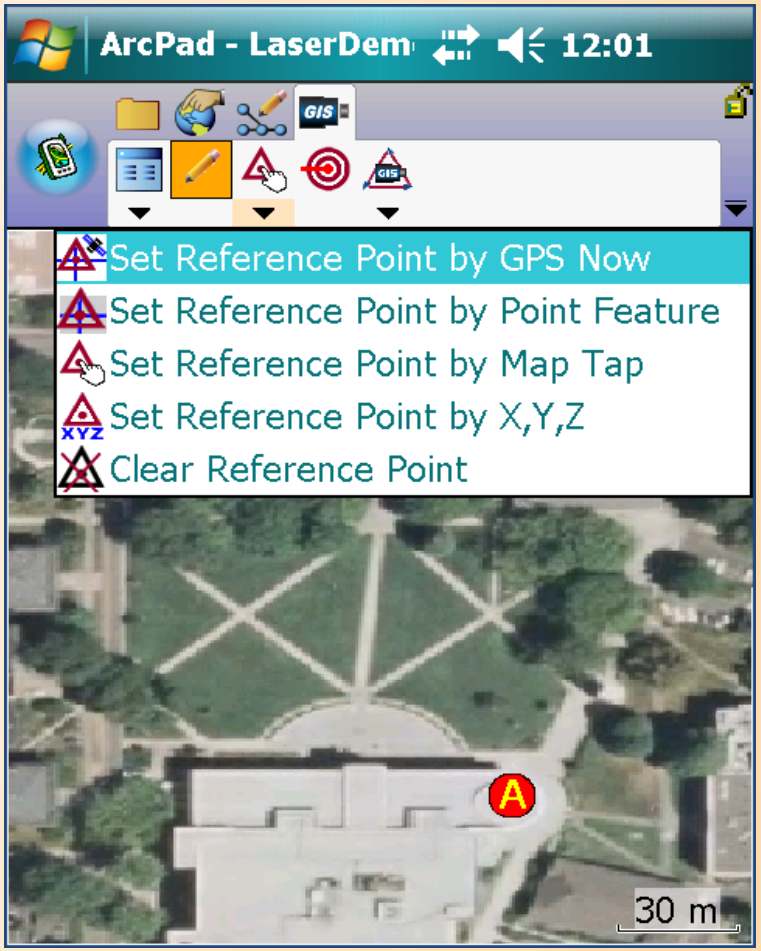
LaserGIS for ArcPad® Demo



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