ProMark2 TRAINING

MODULE ONE

ProMark2

SURVEY-GRADE GPS RECEIVERS

AIM OF MODULE ONE

• **PROVIDE A FUNCTIONAL DESCRIPTION OF THE ProMark2**

• LIST AND IDENTIFY COMPONENTS OF THE ProMark2

• LIST OPTIONAL ACCESSORIES NOT PROVIDED WITH THE ProMark2

THE ProMark2 SYSTEM

- THE ProMark2 REPRESENTS THE LATEST IN ADVANCED GPS TECHNOLOGY PRODUCED BY THALES NAVIGATION
- SINGLE FREQUENCY GPS RECEIVER
- PROVIDES BOTH PRECISION SURVEYING AND NAVIGATION MODE CAPABILITIES
- COLLECTS AND STORES TRANSMITTED GPS DATA USING STATIC, STOP & GO, AND CONTINUOUS KINEMATIC MODES OF DATA COLLECTION.
- DATA IS STORED IN A SOLID-STATE MEMORY FOR SUBSEQUENT DOWNLOADING INTO ASHTECH SOLUTIONS SOFTWARE FOR DATA POST-PROCESSING. THE ASHTECH SOLUTIONS CD IS INCLUDED WITH STATIC AND SUPER-STATIC KITS (2 AND 3 RECEIVER KITS)
- INCLUDES MapSend STREETS CD THAT PROVIDES HIGHLY DETAILED STREET-LEVEL MAPS FOR ANY REGION OF THE UNITED STATES

ProMark2 SYSTEM COMPONENTS



ProMark2 GPS RECEIVER

- SINGLE FREQUENCY `L1' CARRIER RECEPTION
- OPERATING MODES: STATIC, STOP & GO, & CONTINUOUS KINEMATIC
- 10 GPS RECEIVE CHANNELS
- 2 WAAS RECEIVE CHANNELS
- DATA RECORDING INTERVALS: SET TO ANY VALUE BETWEEN 1 AND 120 SECONDS
- 8 MEGABYTE MEMORY



EXTERNAL GPS ANTENNA

- SPECIALLY DESIGNED FOR ProMark2 GPS SIGNAL RECEPTION
- CONTAINS A BATTERY POWERED SIGNAL PREAMPLIFIER TO BOOST LOW POWER 'L1' CARRIER SIGNALS



ANTENNA GAIN:
 12db

EXTERNAL ANTENNA CABLE

- DELIVERS ELECTRICAL
 POWER TO EXT. GPS
 ANTENNA PREAMPLIFIER
- TRANSFERS ANTENNA
 PREAMPLIFIED GPS
 SIGNALS TO THE
 ProMark2 RECEIVER



#110519

VERTICAL ANTENNA EXTENSION

• PROVIDES MECHANICAL ATTACHMENT BETWEEN THE TRIPOD/TRIBRACH AND EXTERNAL GPS ANTENNA



FIELD RECEIVER BRACKET



#701993

 ASSEMBLY SECURES THE ProMark2 RECEIVER FOR ATTACHMENT TO THE TRIPOD

HEIGHT OF INSTRUMENT MEASUREMENT TAPE

#701083

• USED FOR ACCURATE MEASUREMENT OF TRUE GPS ANTENNA HEIGHT ABOVE SURVEY BENCHMARK

FIELD STORAGE BAG



• STORES ALL ProMark2 COMPONENTS AND ACCESSORIES IN A NYLON BASED WEATHER PROOF CONTAINER

OFFICE RECEIVER BRACKET WITH DOWNLOAD CABLE

- OFFICE RECEIVER BRACKET SECURES THE ProMark2 RECEIVER
- COMPUTER CABLE TRANSFERS SURVEY DATA FROM THE ProMark2 FOR DOWNLOADING INTO A COMPUTER FOR Ashtech Solutions POST-PROCESSING



Ashtech Solutions

Ashtech Solutions
 PROVIDES TOOLS TO
 DOWNLOAD AND PROCESS
 GPS DATA FROM THE
 ProMark2 TO PRODUCE
 RELATIVE POSITIONS OF
 POINTS SURVEYED



OPTIONAL ACCESSORIES (NOT SUPPLIED)

MapSend Streets USA

- CD CONTAINS HIGHLY DETAILED STREET MAPS OF MOST U.S. CITIES
- MAPPING DATA IS DOWNLOADED INTO THE MEMORY OF THE ProMark2 RECEIVER TO PROVIDE NAVIGATION ASSISTANCE



EXTERNAL BATTERY STORAGE POUCH

• PROVIDES POWER TO THE ProMark2 RECEIVER AND TO THE SIGNAL PREAMPLIFIER CONTAINED WITHIN THE EXTERNAL ANTENNA



TRIPOD

• PROVIDES ATTACHMENT POINTS TO SUPPORT THE EXTERNAL ANTENNA, TRIBRACH, AND THE ProMark2 FIELD RECEIVER BRACKET



TRIBRACH

- THIS DEVICE MATES WITH THE TRIPOD USING A TWIST-LOCK/RELEASE MECHANISM (NOT VISIBLE)
- CONTAINS THREE LEVEL ADJUSTING WHEELS, AN OPTICAL PLUMMENT (MID-CENTER), AND A CIRCULAR BUBBLE LEVEL (RIGHT CORNER) THAT PROVIDES PRECISE PLUMB AND LEVELING OF THE EXTERNAL GPS ANTENNA



TRIBRACH WITH ADAPTER

• THE ADAPTER PORTION OF THE TRIBRACH (TOP CENTER) CONTAINS A REMOVABLE BRASS ADAPTER POST TO MATE THE VERTICAL ANTENNA EXTENSION AND THE EXTERNAL ANTENNA



ProMark2 FAQ's

- **Q:** Is the ProMark2 a replacement for the ProMarkX?
- A: No. The ProMark2 is designed to be a high precision land survey tool.
- **Q:** Can the ProMark2 perform kinematic surveys?
- A: Yes! The firmware for the ProMark2 has been upgraded to support kinematic surveys.
- **Q:** Is the ProMark2 a replacement for the LOCUS?
- A: No. The LOCUS has features that the ProMArk2 doesn't have such as ultra-long battery life and wider operating temperature range.
- Q: Can the ProMark2 be used for GIS?
- A: At this time, the ProMArk2 can only be used for static GPS surveying. Attributing capabilities currently consists of antenna heights, a four character alphanumeric Site ID, and a 20 character alphanumeric descriptor.

ProMark2 FAQ's (Cont'd)

- **Q:** How do I get the street maps for navigation?
- A: At this time, only USA street level maps are supported by the ProMark2. The maps and software to load them into the ProMark2 are stored on the MapSend CD which is shipped standard with all ProMarks2's. The ProMark2 does not currently support MapSend Europe.
- **Q:** How do I tell the unit to track WAAS or EGNOS satellites?
- A: The unit tracks and uses WAAS and EGNOS satellites automatically, when available.
- **Q:** How do I set-up the unit to navigate?
- A: Please refer to the Magellan 330 Manual that is shipped with the Promark2 for a complete description of navigation procedures

GO TO MODULE TWO