ProMark2 TRAINING MODULE THREE

DATA COLLECTION

AIM OF MODULE 3

- LIST A FEW BASIC STEPS THAT WILL ENSURE A SUCCESSFUL STOP & GO SURVEY
- IDENTIFY THE BUTTONS AND SCREENS USED TO TRANSITION THE ProMark2 FOR STOP & GO DATA COLLECTION
- PROVIDE A DETAILED FUNCTIONAL DESCRIPTION OF THE ProMark2 SCREENS USED FOR STOP & GO SURVEYS
- EXPLAIN BRIEFLY THE MEANING OF THE ICONS DISPLAYED WITH RESPECT TO POWER STATUS MONITORING

TIPS FOR STOP & GO

HERE ARE A FEW FIELD TIPS AND POINTS THAT WILL HELP IN CONDUCTING A SUCCESSFUL STOP & GO SESSION LOAD THE ProMark2's WITH FRESH BATTERIES **USE A BIPOD WITH THE RANGE POLE. PLUMB AND LEVEL ON THE NEW POINTS TO BE SURVEYED** LOG INFORMATION ABOUT EACH SURVEY POINT (e.g. Site ID, Site **Description) AND THE TIME OF THE OCCUPATION ENSURE THE ProMark2 BASE AND ROVER RECEIVERS ARE** TRACKING SATELLITES THROUGHOUT THE SURVEY IF SATELLITE LOCK IS LOST, REOCCUPY THE LAST CONTROL POINT SURVEYED PRIOR TO LOSS OF LOCK AS A KNOWN POINT

DATA COLLECTION

- AFTER THE ProMark2's HAVE BEEN PROPERLY CONFIGURED FOR STOP & GO START THE DATA COLLECTION PROCESS
- MODE SCREEN
- HIT: ESCAPE TO RETURN TO THE MODE SCREEN
- SELECT: SURVEY
- HIT: ENTER



- <u>SURVEY SCREEN</u>
- ARROW KEY DOWN TO: COLLECT DATA
- NOTE: MAKE CERTAIN AN EXTERNAL ANTENNA IS CONNECTED TO THE ProMark2 TO PRECLUDE A <u>NO EXTERNAL ANTENNA ALARM</u>
- HIT: ENTER



- <u>SATELLITE STATUS SCREEN</u>
- THE SATELLITE STATUS SCREEN DISPLAYS INDICATORS PERTAINING TO QUALITY MONITORING OF THE GPS SATELLITES USED DURING A SESSION



- PROVIDES COMPASS REFERENCE
- SKY PLOT [NO BOX CAPTURE=NO LOCK]
- SATELLITES TRACKED [BOX CAPTURE]
- RELATIVE SIGNAL STRENGTH OF SATELLITES BEING TRACKED
- GPS VEHICLE ID NUMBER
- BATTERY AND MEMORY STATUS

- <u>SURVEY STATUS SCREEN</u>
- THE SURVEY STATUS SCREEN PROVIDES INFORMATION PERTAINING TO THE QUALITY OF THE OBSERVATION

Survey Status

Stop-and-go



- SURVEY TYPE CLASSIFICATION
- SITE ID / TIME REMAINING TO COMPLETE LOGGING OF POINT ATTRIBUTE FOR THE CURRENT SESSION
- NUMBER OF GPS SATELLITES LOGGED DURING THE SESSION AND THE POSITION DILUTION OF PRECISION (PDOP)
- START BUTTON INITIATES POINT ATTRIBUTE LOGGING
- STOP BUTTON HALTS POINT ATTRIBUTE LOGGING BEFORE THE REMAIN TIMES REACHES 00:00:00
- POWER SOURCE [PLUG ICON=EXTERNAL / BATTERY ICON=INTERNAL BATTERY] AND MEMORY STORAGE AVAILABILITY STATUS

- <u>SURVEY STATUS SCREEN (Cont'd)</u>
- <u>SITE ID</u> INDICATES THE CURRENT SITE IDENTIFIER ASSIGNED FOR A PARTICULAR DATA SESSION. EVERY SURVEY POINT MUST HAVE A UNIQUE ID ASSOCIATED WITH THE DATA TO SUPPORT POST-PROCESSING
- <u>REMAIN</u>—INDICATES THE AMOUNT OF TIME REMAINING FOR LOGGING POINT DATA FOR A PARTICULAR SURVEY POINT
- <u>#SATS</u>—INDICATES THE CURRENT NUMBER OF SATELLITES ABOVE 10 DEGREES ELEVATION THAT ARE BEING LOGGED INTO MEMORY

- <u>PDOP</u>
- POSITION <u>D</u>ILUTION <u>OF</u> <u>PRECISION</u> DISPLAYS A NUMERICAL FIGURE THAT REPRESENTS THE ORBITAL GEOMETRY OF THE SATELLITES BEING USED ABOVE 10 DEGREES
- START BUTTON
- THE START BUTTON APPEARS WITH WHITE LETTERS ON A BLACK BACKGROUND. PRESS ENTER TO INITIATE POINT DATA LOGGING
- STOP BUTTON
- THE STOP BUTTON APPEARS IN REVERSE VIDEO WHEN THE ProMark2 IS STORING POINT ATTRIBUTE DATA. PRESS ENTER TO STOP POINT DATA LOGGING. THE STOP BUTTON WILL REVERT TO NORMAL VIDEO WHEN THE REMAIN FRAME APPEARS AS 00:00:00

- POWER STATUS
- WHEN AN EXTERNAL POWER PACK IS USED WITH THE ProMark2, AN AC PLUG ICON APPEARS ON SCREEN
- WHEN THE EXTERNAL POWER SOURCE REACHES NEAR THE POINT OF TOTAL DISCHARGE, A <u>BATTERY ICON</u> WILL APPEAR ON THE SURVEY STATUS SCREEN INDICATING THE ProMarK2 HAS SWITCHED TO INTERNAL POWER

- KINEMATIC ALARM SCREEN
- IF THERE ARE LESS THAN <u>FIVE</u> SATELLITES AVAILABLE [CHECK MISSION PLANNING STATUS], OR IF THERE IS DIFFICULTY WITH THE RECEIVER IN MAINTAINING <u>LOCK</u> (e.g. loss of signal) WITH THIS SATELLITE MINIMUM, A KINEMATIC ALARM SCREEN WILL APPEAR OVER THE <u>SURVEY STATUS</u> SCREEN. DISABLE THE ALARM BY HITTING ANY KEY ON THE ProMark2. THEN <u>REINITIALIZE</u> THE SURVEY



• NOTE: KEEP THE ProMark2 EXTERNAL ANTENNA IN A VERTICAL POSITION TO MAINTAIN LINE-OF-SIGHT WITH THE GPS SATELLITES OVERHEAD

- <u>SITE ID</u>
- THIS SCREEN IS AVAILABLE FOR STOP-AND-GO OPERATIONS WHEN A KNOWN POINT HAS BEEN SELECTED IN THE <u>INITIALIZE FIELD</u> ON THE THE <u>POINT ATTRIBUTE</u> SCREEN



- TO ACCESS THE SITE ID SCREEN
- SELECT: KNOWN POINT IN THE INITIALIZE FRAME
- ARROW KEY AND HIGHLIGHT THE SITE ID
- HIT: ENTER

- <u>SITE ID (Cont'd)</u>
- [CT23....ETC]
- REPRESENT A LIST OF OF <u>KNOWN</u> INITIALIZATION POINTS THAT ARE ASSOCIATED WITH THE <u>SITE DESCRIPTORS</u>
- [SAVE]
- SAVE THE SETTINGS INPUT INTO MEMORY FOR EACH SURVEYED POINT
- [DELETE]
- DELTES THE HIGHLIGHTED <u>SITE ID</u> IN THE <u>SITE ID TABLE.</u> THE SITE ID LIST IS SAVED AND CAN ONLY BE CLEARED BY USING THE DELETE BUTTON, OR BY SELECTING <u>CLEAR ALL</u> IN THE <u>NAVIGATION</u> SETUP MENU

GO TO MODULE FOUR