

ILLINOIS ARMY NATIONAL GUARD

Sparta Training Area
1803 Hillcrest Drive
Sparta, IL 62286

102 Land Navigation Course

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SPARTA TRAINING AREA
BEGINNER LAND NAVIGATION COURSE
102 COURSE

GUIDANCE FOR COURSE OIC/TEST ADMINISTRATOR

I. Materials needed for Beginner Land Navigation Course:

- a. _____ STA 1:25000 scale map
- b. _____ lensatic compass
- c. _____ protractors
- d. _____ pencils
- e. _____ pre-made test sheets
- f. _____ answer sheet matrixes

II. Instructions for conducting the intermediate land navigation course:

There are several pre-made test sheets included in the course binder.

This course is designed to run several relays of students through in a minimal amount of time.

There are also answer sheet matrixes included for easy grading. To use them, simply determine which test sheet the student is using, locate the test answer sheet, red, white, blue, black, or green, and compare the answers to the students test sheet.

It is also important that students have an opportunity to determine their pace counts prior to beginning the course.

Finally, the students should be briefed on, or have the opportunity to read, the contents of the student instruction sheet provided.

SPARTA TRAINING AREA
BEGINNER LAND NAVIGATION COURSE
102 COURSE

STUDENT INSTRUCTION SHEET

COURSE REQUIREMENTS:

TASK: Navigate over relatively flat grassland between points while dismounted.

CONDITION: Given a 1:25000 scale topographic map of Sparta Training Area, compass, protractor, pencil, and either: (1) a ten digit grid coordinate of the next point or (2) a distance and/or azimuth to the next point.

STANDARD: Correctly determine the identification or ten-digit coordinate of all points to which you are directed.

COURSE DESCRIPTION:

This is a five-leg course over relatively flat grassland. The course requires the user to plot points, determine grids and navigate from one point to another.

COURSE POINT IDENTIFICATION:

Known Points are labeled KP1 and KP2. Start points are identified as SP1 through SP5. All other course stakes are identified with an alphanumeric designation containing one letter and one number. Identifications are posted on 1' by 1' signs painted half white and half international orange and are between 5' and 7' above ground level.

PACE COUNT:

An individual soldiers pace count may be identified utilizing the known points or start points. These stakes are each 50 meters apart.

SAFETY:

The panic azimuth is 270 degrees. Following this azimuth will lead you to a gravel road. If not reoriented once on the gravel road, remain in place to be picked up by your unit or range control personnel.

INJURIES:

If you are injured and unable to follow the panic azimuth to the road, call for help. If you come upon someone who is injured, or respond to someone's call for assistance, render required first aid within your capabilities and knowledge. If you are the only person with the injured person, try calling for assistance. If a second person arrives, one of you should stay with the injured person while the other person follows the panic azimuth and gets help. If no one responds within a reasonable period of time, you must judge whether to wait with the person or to get help. If you leave REMEMBER THE INJURED PERSON'S LOCATION and mark if necessary so you can find it again. DO NOT IGNORE SOMEONE'S CALL FOR ASSISTANCE – the safety of your fellow soldiers is more important than completing the course.

PREMATURE TERMINATION:

If for any reason it is determined that conditions are no longer safe for the conduct of the land navigation course, a horn will sound three times in succession. IMMEDIATELY follow the panic azimuth to the road and wait for further instructions.

SAFETY CONT...

TEST CONDUCT:

Determine your pace count.

You should be able to perform to standard all skill level 1-4 navigation tasks listed in the Soldier's Manual of Common Tasks.

You will be provided with a STA 1:25,000 scale map, a compass, protractor, pencil, and test sheet. The test sheet will direct you from one course point to the next by giving you either a ten digit grid coordinate (day), or distance and azimuth (night). You will be asked to record the identification number of the point you have been directed to. Record this information in the appropriate space on the test sheet.

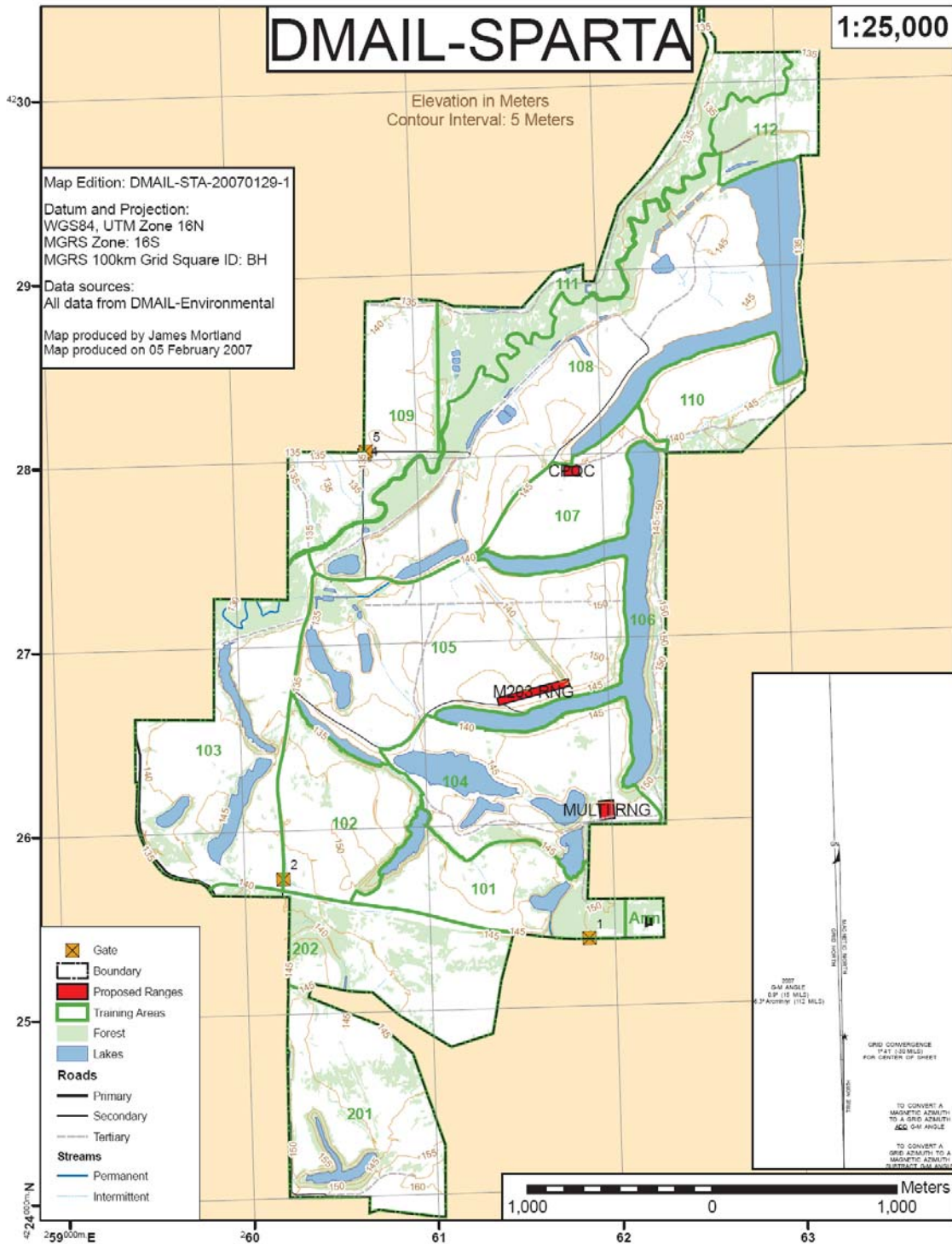
Once you have reached and recorded the final point, return to assembly area within allotted time and turn in test sheet for grading.

You will have _____ minutes (hours) to complete the course. At the end of this time, a horn will sound three times. Immediately return to the road along the panic azimuth.

Do you know the panic azimuth?

Do you have any questions?

Sparta Training Area 1:25,000 General Map



102 Land Navigation Course Stake Locations

102 Land Nav Sign Locations

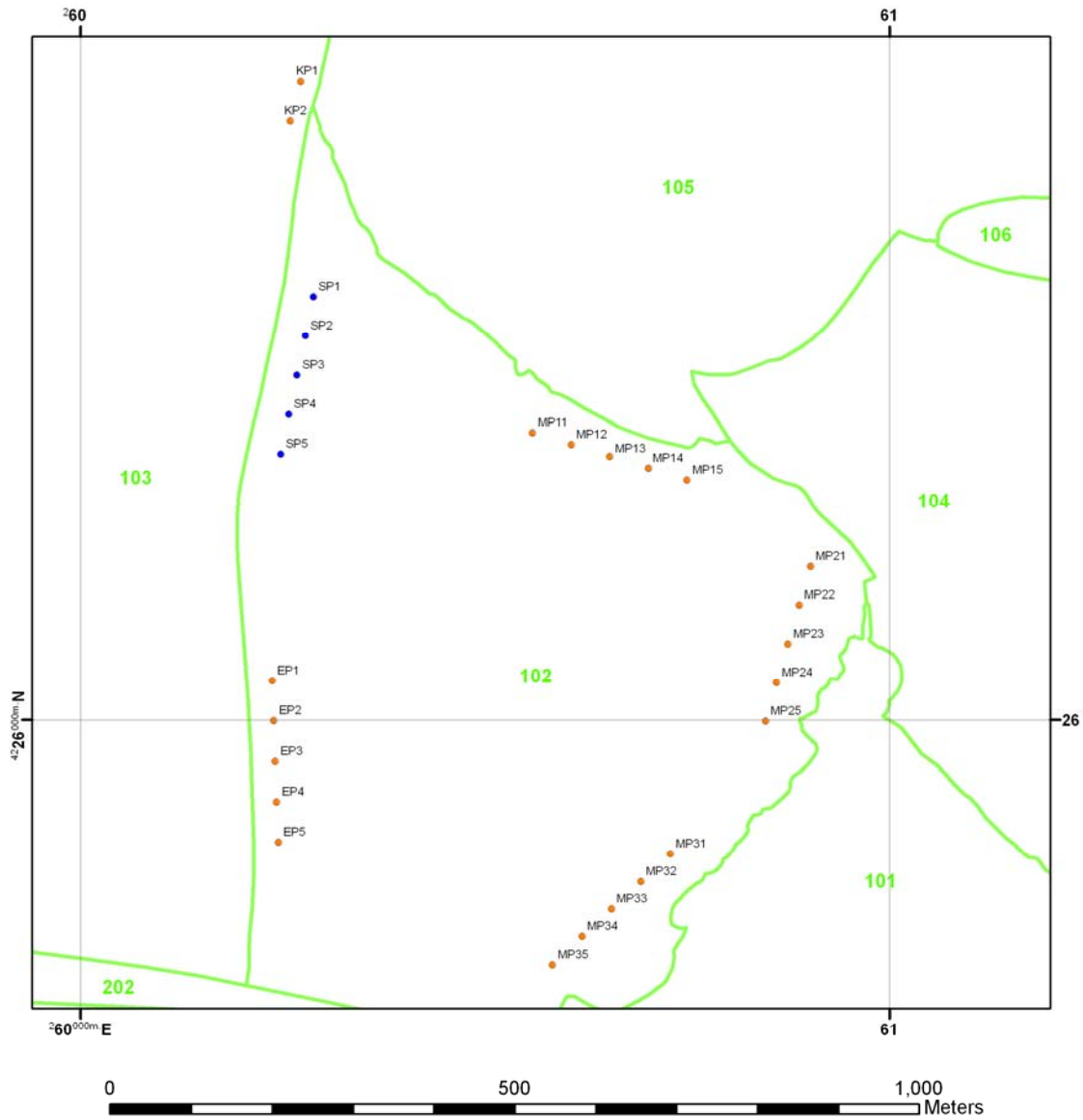
Legend

Land Nav Points

TYPE

- Start Points
- Other Points

Datum and Projection: WGS84, UTM Zone 16N
100km GSI: BH
All data from DMAIL-Environmental
Map created by James Mortland
Map created on 18 DEC 07



**SCORESHEET FOR 102 DAY LAND NAVIGATION COURSE
SPARTA TRAINING AREA**

SOLDIERS' NAME(S): _____ **&** _____

UNIT: _____ **DATE TAKEN:** _____

START TIME: _____ **FINISH TIME:** _____

**TO MEET STANDARD, YOU MUST CORRECTLY IDENTIFY 4 OF 5 POINTS
IN LESS THAN 3 HOURS. YOU ARE ASSIGNED TO THE DAY RED LANE**

**NOTE: WHEN DETERMINING AZIMUTHS, REMEMBER TO CONVERT
YOUR AZIMUTH USING YOUR GRID-AZIMUTH (G-M) ANGLE. [To convert a
grid azimuth to a magnetic azimuth, subtract the G-M angle (0.9 degrees)]**

YOU ARE AT BH 6027126792 (KP1).

1. Travel from this location 267 Meters, 177 degrees (grid) to find your first point.

Record marking on point here _____

What is the 10 digit grid to this location? _____

2. Go to BH 6065326327 to find your second point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

3. Go to BH 6086026047 to find your third point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

4. Go to BH 6058225698 to find your fourth point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

5. Go to BH 6023825999 to find your fifth point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

Return to scoring station within designated time

**SOLDIER(S) CORRECTLY IDENTIFIED _____ OF 5 POINTS
IN _____ HOUR(S) _____ MINUTES.**

SCORE AS: GO NO GO (circle one)

REVIEWED AND GRADED BY: _____

**SCORESHEET FOR 102 DAY LAND NAVIGATION COURSE
SPARTA TRAINING AREA**

SOLDIERS' NAME(S): _____ & _____

UNIT: _____ **DATE TAKEN:** _____

START TIME: _____ **FINISH TIME:** _____

**TO MEET STANDARD, YOU MUST CORRECTLY IDENTIFY 4 OF 5 POINTS
IN LESS THAN 3 HOURS. YOU ARE ASSIGNED TO THE DAY WHITE LANE**

**NOTE: WHEN DETERMINING AZIMUTHS, REMEMBER TO CONVERT
YOUR AZIMUTH USING YOUR GRID-AZIMUTH (G-M) ANGLE. [To convert a
grid azimuth to a magnetic azimuth, subtract the G-M angle (0.9 degrees)]**

YOU ARE AT BH 6027126792 (KP1).

1. Travel from this location 315 Meters, 179 degrees (grid) to find your first point.

Record marking on point here _____

What is the 10 digit grid to this location? _____

2. Go to BH 6070126313 to find your second point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

3. Go to BH 6084625998 to find your third point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

4. Go to BH 6065525766 to find your fourth point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

5. Go to BH 6023626049 to find your fifth point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

Return to scoring station within designated time

**SOLDIER(S) CORRECTLY IDENTIFIED _____ OF 5 POINTS
IN _____ HOUR(S) _____ MINUTES.**

SCORE AS: GO NO GO (circle one)

REVIEWED AND GRADED BY: _____

**SCORESHEET FOR 102 DAY LAND NAVIGATION COURSE
SPARTA TRAINING AREA**

SOLDIERS' NAME(S): _____ & _____

UNIT: _____ **DATE TAKEN:** _____

START TIME: _____ **FINISH TIME:** _____

**TO MEET STANDARD, YOU MUST CORRECTLY IDENTIFY 4 OF 5 POINTS
IN LESS THAN 3 HOURS. YOU ARE ASSIGNED TO THE DAY BLUE LANE**

**NOTE: WHEN DETERMINING AZIMUTHS, REMEMBER TO CONVERT
YOUR AZIMUTH USING YOUR GRID-AZIMUTH (G-M) ANGLE. [To convert a
grid azimuth to a magnetic azimuth, subtract the G-M angle (0.9 degrees)]**

YOU ARE AT BH 6025826744 (KP2).

1. Travel from this location 316 Meters, 178 degrees (grid) to find your first point.

Record marking on point here _____

What is the 10 digit grid to this location? _____

2. Go to BH 6060526342 to find your second point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

3. Go to BH 6090126191 to find your third point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

4. Go to BH 6061925732 to find your fourth point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

5. Go to BH 6024025949 to find your fifth point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

Return to scoring station within designated time

**SOLDIER(S) CORRECTLY IDENTIFIED _____ OF 5 POINTS
IN _____ HOUR(S) _____ MINUTES.**

SCORE AS: GO NO GO (circle one)

REVIEWED AND GRADED BY: _____

**SCORESHEET FOR 102 DAY LAND NAVIGATION COURSE
SPARTA TRAINING AREA**

SOLDIERS' NAME(S): _____ & _____

UNIT: _____ **DATE TAKEN:** _____

START TIME: _____ **FINISH TIME:** _____

**TO MEET STANDARD, YOU MUST CORRECTLY IDENTIFY 4 OF 5 POINTS
IN LESS THAN 3 HOURS. YOU ARE ASSIGNED TO THE DAY BLACK
COURSE**

**NOTE: WHEN DETERMINING AZIMUTHS, REMEMBER TO CONVERT
YOUR AZIMUTH USING YOUR GRID-AZIMUTH (G-M) ANGLE. [To convert a
grid azimuth to a magnetic azimuth, subtract the G-M angle (0.9 degrees)]**

YOU ARE AT BH 6025826744 (KP2).

1. Travel from this location 365 Meters, 180 degrees (grid) to find your first point.

Record marking on point here _____

What is the 10 digit grid to this location? _____

2. Go to BH 6074926298 to find your second point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

3. Go to BH 6087326095 to find your third point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

4. Go to BH 6069225800 to find your fourth point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

5. Go to BH 60243225849 to find your fifth point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

Return to scoring station within designated time

**SOLDIER(S) CORRECTLY IDENTIFIED _____ OF 5 POINTS
IN _____ HOUR(S) _____ MINUTES.**

SCORE AS: GO NO GO (circle one)

REVIEWED AND GRADED BY: _____

**SCORESHEET FOR 102 DAY LAND NAVIGATION COURSE
SPARTA TRAINING AREA**

SOLDIERS' NAME(S): _____ & _____

UNIT: _____ **DATE TAKEN:** _____

START TIME: _____ **FINISH TIME:** _____

**TO MEET STANDARD, YOU MUST CORRECTLY IDENTIFY 4 OF 5 POINTS
IN LESS THAN 3 HOURS. YOU ARE ASSIGNED TO THE DAY GREEN LANE**

**NOTE: WHEN DETERMINING AZIMUTHS, REMEMBER TO CONVERT
YOUR AZIMUTH USING YOUR GRID-AZIMUTH (G-M) ANGLE. [To convert a
grid azimuth to a magnetic azimuth, subtract the G-M angle (0.9 degrees)]**

YOU ARE AT BH 6025826744 (KP2).

1. Travel from this location 414 Meters, 182 degrees (grid) to find your first point.

Record marking on point here _____

What is the 10 digit grid to this location? _____

2. Go to BH 6055826357 to find your second point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

3. Go to BH 6088726143 to find your third point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

4. Go to BH 6072825835 to find your fourth point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

5. Go to BH 6024125899 to find your fifth point.

_____ Meters _____ degrees (grid) _____ degrees (mag)

Record marking on point here _____

Return to scoring station within designated time

**SOLDIER(S) CORRECTLY IDENTIFIED _____ OF 5 POINTS
IN _____ HOUR(S) _____ MINUTES.**

SCORE AS: GO NO GO (circle one)

REVIEWED AND GRADED BY: _____

**SCORESHEET FOR 102 NIGHT LAND NAVIGATION COURSE
SPARTA TRAINING AREA**

SOLDIERS' NAME(S): _____ **&** _____

UNIT: _____ **DATE TAKEN:** _____

START TIME: _____ **FINISH TIME:** _____

**TO MEET STANDARD, YOU MUST CORRECTLY IDENTIFY 3 OF 4 POINTS
IN LESS THAN 3 HOURS.**

YOU ARE ASSIGNED TO THE NIGHT RED LANE

YOU ARE AT BH 6028726526 (SP1).

- 1. Move from your present location
417 meters 118 degrees (mag)**

Record marking on point here _____

- 2. Move from your present location
348 meters 143 degrees (mag)**

Record marking on point here _____

- 3. Move from your present location
446 meters 218 degrees (mag)**

Record marking on point here _____

- 4. Move from your present location
458 meters 310 degrees (mag)**

Record marking on point here _____

Return to scoring station within designated time

**SOLDIER(S) CORRECTLY IDENTIFIED _____ OF 4 POINTS
IN _____ HOUR(S) _____ MINUTES.**

SCORE AS: GO NO GO (circle one)

REVIEWED AND GRADED BY: _____

**SCORESHEET FOR 102 NIGHT LAND NAVIGATION COURSE
SPARTA TRAINING AREA**

SOLDIERS' NAME(S): _____ **&** _____

UNIT: _____ **DATE TAKEN:** _____

START TIME: _____ **FINISH TIME:** _____

**TO MEET STANDARD, YOU MUST CORRECTLY IDENTIFY 3 OF 4 POINTS
IN LESS THAN 3 HOURS.**

YOU ARE ASSIGNED TO THE NIGHT WHITE LANE

YOU ARE AT BH 6027726477(SP2).

1. Move from your present location
455 meters 110 degrees (mag)

Record marking on point here _____

2. Move from your present location
346 meters 154 degrees (mag)

Record marking on point here _____

3. Move from your present location
300 meters 218 degrees (mag)

Record marking on point here _____

4. Move from your present location
506 meters 303 degrees (mag)

Record marking on point here _____

Return to scoring station within designated time

**SOLDIER(S) CORRECTLY IDENTIFIED _____ OF 4 POINTS
IN _____ HOUR(S) _____ MINUTES.**

SCORE AS: GO NO GO (circle one)

REVIEWED AND GRADED BY: _____

**SCORESHEET FOR 102 NIGHT LAND NAVIGATION COURSE
SPARTA TRAINING AREA**

SOLDIERS' NAME(S): _____ **&** _____

UNIT: _____ **DATE TAKEN:** _____

START TIME: _____ **FINISH TIME:** _____

**TO MEET STANDARD, YOU MUST CORRECTLY IDENTIFY 3 OF 4 POINTS
IN LESS THAN 3 HOURS.**

YOU ARE ASSIGNED TO THE NIGHT BLUE LANE

YOU ARE AT BH 6026726428 (SP3).

1. Move from your present location
350 meters 103 degrees (mag)

Record marking on point here _____

2. Move from your present location
332 meters 116 degrees (mag)

Record marking on point here _____

3. Move from your present location
539 meters 211 degrees (mag)

Record marking on point here _____

4. Move from your present location
437 meters 299 degrees (mag)

Record marking on point here _____

Return to scoring station within designated time

**SOLDIER(S) CORRECTLY IDENTIFIED _____ OF 4 POINTS
IN _____ HOUR(S) _____ MINUTES.**

SCORE AS: GO NO GO (circle one)

REVIEWED AND GRADED BY: _____

**SCORESHEET FOR 102 NIGHT LAND NAVIGATION COURSE
SPARTA TRAINING AREA**

SOLDIERS' NAME(S): _____ **&** _____

UNIT: _____ **DATE TAKEN:** _____

START TIME: _____ **FINISH TIME:** _____

**TO MEET STANDARD, YOU MUST CORRECTLY IDENTIFY 3 OF 4 POINTS
IN LESS THAN 3 HOURS.**

YOU ARE ASSIGNED TO THE NIGHT BLACK LANE

YOU ARE AT BH 6025626379(SP4).

1. Move from your present location
499 meters 98 degrees (mag)

Record marking on point here _____

2. Move from your present location
239 meters 148 degrees (mag)

Record marking on point here _____

3. Move from your present location
346 meters 211 degrees (mag)

Record marking on point here _____

4. Move from your present location
451 meters 275 degrees (mag)

Record marking on point here _____

Return to scoring station within designated time

**SOLDIER(S) CORRECTLY IDENTIFIED _____ OF 4 POINTS
IN _____ HOUR(S) _____ MINUTES.**

SCORE AS: GO NO GO (circle one)

REVIEWED AND GRADED BY: _____

**SCORESHEET FOR 102 NIGHT LAND NAVIGATION COURSE
SPARTA TRAINING AREA**

SOLDIERS' NAME(S): _____ & _____

UNIT: _____ **DATE TAKEN:** _____

START TIME: _____ **FINISH TIME:** _____

**TO MEET STANDARD, YOU MUST CORRECTLY IDENTIFY 3 OF 4 POINTS
IN LESS THAN 3 HOURS.**

YOU ARE ASSIGNED TO THE NIGHT GREEN LANE

YOU ARE AT BH 6024626330 (SP5).

1. Move from your present location
312 meters 84 degrees (mag)

Record marking on point here _____

2. Move from your present location
393 meters 122 degrees (mag)

Record marking on point here _____

3. Move from your present location
347 meters 206 degrees (mag)

Record marking on point here _____

4. Move from your present location
491 meters 277 degrees (mag)

Record marking on point here _____

Return to scoring station within designated time

**SOLDIER(S) CORRECTLY IDENTIFIED _____ OF 4 POINTS
IN _____ HOUR(S) _____ MINUTES.**

SCORE AS: GO NO GO (circle one)

REVIEWED AND GRADED BY: _____

**ANSWER SHEET
102 DAY LAND NAVIGATION COURSE**

RED: SP1 BH 60287 26526 +/- 25 meters
M8
V1
P1
C4

WHITE: SP2 BH 60277 26477 +/- 25 meters
N3
B1
T8
H4

BLUE: SP3 BH 60267 26428 +/- 25 meters
X6
Q4
E9
G6

BLACK: SP4 BH 60256 26379 +/- 25 meters
A4
D5
U5
F1

GREEN: SP5 BH 60246 26330 +/- 25 meters
L8
J2
R8
W7

ANSWER SHEET
102 NIGHT LAND NAVIGATION COURSE

RED: M8
V1
P1
C4

WHITE: N3
B1
T8
H4

BLUE: X6
Q4
E9
G6

BLACK: A4
D5
U5
F1

GREEN: L8
J2
R8
W7

ANSWER SHEET

ALL POINTS WITH IDENTIFICATION NUMBERS

102 Land Nav Sign Codes

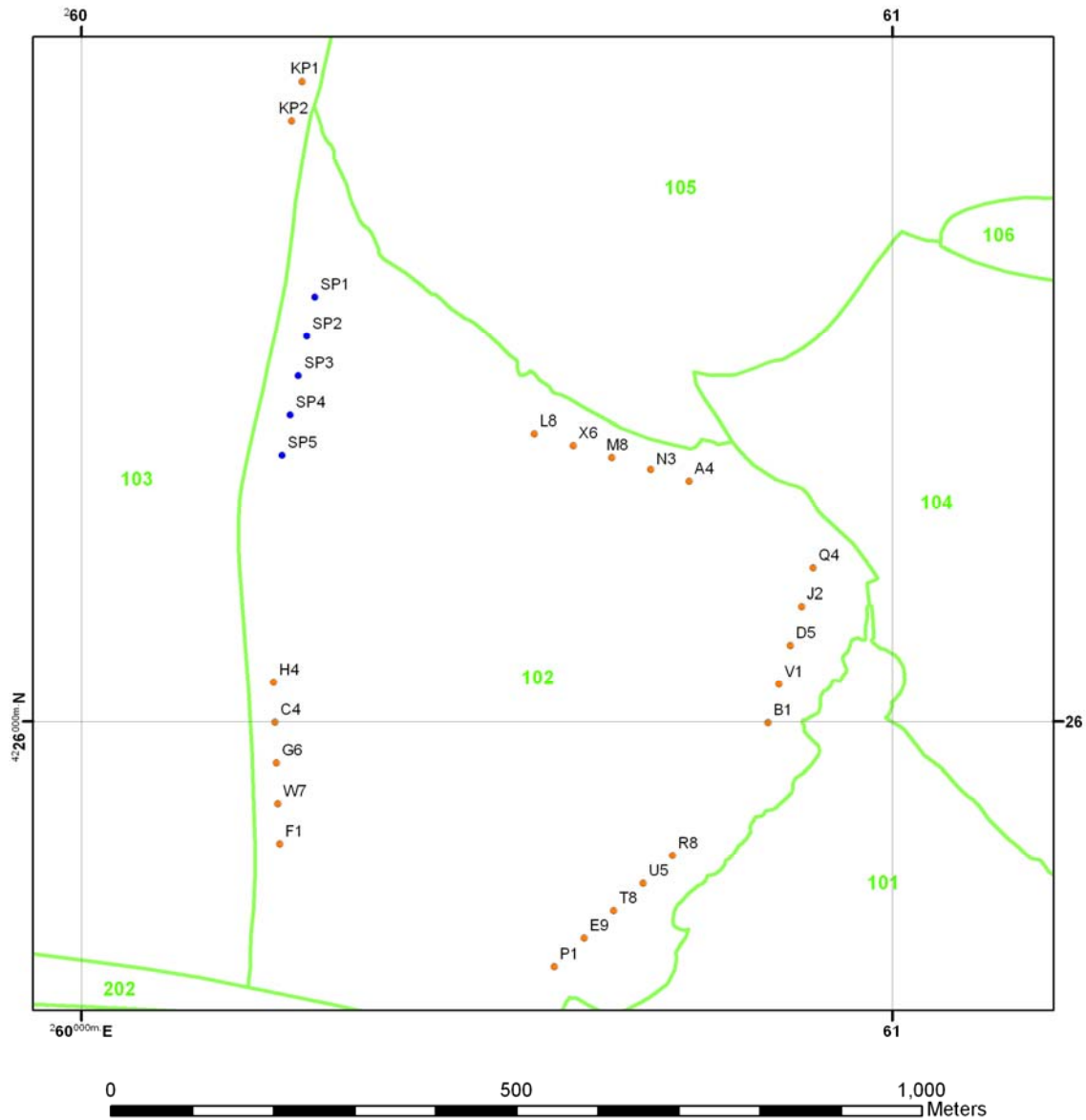
Legend

Land Nav Points

TYPE

- Start Points
- Other Points

Datum and Projection: WGS84, UTM Zone 16N
 100km GSI: BH
 All data from DMAIL-Environmental
 Map created by James Mortland
 Map created on 18 DEC 07



POINT TO POINT DISTANCE AND DIRECTION FOR THE CREATION OF ALTERNATE COURSES

DIST_M	FR_POINT	TO_POINT	GRID_AZ	BACK_AZ
50.000	KP1	KP2	195.274	15.274
266.601	KP1	SP1	176.605	356.605
315.139	KP1	SP2	178.978	358.978
364.073	KP1	SP3	180.715	0.715
413.262	KP1	SP4	182.040	2.040
462.625	KP1	SP5	183.084	3.084
521.365	KP1	L8	146.668	326.668
560.818	KP1	X6	143.410	323.410
601.839	KP1	M8	140.609	320.609
644.131	KP1	N3	138.153	318.153
687.459	KP1	A4	135.984	315.984
871.406	KP1	Q4	133.696	313.696
895.569	KP1	J2	136.514	316.514
921.814	KP1	D5	139.207	319.207
949.968	KP1	V1	141.731	321.731
979.865	KP1	B1	144.115	324.115
1061.278	KP1	R8	154.488	334.488
1077.477	KP1	U5	157.033	337.033
1095.719	KP1	T8	159.486	339.486
1115.905	KP1	E9	161.845	341.845
1137.932	KP1	P1	164.134	344.134
744.201	KP1	H4	182.711	2.711
794.036	KP1	C4	182.410	2.410
843.891	KP1	G6	182.143	2.143
893.762	KP1	W7	181.907	1.907
943.647	KP1	F1	181.695	1.695
219.816	KP2	SP1	172.426	352.426
267.517	KP2	SP2	175.971	355.971
315.929	KP2	SP3	178.434	358.434
364.770	KP2	SP4	180.242	0.242
413.888	KP2	SP5	181.620	1.620
489.740	KP2	L8	142.269	322.269
531.394	KP2	X6	139.157	319.157
574.381	KP2	M8	136.518	316.518
618.424	KP2	N3	134.241	314.241
663.312	KP2	A4	132.265	312.265
848.763	KP2	Q4	130.696	310.696
870.688	KP2	J2	133.708	313.708
894.871	KP2	D5	136.528	316.528
921.136	KP2	V1	139.223	319.223
949.310	KP2	B1	141.749	321.749
1023.942	KP2	R8	152.667	332.667
1038.673	KP2	U5	155.324	335.324
1055.569	KP2	T8	157.895	337.895
1074.528	KP2	E9	160.373	340.373
1095.443	KP2	P1	162.786	342.786
695.484	KP2	H4	181.817	1.817
745.375	KP2	C4	181.555	1.555
795.280	KP2	G6	181.325	1.325

845.196	KP2	W7	181.122	1.122
895.122	KP2	F1	180.944	0.944
50.000	SP1	SP2	191.735	11.735
100.000	SP1	SP3	191.735	11.735
150.000	SP1	SP4	191.735	11.735
200.000	SP1	SP5	191.735	11.735
319.350	SP1	L8	122.061	302.061
367.885	SP1	X6	120.064	300.064
416.767	SP1	M8	118.485	298.485
465.886	SP1	N3	117.276	297.276
515.174	SP1	A4	116.314	296.314
700.150	SP1	Q4	118.658	298.658
712.595	SP1	J2	122.571	302.571
728.268	SP1	D5	126.332	306.332
746.964	SP1	V1	129.974	309.974
768.465	SP1	B1	133.357	313.357
820.454	SP1	R8	147.457	327.457
831.110	SP1	U5	150.859	330.859
844.595	SP1	T8	154.139	334.139
860.778	SP1	E9	157.330	337.330
879.510	SP1	P1	160.372	340.372
479.952	SP1	H4	186.098	6.098
529.489	SP1	C4	185.329	5.329
579.107	SP1	G6	184.690	4.690
628.784	SP1	W7	184.152	4.152
678.509	SP1	F1	183.691	3.691
50.000	SP2	SP3	191.735	11.735
100.000	SP2	SP4	191.735	11.735
150.000	SP2	SP5	191.735	11.735
305.601	SP2	L8	113.254	293.254
355.356	SP2	X6	112.387	292.387
405.172	SP2	M8	111.702	291.702
455.028	SP2	N3	111.237	291.237
504.912	SP2	A4	110.787	290.787
687.268	SP2	Q4	114.659	294.659
696.372	SP2	J2	118.724	298.724
708.895	SP2	D5	122.689	302.689
724.658	SP2	V1	126.460	306.460
743.456	SP2	B1	130.070	310.070
785.426	SP2	R8	144.927	324.927
793.979	SP2	U5	148.478	328.478
805.550	SP2	T8	151.981	331.981
820.012	SP2	E9	155.353	335.353
837.215	SP2	P1	158.604	338.604
430.221	SP2	H4	185.445	5.445
479.833	SP2	C4	184.663	4.663
529.519	SP2	G6	184.027	4.027
579.259	SP2	W7	183.498	3.498
629.040	SP2	F1	183.057	3.057
50.000	SP3	SP4	191.735	11.735
100.000	SP3	SP5	191.735	11.735
299.666	SP3	L8	103.795	283.795
349.595	SP3	X6	104.288	284.288
399.542	SP3	M8	104.620	284.620
449.501	SP3	N3	104.896	284.896

499.468	SP3	A4	105.117	285.117
677.838	SP3	Q4	110.552	290.552
683.430	SP3	J2	114.718	294.718
692.596	SP3	D5	118.789	298.789
705.196	SP3	V1	122.764	302.764
721.051	SP3	B1	126.588	306.588
752.092	SP3	R8	142.147	322.147
758.328	SP3	U5	145.898	325.898
767.777	SP3	T8	149.588	329.588
780.321	SP3	E9	153.168	333.168
795.814	SP3	P1	156.638	336.638
380.561	SP3	H4	184.623	4.623
430.257	SP3	C4	183.844	3.844
480.017	SP3	G6	183.227	3.227
529.822	SP3	W7	182.725	2.725
579.661	SP3	F1	182.310	2.310
50.000	SP4	SP5	191.735	11.735
302.005	SP4	L8	94.273	274.273
350.935	SP4	X6	96.095	276.095
400.129	SP4	M8	97.492	277.492
449.501	SP4	N3	98.516	278.516
498.999	SP4	A4	99.380	279.380
672.006	SP4	Q4	106.334	286.334
673.958	SP4	J2	110.557	290.557
679.593	SP4	D5	114.777	294.777
688.821	SP4	V1	118.903	298.903
701.500	SP4	B1	122.884	302.884
720.687	SP4	R8	139.120	319.120
724.376	SP4	U5	143.057	323.057
731.472	SP4	T8	146.958	326.958
741.877	SP4	E9	150.766	330.766
755.454	SP4	P1	154.455	334.455
331.003	SP4	H4	183.550	3.550
380.792	SP4	C4	182.812	2.812
430.630	SP4	G6	182.243	2.243
480.502	SP4	W7	181.793	1.793
530.398	SP4	F1	181.426	1.426
312.433	SP5	L8	85.192	265.192
359.296	SP5	X6	88.132	268.132
406.907	SP5	M8	90.427	270.427
455.030	SP5	N3	92.242	272.242
503.519	SP5	A4	93.685	273.685
669.865	SP5	Q4	102.042	282.042
668.103	SP5	J2	106.335	286.335
670.078	SP5	D5	110.612	290.612
675.757	SP5	V1	114.837	294.837
685.048	SP5	B1	118.969	298.969
691.476	SP5	R8	135.816	315.816
692.372	SP5	U5	139.956	319.956
696.865	SP5	T8	144.052	324.052
704.884	SP5	E9	148.112	328.112
716.311	SP5	P1	152.019	332.019
281.601	SP5	H4	182.103	2.103
331.487	SP5	C4	181.471	1.471
381.403	SP5	G6	181.004	1.004

431.339	SP5	W7	180.645	0.645
481.288	SP5	F1	180.362	0.362
50.000	L8	X6	107.115	287.115
100.000	L8	M8	107.115	287.115
150.000	L8	N3	107.115	287.115
200.000	L8	A4	107.115	287.115
381.837	L8	Q4	115.783	295.783
393.269	L8	J2	123.008	303.008
410.513	L8	D5	129.704	309.704
432.877	L8	V1	135.758	315.758
459.612	L8	B1	141.210	321.210
549.352	L8	R8	161.912	341.912
572.316	L8	U5	166.447	346.447
598.584	L8	T8	170.608	350.608
627.742	L8	E9	174.410	354.410
659.407	L8	P1	177.855	357.855
597.065	L8	F1	211.766	31.766
556.244	L8	W7	214.653	34.653
517.038	L8	G6	217.944	37.944
479.843	L8	C4	221.816	41.816
445.163	L8	H4	226.277	46.277
50.000	X6	M8	107.115	287.115
100.000	X6	N3	107.115	287.115
150.000	X6	A4	107.115	287.115
332.496	X6	Q4	117.093	297.093
345.450	X6	J2	125.269	305.269
364.853	X6	D5	132.698	312.698
389.743	X6	V1	139.301	319.301
419.144	X6	B1	145.039	325.039
522.127	X6	R8	166.399	346.399
548.503	X6	U5	170.940	350.940
578.008	X6	T8	175.053	355.053
610.190	X6	E9	178.742	358.742
644.647	X6	P1	182.053	2.053
611.633	X6	F1	216.315	36.315
573.289	X6	W7	219.397	39.397
536.867	X6	G6	222.947	42.947
502.784	X6	C4	227.004	47.004
471.548	X6	H4	231.590	51.590
50.000	M8	N3	107.115	287.115
100.000	M8	A4	107.115	287.115
283.386	M8	Q4	118.845	298.845
298.347	M8	J2	128.265	308.265
320.490	M8	D5	136.582	316.582
348.449	M8	V1	143.681	323.681
380.946	M8	B1	149.673	329.673
498.443	M8	R8	171.345	351.345
528.360	M8	U5	175.815	355.815
561.145	M8	T8	179.788	359.788
596.324	M8	E9	183.307	3.307
633.500	M8	P1	186.425	6.425
629.843	M8	F1	220.612	40.612
594.065	M8	W7	223.876	43.876
560.467	M8	G6	227.541	47.541
529.466	M8	C4	231.671	51.671

501.542	M8	H4	236.288	56.288
50.000	N3	A4	107.115	287.115
234.653	N3	Q4	121.317	301.317
252.361	N3	J2	132.382	312.382
278.047	N3	D5	141.649	321.649
309.732	N3	V1	149.198	329.198
345.772	N3	B1	155.272	335.272
478.826	N3	R8	176.737	356.737
512.322	N3	U5	181.032	1.032
548.338	N3	T8	184.781	4.781
586.408	N3	E9	188.058	8.058
626.158	N3	P1	190.928	10.928
651.392	N3	F1	224.642	44.642
618.196	N3	W7	228.027	48.027
587.385	N3	G6	231.744	51.744
559.353	N3	C4	235.900	55.900
534.538	N3	H4	240.430	60.430
186.591	A4	Q4	125.129	305.129
208.233	A4	J2	138.243	318.243
238.550	A4	D5	148.468	328.468
274.684	A4	V1	156.227	336.227
314.637	A4	B1	162.084	342.084
463.792	A4	R8	182.536	2.536
500.783	A4	U5	186.536	6.536
539.874	A4	T8	189.968	9.968
580.642	A4	E9	192.942	12.942
622.757	A4	P1	195.498	15.498
675.958	A4	F1	228.396	48.396
645.305	A4	W7	231.812	51.812
617.186	A4	G6	235.578	55.578
591.962	A4	C4	239.682	59.682
570.016	A4	H4	244.102	64.102
50.000	Q4	J2	196.208	16.208
100.000	Q4	D5	196.208	16.208
150.000	Q4	V1	196.208	16.208
200.000	Q4	B1	196.208	16.208
395.898	Q4	R8	205.928	25.928
442.961	Q4	U5	208.245	28.245
490.606	Q4	T8	210.108	30.108
538.678	Q4	E9	211.648	31.648
587.073	Q4	P1	212.933	32.933
741.439	Q4	F1	242.603	62.603
721.466	Q4	W7	246.161	66.161
704.483	Q4	G6	249.956	69.956
690.708	Q4	C4	253.888	73.888
680.338	Q4	H4	258.012	78.012
50.000	J2	D5	196.208	16.208
100.000	J2	V1	196.208	16.208
150.000	J2	B1	196.208	16.208
346.720	J2	R8	207.332	27.332
394.199	J2	U5	209.766	29.766
442.235	J2	T8	211.665	31.665
490.663	J2	E9	213.214	33.214
539.378	J2	P1	214.465	34.465
707.867	J2	F1	245.515	65.515

690.365	J2	W7	249.333	69.333
676.116	J2	G6	253.385	73.385
665.329	J2	C4	257.523	77.523
658.173	J2	H4	261.808	81.808
50.000	D5	V1	196.208	16.208
100.000	D5	B1	196.208	16.208
297.816	D5	R8	209.201	29.201
345.791	D5	U5	211.721	31.721
394.270	D5	T8	213.615	33.615
443.086	D5	E9	215.076	35.076
492.141	D5	P1	216.264	36.264
676.327	D5	F1	248.705	68.705
661.585	D5	W7	252.828	72.828
650.362	D5	G6	257.084	77.084
642.843	D5	C4	261.431	81.431
639.158	D5	H4	265.888	85.888
50.000	V1	B1	196.208	16.208
249.348	V1	R8	211.769	31.769
297.909	V1	U5	214.285	34.285
346.880	V1	T8	216.071	36.071
396.107	V1	E9	217.418	37.418
445.507	V1	P1	218.468	38.468
647.118	V1	F1	252.216	72.216
635.441	V1	W7	256.591	76.591
627.541	V1	G6	261.053	81.053
623.564	V1	C4	265.620	85.620
623.582	V1	H4	270.213	90.213
201.629	B1	R8	215.596	35.596
250.855	B1	U5	217.828	37.828
300.337	B1	T8	219.309	39.309
349.967	B1	E9	220.387	40.387
399.688	B1	P1	221.197	41.197
620.568	B1	F1	256.095	76.095
612.270	B1	W7	260.674	80.674
607.985	B1	G6	265.352	85.352
607.796	B1	C4	270.053	90.053
611.708	B1	H4	274.754	94.754
50.000	R8	U5	226.867	46.867
100.000	R8	T8	226.867	46.867
150.000	R8	E9	226.867	46.867
200.000	R8	P1	226.867	46.867
485.195	R8	F1	271.708	91.708
491.062	R8	W7	277.546	97.546
501.866	R8	G6	283.190	103.190
517.298	R8	C4	288.519	108.519
536.959	R8	H4	293.547	113.547
50.000	U5	T8	226.867	46.867
100.000	U5	E9	226.867	46.867
150.000	U5	P1	226.867	46.867
451.136	U5	F1	276.202	96.202
461.015	U5	W7	282.369	102.369
475.968	U5	G6	288.182	108.182
495.537	U5	C4	293.612	113.612
519.199	U5	H4	298.603	118.603
50.000	T8	E9	226.867	46.867

100.000	T8	P1	226.867	46.867
420.277	T8	F1	281.387	101.387
434.658	T8	W7	287.788	107.788
454.117	T8	G6	293.728	113.728
478.034	T8	C4	299.149	119.149
505.778	T8	H4	303.981	123.981
50.000	E9	P1	226.867	46.867
393.373	E9	F1	287.338	107.338
412.699	E9	W7	293.897	113.897
436.920	E9	G6	299.769	119.769
465.271	E9	C4	305.014	125.014
497.046	E9	H4	309.635	129.635
371.284	P1	F1	294.071	114.071
395.871	P1	W7	300.564	120.564
424.942	P1	G6	306.254	126.254
457.643	P1	C4	311.175	131.175
493.253	P1	H4	315.417	135.417
50.000	F1	W7	357.907	177.907
100.000	F1	G6	357.907	177.907
150.000	F1	C4	357.907	177.907
200.000	F1	H4	357.907	177.907
50.000	W7	G6	357.907	177.907
100.000	W7	C4	357.907	177.907
150.000	W7	H4	357.907	177.907
50.000	G6	C4	357.907	177.907
100.000	G6	H4	357.907	177.907
50.000	C4	H4	357.907	177.907

SPARTA TRAINING AREA
102 LAND NAVIGATION COURSE

COMMON TASKS REQUIRED

- #071-329-1000 Identify topographic symbols on a military map.....
- #071-329-1001 Identify terrain features on a map.....
- #071-329-1012 Orient a map to the ground by map-terrain association.....
- #071-329-1002 Determine the grid coordinates of a point on a military map using the
military grid reference system.....
- #071-329-1005 Determine a location on the ground by terrain association.....
- #071-329-1003 Determine a magnetic azimuth using a lensatic compass.....
- #071-329-1018 Determine direction using field-expedient methods.....
- #071-329-1008 Measure distance on a map.....
- #071-326-0515 Select a movement route using a map.....
- #071-329-1006 Navigate from one point on the ground to another point while dismounted.....
- #071-329-1009 Convert azimuths.....
- #071-329-1011 Orient a map using a lensatic compass.....
- #071-329-1019 Use a map overlay.....
- #071-329-1004 Determine the elevation of a point on the ground using a map.....
- #071-329-1014 Locate an unknown point on a map and on the ground by intersection.....
- #071-329-1015 Locate an unknown point on a map and on the ground by resection.....
- #071-510-0001 Determine azimuth using a protractor.....
- #071-510-0002 Compute back azimuths.....