Road Running Technical Council
USA Track & Field
Measurement Certificate

recognized by RRCA

Name of the course We Run This Beach Half Marathon Course Distance 21.0975 km

Location (state) AL (city) Gulf Shores

Type of course: Road Race

Measuring Methods: Bicycle

Measured By Jon Bowie, 117 Laurel Pl, Daphne AL 36526, jnbowie@gmail.com, 251-209-0887

Race Contact ,

Date(s) when course measured: 01/22/22, 01/29/22

Number of measurements of entire course: 2 Course Configuration: complex of different loops

Elevation (meters above sea level) Start 1.00 Finish 2.00 Lowest 1.00 Highest 15.00

Straight line distance between start and finish 127m Drop -0.05 m/km Separation 0.60 %

Type of surface: Paved 100 % Dirt 0 % Gravel 0 % Grass 0 % Track 0 %

Effective date of certification: February 7, 2022 Certification code: AL22005JE

Note to Race Director: Use this Certification Code in all public announcements relating to your race.

Be It Officially Noted That

Based on examination of data provided by the above named measurer, the course described above and in the map attached is hereby certified as reasonably accurate in measurement according to the standards adopted by the Road Running Technical Council. If any changes are made to the course, this certification becomes void, and the course must then be recertified.

Verification of Course --- In the event a National Open Record is set on the course, or at the discretion of USA Track & Field, a verification measurement may be required to be performed by a member of the Road Running Technical Council. If such a remeasurement shows the course to be short, then all pending records will be rejected and the course certification will be cancelled.

This certification expires on December 31 of the year: ***2032***

AS NATIONALLY CERTIFIED BY:

Jon Elmore

Date: February 7, 2022

Jon Elmore - USATF/RRTC Certifier - 3428 Tanglewood Dr SW, Decatur AL 35603
(256) 476-3517 - jklca5@att.net

Version: 2019b

We Run This Beach Half Marathon Course
Gulf Shores, AL

Course Description:
Except for the starting stretch on Beach Blvd, the entire course is on clearly defined paved trails and raised wooden boardwalks.

Restrictions:
R1: Runners stay on pavement around junction of Bear Creek Tail

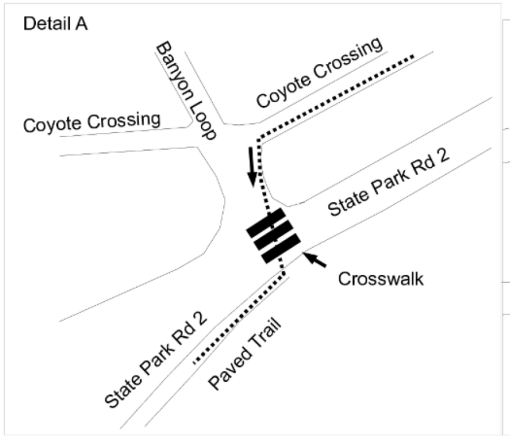
Splits: Due to sensitive nature of the trails, no mile splits are marked. These will be laid out prior to race day.

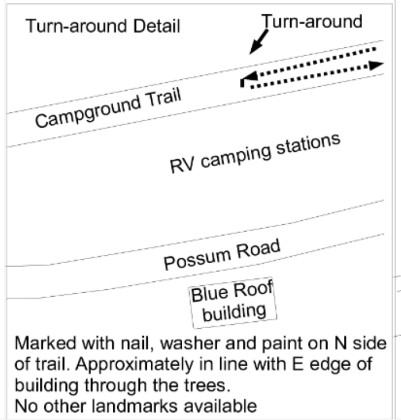
USATF Certificate
AL22005JE
Effective: 02/07/2022
Through: 12/31/2032

Diagrams to scale
Start and Finish marked with paint and landmarks only

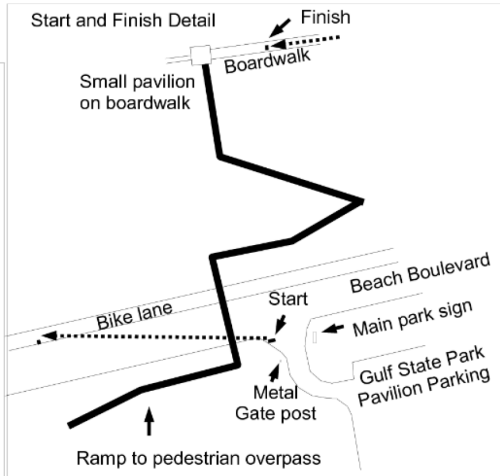
Course was measured on the SPR and the runners have full use of the road unless otherwise noted.

Measured by Jon Bowie (Daphne, AL 251-209-0887)
jnbowie@gmail.com 22 and 29 January 2022





Marked with nail, washer and paint on N side of trail. Approximately in line with E edge of building through the trees.
No other landmarks available



Start: In drive to parking lot
In line with N edge of main park sign
31' 2" N of metal gate post

Finish: 75' E of pavilion
4th wooden plank after 20th post on N

Start transition:
Runners will leave start line in entrance of parking lot and transition to the N bike lane. Cone will be placed at the final transition point. Cone will be placed in line with the W most edge of ramp to pedestrian overpass

BICYCLE CALIBRATION DATA SHEET

Date of Measurement 29 January 2022

Name of Measurer Jon Bowie

Length of calibration course 304.8m

1. Ride the calibration course 4 times, recording data as follows:

Ride	Start Count	Finish Count	Difference
1	149000	152260	3260
2	-	155520	3260
3	-	158779	3259
4	-	162039	3260

Pre-measurement Average Count 3259.75

Time of Day 09:37

Temperature 36F

Note: The spread shouldn't exceed 2 to 3 counts for riding each direction of the calibration course.

WORKING CONSTANT = Number of counts in one kilometer or one mile, calculated from Pre-measurement average count, and multiplied by **1.001 "safety factor."**

Working Constant = 17229

3259.75 x 5.28 x 1.001= 17228.6915

2. Now, measure the course, including all intermediate distances, using the working constant. Enter data on the **"Course Measurement Data Sheet."**

3. Recalibrate the bicycle by riding the calibration course 4 times, recording data as follows:

Ride	Start Count	Finish Count	Difference
1	688000	691259	3259
2	-	694518	3259
3	-	697788	3260
4	-	701038	3260

Post-measurement Average Count 3259.50

Time of Day 14:36

Temperature 49F

Note: The spread shouldn't exceed 2 to 3 counts for riding each direction of the calibration course.

FINISH CONSTANT = Number of counts in one kilometer or one mile, calculated from Post-measurement average count, and multiplied by **1.001 "safety factor."**

Finish Constant = 17228

3259.50 x 5.28 x 1.001= 17227.3702

CONSTANT FOR THE DAY = **Either** the Working Constant **or** the Finish Constant, whichever is the **larger***.

Constant for the Day = 17229

Remember, each day's measurement must be preceded and followed by a calibration run. You may measure as much as you want in a day, just so calibration precedes and follows it in the same 24 hour period. This is done to minimize error due to changes in tire pressure from thermal expansion and slow leakage. Frequent calibration "protects" the previous measurement. A smart measurer will recalibrate frequently—you never know when a flat tire is coming!

CONVERSION FACTOR: 1 mile = 1.609344 kilometers

* You may, if you wish, define your "Constant for the Day" as the *average* of Working and Finish constant instead of the larger. However, if you use the average, you will produce a shorter race course, which will face a greater risk of being found short if it ever needs to be verified. Therefore, use of the **larger** constant is strongly recommended.