

# FIA LONG DISTANCE ENDURANCE WORLD LAND SPEED RECORD CALCULATION FORM

This form is used to calculate speeds the following standing start record distances on a **closed course**:

DISTANCE
10 Kilometers
10 Miles
100 Kilometers
And all record distances up to and including
100,000 miles

**NOTE:** For the 10 Kilometer and 10 Mile standing start records set on an **open course**, use the form entitled **FIA Acceleration & Flying Start Record Calculation Form**.

Please note when you are working in the Excel spreadsheet the sheet appears as shown below.

**LONG DISTANCE ENDURANCE RECORD CALCULATION FORM**

Venue:	<input type="text"/>		
Vehicle Classification:	Category <input type="text"/>	Group <input type="text"/>	Class <input type="text"/>
Vehicle Name:	<input type="text"/>		
Vehicle ID:	<input type="text"/>		
Measured Lap Distance:	<input type="text"/>	<input type="text"/>	← Enter distance designator - K or M
Record Distance:	<input type="text"/>	<input type="text"/>	← Enter distance designator - K or M
Laps Needed:	<input type="text"/>		
Complete Laps:	<input type="text"/>		
Attempt Start Date:	Day <input type="text"/>	Month <input type="text"/>	Year <input type="text"/>
Date Record Distance Reached:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Attempt Day Count:	<input type="text"/>		
Attempt Vehicle () Start Time:	Hours <input type="text"/>	Minutes <input type="text"/>	Seconds <input type="text"/>
Distance Sensor Time of Day-X Distance	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>OR</b>	Hours <input type="text"/>	Minutes <input type="text"/>	Seconds <input type="text"/>
Time of Day-Lap X:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Time of Day-Lap X:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Elapsed Time-Lap X:	<input type="text"/>		
Average Speed-Lap X:	<input type="text"/>		
Partial Lap Distance:	<input type="text"/>		
Elapsed Time-Part Lap:	<input type="text"/>		
Elapsed Time-Record Distance:	<input type="text"/>		
Record Date:	<input type="text"/>		
Record Time:	<input type="text"/>		
Average Speeds:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Timekeeper _____		Steward _____

When the Excel worksheet is Print Previewed or Printed the sheet will appear as below.

The following information is presented to aid the user while filling in the *FIA Long Distance Endurance Record Calculation Form*.

There are two types of “fields” included on the form. Each field is defined by the field background color.

FIELD COLOR	FIELD TYPE	USER ACCESS
	Data entry	Yes
	Calculated value	No

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The form is protected allowing the user to negotiate from field to field using either the “Tab” or “Enter” key after making an entry. This allows selection of fields (cells) that require user information entry and prevents accessing cells on the form where entry is not desirable.

## START GUIDE

Please enter timing information as needed in the dark green field cells. If you need additional information return here and read the following pages.

Enter the following information to enable calculation of new closed course world land speed records.

In the first section, enter venue, vehicle and record information:

The screenshot shows the following fields and their states:

- Venue: [Dark Green Field]
- Vehicle Classification: [Dark Green Field] with sub-fields: Category [Dark Green Field], Group [Dark Green Field], Class [Dark Green Field]
- Vehicle Name: [Dark Green Field]
- Vehicle ID: [Dark Green Field]
- Measured Lap Distance: [Dark Green Field] [Dark Green Field] ← Enter distance designator - K or M
- Record Distance: [Dark Green Field] [Dark Green Field] ← Enter distance designator - K or M
- Laps Needed: [Light Green Field]
- Complete Laps: [Light Green Field]
- Attempt Start Date: [Dark Green Field] [Dark Green Field] [Dark Green Field] with sub-fields: Day [Dark Green Field], Month [Dark Green Field], Year [Dark Green Field]
- Date Record Distance Reached: [Dark Green Field] [Dark Green Field] [Dark Green Field]
- Attempt Day Count: [Light Green Field]

- The information for the Venue and Vehicle Name is straightforward and used to identify the venue and vehicle. The Vehicle ID field is used to identify the vehicle if more than one vehicle is participating in the attempt. This field may contain a number, color or other short description of the vehicle(s).
- The vehicle classification is determined by entry into the category, group and class fields.

There are currently two valid vehicle categories available for long distance endurance record attempts. They are defined by the alpha characters “A” and “B”. If an invalid character is entered in the Category field the background color will change to “RED”.

The screenshot shows the following fields and their states:

- Vehicle Classification: [Dark Green Field] with sub-fields: Category [Red Field with 'E'], Group [Dark Green Field], Class [Dark Green Field]
- Vehicle Name: [Dark Green Field]

If an invalid (not Roman numeral or alphabetic) group designator is entered in the Group field the background color will change to “RED” (see Category example above).

If an invalid class designator is entered in the Class field the background color will change to “RED” (see Category example above).

While a valid entry for the category, group and class fields is verified the validity of the individual entries when the category, group and class are taken into account is not verified. In other words, the characters entered into the three fields may be valid for the individual fields, but the group designator may be invalid for a given category or the class designator may be invalid for the entered category and group. It is the responsibility of the user to make valid entries into all three fields.

# FIA LONG DISTANCE ENDURANCE WORLD LAND SPEED RECORD CALCULATION FORM

- The Measured Lap Distance must contain the certified measurement distance of one lap of the venue. Followed by either a “K” or “M” to indicate whether the lap distance shown is in kilometers or miles. An invalid entry in this field will cause the following message to be displayed:

Measured Lap Distance:   ←Valid entries: K or M

With the above information entered, the “Laps Needed” to reach the record distance (including any partial lap if needed) and the “Complete Laps” (lap count prior to the lap in which the record distance will be reached) will be displayed.

- Enter the date the record attempt vehicle started its run. Enter the day, month and year in the three separate field boxes. The year must be entered using four numeric digits.
- Enter the date the record attempt vehicle reached the record distance. Enter the day, month and year in the three separate field boxes. The year must be entered using four numeric digits.

Entry of the year in either or both fields using only two digits will produce the following message:

Attempt Start Date:    ← Enter year using FOUR digits  
 Date Record Distance Reached:    ← Enter year using FOUR digits  
 Attempt Day Count:

After the two dates have been entered the number of days that have passed since the start of the attempt will be displayed in the “Attempt Day Count” field.

In the second section, enter the timing information:

Attempt Vehicle Start Time:	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>
Distance Sensor Time of Day-X Distance	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>
<b>OR</b>			
Time of Day-Lap X:	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>
Time of Day-Lap X:	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>

When entering the “Hours” time you must use the 24 Hour time format.

- Enter the time of day the designated car started the attempt.
- Enter the Seconds in 3 decimal place precision (x.xxx) only. If the timing equipment provides more than 3 decimal place precision, truncate (do not round) to 3 decimal place precision.
- If the actual points for each of the record distances have been established and marked on the course, enter the time of day the car triggered the sensor at the record distance point. The “X” in the above will show the record distance.

**OR**

- Enter the time of day the car triggered the start/finish line sensor on lap X (the lap number displayed in the “Attempt Day Count” field above). The “X” character will indicate the lap number displayed in the “Complete Laps” field above.
- Enter the time of day the car triggered the start/finish line sensor on lap X+1 (the lap number displayed in the “Complete Laps” field above plus one lap). This will be the lap in which the record distance was reached.

**NOTE:** if the record distance divided by measured lap distance indicates no partial lap needed to reach the record distance, enter the same time of day for both fields.

# FIA LONG DISTANCE ENDURANCE WORLD LAND SPEED RECORD CALCULATION FORM

## Section 3 - Record Calculation:

Elapsed Time-Lap X:	<input type="text"/>
Average Speed-Lap X:	<input type="text"/>
Partial Lap Distance:	<input type="text"/>
Elapsed Time-Part Lap:	<input type="text"/>
Elapsed Time-Record Distance:	<input type="text"/>
<b>Record Date:</b>	<input type="text"/>
<b>Record Time:</b>	<input type="text"/>
<b>Average Speeds:</b>	<input type="text"/> <input type="text"/>
	<hr style="width: 100%;"/> <div style="display: flex; justify-content: space-between; width: 100%;"> <span>Timekeeper</span> <span>Steward</span> </div>

Once all of the required timing information has been entered the record time and speed information appearing on the form will be displayed including:

- The elapsed time for the record lap.
- The average speed for the record lap.
- The distance traveled from the start/finish line to the record distance.
- The elapsed time for this partial distance.
- The total elapsed time for the record distance (in seconds).
- The date on which the record was set.
- The total elapsed time for the record in hours, minutes and seconds.
- The average speeds in Km/h and MPH for the record distance.

**NOTE:** If the record distance elapsed time was determined by a sensor at the record distance the Elapsed time-Lap X, Average Speed-Lap X, Partial Lap Distance and Elapsed Time-Part Lap field will contain no data.

The Timekeeper and Steward must sign the form.

The following samples show completed forms for both types of timing systems.

# FIA LONG DISTANCE ENDURANCE WORLD LAND SPEED RECORD CALCULATION FORM

Sample 1 – Timing system that produces the elapsed time for the record distance based on the time of day for two (pre- and post-record distance) laps:

LONG DISTANCE ENDURANCE RECORD CALCULATION FORM									
Venue:	Venue Name								
Vehicle Classification:	Category	Group	Class						
	B	II	10						
Vehicle Name:	Make & Model								
Vehicle ID:	Car 2								
Measured Lap Distance:	5.000	M							
	8.046	Kilos							
Record Distance:	100000	M							
Laps Needed:	20000.000								
Complete Laps:	20000								
Attempt Start Date:	Day	Month	Year						
	01	04	2005						
Date Record Distance Reached:	01	05	2005						
Attempt Day Count:	30								
Attempt Vehicle (Car 2) Start Time:	Hours	Minutes	Seconds						
	07	00	1.861						
Distance Sensor Time of Day - 100000M:									
<b>OR</b>									
Time of Day-Lap 20000:	Hours	Minutes	Seconds						
	07	04	34.056						
Time of Day-Lap 20001:	08	06	2.883						
Elapsed Time-Lap 20001:	3688.827								
Average Speed-Lap 20001:	4.879 MPH								
Partial Lap Distance:	0.000 Miles								
Elapsed Time-Part Lap:	0.000								
Elapsed Time-Record Distance:	2592272.195								
Record Date:	Sunday, May 1, 2005								
Record Time:	720:04:32.195								
Average Speeds:	138.874	MPH	223.496	K/PH					
Timekeeper					Steward				

Sample 2 – Timing system that returns the time of day at the record distance sensor:

LONG DISTANCE ENDURANCE RECORD CALCULATION FORM									
Venue:	Venue Name								
Vehicle Classification:	Category	Group	Class						
	B	II	10						
Vehicle Name:	Make & Model								
Vehicle ID:	Red								
Measured Lap Distance:	5.000	M							
	8.046	Kilos							
Record Distance:	10	K							
Laps Needed:	1.242								
Complete Laps:	1								
Attempt Start Date:	Day	Month	Year						
	01	04	2005						
Date Record Distance Reached:	01	04	2005						
Attempt Day Count:	0								
Attempt Vehicle (Red) Start Time:	Hours	Minutes	Seconds						
	07	00	1.861						
Distance Sensor Time of Day - 10K:									
<b>OR</b>									
Time of Day-Lap 1:	Hours	Minutes	Seconds						
Time of Day-Lap 2:	Hours	Minutes	Seconds						
Elapsed Time-Lap 2:									
Average Speed-Lap 2:									
Partial Lap Distance:									
Elapsed Time-Part Lap:									
Elapsed Time-Record Distance:	212.195								
Record Date:	Friday, April 1, 2005								
Record Time:	00:03:32.195								
Average Speeds:	169.655	KP/H	105.418	MPH					
Timekeeper					Steward				