

Issue Date: 07/2022

2022 Sasol Solar Challenge Team Notice 1.0

All teams registered for the 2022 Sasol Solar Challenge should note the following official updates to the Sporting Regulations and Team Manager's Guide as approved by the Event Director, Robert Walker.

Please note all document changes relate to the venue changes of the scrutineering venue (Red Star Raceway, Delmas) and the start line venue (Carnival City Hotel and Casino, Boksburg)

The updated documents can be found on the website via this link:

https://www.solarchallenge.org.za/solar-challenge/regulations

Latest Versions:

- 2022 Sasol Solar Challenge Sporting Regulations Release 2.0.pdf
- 2022 Sasol Solar Challenge Technical Regulations Release 1.0.pdf
- 2022 Sasol Solar Challenge Team Manager's Guide Release 2.0.pdf
- 2022 Sasol Solar Challenge Remotely Piloted Aircraft Addendum .pdf

Sporting Regulations:

1.8. Event Management Team

- 1.8.1. Core Operations Team
- 1.8.2. Officials

1.12. Schedule

1.12.2. All registered teams must adhere to the event schedule, attend official functions, media calls, promotional activities and/or public engagement activations with the solar car and/or any other team vehicles or equipment as listed or requested.

Date	Activity	Venue
Monday, 1 st March 2021	Event dates announcedRegulations published	Online
Monday, 5 th April 2021	Team registrations openVolunteer registrations open	Online
Monday, 7 th March 2022	Team registration closeVolunteer registration close	Online
Monday, 4 th April 2022	 Group A Documentation submission deadline 	Online
Monday, 2 nd May 2022	 Group B Documentation submission deadline 	Online
Wednesday, 1 st June 2022	 Group C Documentation submission deadline 	Online
Monday, 6 th June 2022	 Official Entry List published 	Online
Saturday, 3 rd September 2022 [AM]	Officials onsite registrationVolunteer onsite registration	Red Star Raceway
Saturday, 3 rd September 2022 [PM]	Team onsite registrationTeam Manager's and teamSafety Officer's briefing	Red Star Raceway



	Welcome function	
Sunday, 4 th September 2022	 Scrutineering briefing Presentation of Group D Documents Static Scrutineering commences 	Red Star Raceway
Monday, 5 th September 2022	Static Scrutineering continuesFree practice open	Red Star Raceway
Tuesday, 6 th September 2022	Dynamic Scrutineering commencesFree practice open	Red Star Raceway
Wednesday, 7 th September 2022	 Dynamic Scrutineering continues Hot lap for starting positions 	Red Star Raceway
Thursday, 8 th September 2022	Public ExpoTeam briefingMedia briefing	Carnival City Big Top Arena
Friday, 9 th September 2022	Official startOn-road segment commences	Carnival City Hotel and Casino
Friday, 16 th September 2022	Official FinishOn-road segment concludes	V & A Waterfront
Saturday, 17 th September 2022	Cruiser Class JudgingFormal Awards Ceremony	V & A Waterfront
Sunday, 18 th September 2022 [AM]	Final pack up and clean out	V & Waterfront
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1.14. Entry Fees

Team accommodation for the 16th of September 2022, the official finish at the V & A Waterfront will be the responsibility of the entrants. The organisers will take no responsibility for any accommodation for teams on the aforementioned date. Team catered dinners will be arranged at specified locations that will be communicated to the teams via a Team Notice. The organisers commit to a minimum of three (3) catered dinners during the challenge, additional catering might be arranged and will be communicated by the event organisers in reasonable time.

1.17. Insurance

1.17.1. The event organisers hold a ZAR 2 million Public Liability policy (aggregate cap with a sub limit of R500,000.00 per incident) which covers registered team members for property damage caused by a participating solar car during the event. The cost of this coverage is included as part of the entry fee

1.23. Vehicle Preparation

1.23.1. Preparation facilities will not be available at Red Star Raceway prior to the commencement of scrutineering in accordance with the schedule.

1.27. Remotely Piloted Aircraft (Drones)

1.27.1. Remotely piloted aircraft (RPA) may only be operated with the approval of the event organisers.

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1.27.2. RPA registration and pilot accreditation must be in accordance with South African Civil Aviation Authority (SACAA) regulations.

Further information will be provided in the Team Manager's Guide and/or any subsequent Team Notices or Addendums.

2.4. Helmets and Safety Apparel

- 2.4.4. Fire-resistant clothing (overall, gloves, shoes, socks, balaclava, and underwear) is highly recommended by the event organisers.
- 2.4.5. Solar car drivers and/or passengers must wear at minimum a Level 1 race suit while driving as per FIA or local manufacturer guide lines, this is specified as mandatory. Fire retardant undergarments are not compulsory as per specifications below but are recommended by the event organisers.

Should your team opt to use a Level 1 race suit without fire retardant undergarments it is advised to wear a cotton T-shirt underneath to help absorb sweat and minimise the need to wash the garment. Each time the garment is washed it reduces the efficacy of the suit.

- 2.4.6. Such fire-resistant clothing must be in good condition and should be FIA approved or locally produced by a recognised manufacturer from flame-retardant material. The clothing item must be clearly labelled to indicate whether it is FIA approved or locally produced from flame-retardant material. In instances where the racing overall being worn is not FIA-approved, underwear that is FIA-approved is recommended to be worn underneath it.
- 2.4.7. Race suits which carry a valid FIA approval (clearly indicated on the collar) and which appear on the official "technical list" of the FIA will be deemed to be similarly approved by the Sasol Solar Challenge.
- 2.4.8. All local race suit manufacturers are required by the Sasol Solar Challenge to include a permanent identification label on the outside of the back collar to indicate compliance with recognised fire-retardant fabrics and specifications.
- 2.4.9. Recognised fire-retardant fabrics for use in race suit manufacturing include:
 - Nomex
 - Diamond
 - Pyrovatex
 - Aflammit
 - Proban
 - Kermal
 - Ter
 - Carmyth Karvin
 - Delta C
 - Hoco Tex Aramid
 - PBI



- In addition to the fabric itself the Sasol Solar Challenge highly recommends 2.4.10. that Nomex sewing thread or similar flame-retardant thread be used in the manufacturing of the garment for all stitching and box quilting.
- The Sasol Solar Challenge recognises fire retardant race suit specifications: 2.4.11.
 - Level 1: One piece race suit with one layer of approved fire-retardant fabric
 - Level 2: One piece race suit with two layers of approved fire-retardant fabric
 - Level 3: One piece race suit with two layers of approved fire-retardant fabric of which at least one layer is Nomex, or a similar fabric approved by the FIA

2.8. Communication

- 2.8.1. Every solar car must have means of two-way voice radio communication with its rear escort vehicle. Communication must be possible whenever the driver is in the solar car, including when the main energy storage contractors are open and when the car is in safe state.
- 2.8.2. Each team must carry a cell phone with a registered South African telecommunications provider and notify the event organisers of its number (See Team Manager's Guide Regulation 4.2. Mobile (Cell) Phones). This information will be required at registration when arriving on site at Red Star Raceway.
- 2.8.3. During the event, we require that all Team Managers download the Zello application onto their mobile devices. Zello is a push-to-talk application that can be installed on both Android and iOS devices. This is the official toway channel of communication between the event organisers and the teams during the event. This application works with a wireless network connection as well as with local cellular network service providers and quarantees minimal data usage of any kind. Zello can be installed via the Play Store for Android and App Store for iOS.
- 2.8.4. The front and rear escort vehicles (at least) for each solar car must each carry a cell phone with a registered South African telecommunications provider as per Sporting Regulation 2.8.2. Zello must also be installed onto these devices as per Sporting Regulation 2.8.3. Teams must monitor the channel they have been allocated always while on the road, and respond promptly and courteously, in English, to reasonable communications with other teams and officials.

2.16. Observers

2.16.6. Each team must provide a suitable place for the observer to sleep. Provisions of a tent and a sleeping mat are minimum requirements. The observer must provide their own sleeping gear (sleeping bag, pillow etc.)

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3.1. Completing the Course

3.1.4. The solar car must drive to the official finish line escorted by vehicles provided by the organisers. Other team vehicles will be directed to prearranged parking at the V & A Waterfront.

3.3. Challenger Class

3.3.2. Parc fermé will be established close to the official finish line at the V & A Waterfront. The location will be published in the official route notes. All teams must pass the marshalling point for their time to be stopped and continue to parc fermé to prepare for the official finish line proceedings.

3.6 Awards

3.6.1 An awards ceremony will be held in Cape Town at the V & A Waterfront during the day of Saturday 17 September 2022 (exact date, time and location will be confirmed).

Team Manager's Guide:

2.4. Deliveries

2.4.1. Details of consignment labelling are in the Freight Manual.

Entrants to not have access to Red Star Raceway before Thursday 1 September 2022, therefore no deliveries can be accepted before that date.

As there is likely to be an event at Red Star Raceway before us, attempted delivery will be refused, and you may face delays or additional charges from your freight company.

Please note that if a forklift or crane is required, it must be arranged with your freight company prior to the delivery. The cost of heavy lifting equipment is a team responsibility.

7.1. General Information

7.1.1. Team preparation facilities will be provided at Red Star Raceway, N12 Zonderfout Farm I226, Portion 5, Delmas, 2210 (Sporting Regulation 1.23).

To register your arrival at Red Star Raceway, drive the perimeter road to the main entrance gate and follow the signs to the Sasol Solar Challenge Event Office (note that all site speed limits apply).

Pit garages (workshops) will be available from 12H00, Saturday 3 September 2022 to 18H00, Wednesday 7 September 2022 by which time all vehicles, materials and waste must have been removed (see also Sporting Regulation 2.10.9).

Teams must register with the Sasol Solar Challenge Site Manager upon arrival. The Sasol Solar Challenge Help Desk is located at the Event Registration Office adjacent to the racetrack control tower (as indicated by the dot on the plan) and is well signposted.

Each team is entitled to a workspace with power (230 V 50 Hz A single phase), light, water, and toilet facilities.



Teams may not reserve workspace in advance. Preferential allocation of workspaces that from part of the permanent infrastructure of the venue will be given to teams who base themselves on site and arrive early. Please be aware that most workspaces are shared with other teams.

Pit allocation is available upon payment of a cash deposit of ZAR2,000.00. This is refundable by returning the pit garage in a clean and tidy condition at 18H00 on Wednesday 7 September 2022. The receipt of a pit garage does not guarantee occupation. The facility is not free storage*. If the workspace is not utilised as intended, you will be required to return the key and make the space available to a team needing workspace.

*The storage of vehicles, crates or containers can be arranged within the area secured by the event organisers but is not guaranteed. This is also on provision of Red Star Raceway management.

The space allocated to each team will include a portion of the paddock in line with each garage (an example is indicated by the red line) which is reserved for no more than one team support vehicle (excluding any vehicles larger than SUV's or pickup trucks or "bakkies") to be parked in single file.

Additional parking areas are available close by and at the team camp site. Roads, crossings, and pathways may not be obstructed.

It is important to note that camping arrangements have been made by the event organisers at Red Star Raceway with all the facilities needed to set up your team's camp site for the duration of your stay at Red Star Raceway.

9.2. Public Liability

9.2.1. The event organisers hold a ZAR 2 million Public Liability policy (aggregate cap with a sub limit of R500,000.00 per incident) which covers registered team members for property damage caused by a participating solar car during the event. The cost of this coverage is included as part of the entry fee

10.11. Vehicle Registration Plate

10.11.1. Following the successful completion of dynamic scrutineering, the National Department of Transport will issue and event vehicle registration plate which must be affixed to your vehicle in accordance with Technical Regulation 1.6.2. this vehicle registration plate authorises the solar car on to be driven on public roads during the event.

11.15. Radio Communications (Sporting Regulation 2.8)

11.15.1. Please refer to Sporting Regulation 2.8 for a detailed description of event related communication requirements. In addition, the following information should be noted as important should your team be making use of any radio communications.

There may be many questions regarding acceptable radio frequencies. Anything concerned with the event must comply with South African civil laws. The South African federal regulations, together with the Independent Communications Authority of South Africa (ICASA) regulations can be found

EVENT DIRECTOR

TEAM LIAISON OFFICER



at https://www.icasa.org.za/ or you can email an enquiry to info@icasa.org.za

If you are using equipment from your own country that was out of band as far as South Africa is concerned, there would be no guarantee that you wouldn't be swamped by licensed users transmitting not only speech, but telemetry or data packets when you least expect it, and there may be remote installations – pumping stations, livestock control or remote area solar power systems (RAPS) – that have the potential to do that.

11.16. Remotely Piloted Aircraft (Drones)

Please refer to the Remotely Piloted Aircraft Addendum for detailed information regarding the operation of RPA's during the 2022 Sasol Solar Challenge.

Further requirements of Sporting Regulation 1.27.1, which states that RPA may only be operated with the approval of the event organisers, persons seeking to operate an RPA in association with the 2022 event must apply through the event media accreditation process.

Teams must also complete the online form requesting approval to operate an RPA, which will be made available on the website, and will include the following fields:

- Purpose of use
- Details of RPA type, weight etc.
- Copy of relevant SACAA registration and license
- Copy of insurance (teams should include RPA operation in their insurance policy coverage)
- Proposed flight plan/schedule

The event organisers will review the request and advise provisional approval in writing to the Team Manager. Formal approval will be provided upon confirmation of request from the pilot and Team Manager in person at Red Star Raceway.

For more information about no-fly zones in South Africa visit:

https://www.google.com/maps/d/viewer?mid=1dysv62Uj_IMC07jtE99-x8iRVNU&II=-26.029090790035557%2C28.738983494642902&z=13

Approved operators must confirm requests to fly between 3 September and 8 September 2022 a minimum of 24 hours in advance, in person to the Event Registration Office at Red Star Raceway. Requests to operate after the event's departure from the Official Start Line must be made through the Event Media & PR Manager the end of the day, the day prior to the intent of flight.

Approval will only be given to operators registered and accredited through the media registration process.

VOLUNTEER COORDINATOR



Logs of operational locations and times must be provided to the Media & PR Manager as soon as possible on completion of operations, but no more than 24 hours later.

12.1. Finish (Sporting Regulation 3.1)

12.1.1. The Finish Line will be at V&A Waterfront that is located in the heart of Cape Town. Further details will be announced once final arrangements have been made.

When your team arrives at the V&A Waterfront, all team support vehicles must be parked strictly at the designated support vehicle parking area. The solar car concession will be halted to allow for team members to make their way to the Finish Line. Each team will be given approximately 15 minutes for photographs.

Your solar car will be subject to final scrutineering once entered into the final parc fermé area at the marshalling point. A marshalling point will be established a few kilometres before the official finish line. The finish line time for the challenge will be determined at the marshalling point. The marshalling point will also serve as the operational holding point where Event Officials will orchestrate the Finish Line solar car concession.

12.2. Public Engagement/Promotional Activities

12.2.1. Once your solar car arrives at the official Finish Line it will be placed on display until 16H00, Saturday 17 September 2022. Team Managers must ensure that at least 3 team members are allocated to your solar car during the public display to engage with the public and media. Security will be provided.

Other promotional, public engagement and event activities such as Cruiser Class practicality judging will be held at The Lookout V & A Waterfront the morning of the Awards Ceremony. Further details will be announced closer to the event.

Per Sporting Regulation 1.12.2 and 1.26, any request to attend or participate in promotional activities or public appearances etc are obligatory for all registered teams. A detailed programme will be provided once details are finalised however may include the following:

- Attendance at event media calls
- Meet and greets with event sponsors and key stakeholders
- Involvement in industry or business networking sessions

13.2. Event Locations

13.2.1.	Red Star Raceway	13.2.2.	Carnival City Big Top Arena
	N12 Zonderfout Farm I226		Century Rd & Elsburg Road
	Portion 5		Carnival City
	Delmas, 2210		Brakpan, 1540
			Public Expo Thursday 8 September 2022 07H00 – 15H00



	Pit Garages available from 12H00 Saturday 3 September 2022 to 18H00 Wednesday 7 September 2022.		Briefings as per Sporting Regulation 1.12.
	Registration 3 September 2022 13H00 – 18H00		
	Static Scrutineering 4-5 September 2022 07H00 – 17H00		
	Dynamic Scrutineering 6-7 September 2022 07H00 – 17H00		
13.2.3.	Official Start Line	13.2.4.	Official Finish Line
	Century Rd & Elsburg Road Carnival City		V&A Waterfront, Jetty 2 Victoria & Alfred Waterfront,
	Brakpan, 1540		Cape Town,
	Official Start 9 September 2022		8001
13.2.5.	Pack Down	13.2.6.	Awards Ceremony
	Location to be confirmed.		The Lookout, Waterfront
Wednesday 14 September 2022 –			Granger Bay Blvd,
	Sunday 18 September 2022		Victoria & Alfred Waterfront,
			Cape Town
			8002

Robert Walker Event Director