



Regulations

Tyler Coffey 2021-02-19

Presenter Information

- Raced in 2008
 - Aero design & build
 - Strategy
 - Chase driver
- Staff 2011-present
 - Driver/Driver Ops Inspector
 - Track Steward
 - Regs Manager since January 2020
- Day Job
 - Integrated Test Operations Engineer for Blue Origin
 - Software Engineer at Weyerhaeuser
 - Flight Test Engineer at Boeing
 - Flight Test/Software at DoD

IEF SOLAR CAR CONFERENCE 2021

Regulations Cycle Background

2015	2016	2017	2018	2019	2020
WSC (Oct)					
ASC Regs (Feb)	ASC (July)	FSGP (July)			
	WSC Regs (June)	WSC (Oct)			
		ASC Regs (Jan)	ASC (July)	FSGP (July)	
			WSC Regs (June)	WSC (Oct)	
				Regs Release (Jan)	ASCoops

Things the inspectors think about

- We want more teams making it through inspections and the qualifier
- We think the best way of doing this is encouraging teams to show up with finished, tested cars
- We can't sit in your shop and make sure you're meeting your (overly optimistic) schedule
- Testing is the #1 thing you can do to make your car reliable
- Testing is the last thing in the schedule, and the first thing to go out the window when you're behind schedule

Current State

- Teams that build for WSC and ASC
 - Build a car for WSC (odd year)
 - Modify that car, fix the broken things, then bring that car to ASC (even year)
 - Build deadline is ~1 year prior to ASC
- Teams that build for ASC and FSGP
 - Build a car for ASC (even year)
 - Fix all the broken things, then bring that car to FSGP (odd year)
 - Build deadline is day 3 of qualifying
 - If you miss that deadline, you miss ASC

Going Forward

- ASC 2022 regulations will be substantially the same as ASC 2020/2021
- A new set of regulations will be released by January 2022 (hopefully earlier)
 - These will cover FSGP 2023 and ASC 2024
 - They will be harmonized with the WSC 2021/2023 regulations to the extent possible
- Teams that build for WSC and ASC
 - Build a car for WSC (2023)
 - Modify that car, fix the broken things, then bring that car to ASC (2024)
 - No change to your build cycle
- Teams that build for ASC and FSGP
 - Build a car for FSGP (2023)
 - Fix all the broken things, then bring that car to ASC (2024)
 - If you don't finish your car on time, you miss FSGP, but have a year to finish AND TEST your car before ASC

The future

2018	2019	2020	2021	2022	2023	2024	2025	2026
Regs	wsc							
	Regs	Ab	ASC	ASC				
		Regs	WSC		wsc			
				Regs	FSGP	ASC		
						Regs	wsc	
						Regs	FSGP	ASC
								Regs
								Regs

Questions/Feedback

- Unfortunately not available on a set schedule for 1:1 or office hours this week
- Hanging out in the Regulations Chat voice channel as much as possible
- I'll monitor and respond to #regulations-questions and #regulations-general
- As always, <u>ascregs@americansolarchallenge.org</u> is the official place to send regs questions