FIA FORMULA 1 WORLD CHAMPIONSHIP

2024 LAS VEGAS GRAND PRIX

21 - 23 November 2024

From	The FIA Formula One Media Delegate	**Document**	7
To	All Teams, All Officials	**Date**	21 November 2024
		Time	15:50

Title Car Presentation Submissions

Description Car Presentation Submissions

Enclosed 2024 Las Vegas Grand Prix - Car Presentation Submissions.pdf

Roman De Lauw

The FIA Formula One Media Delegate

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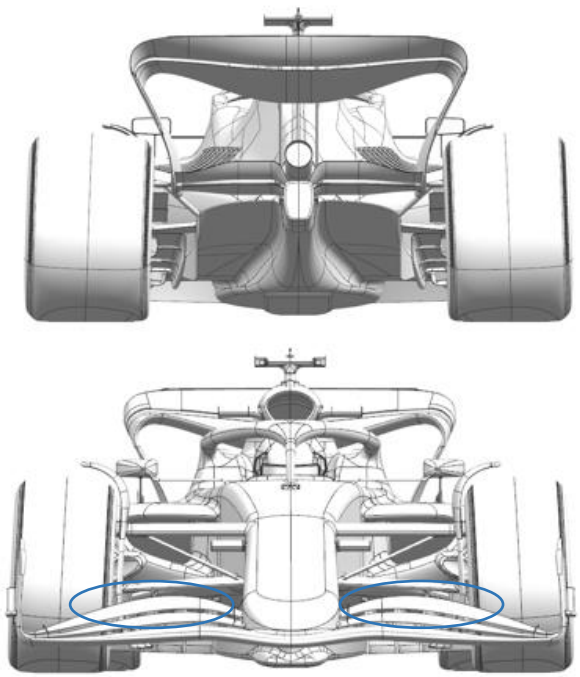
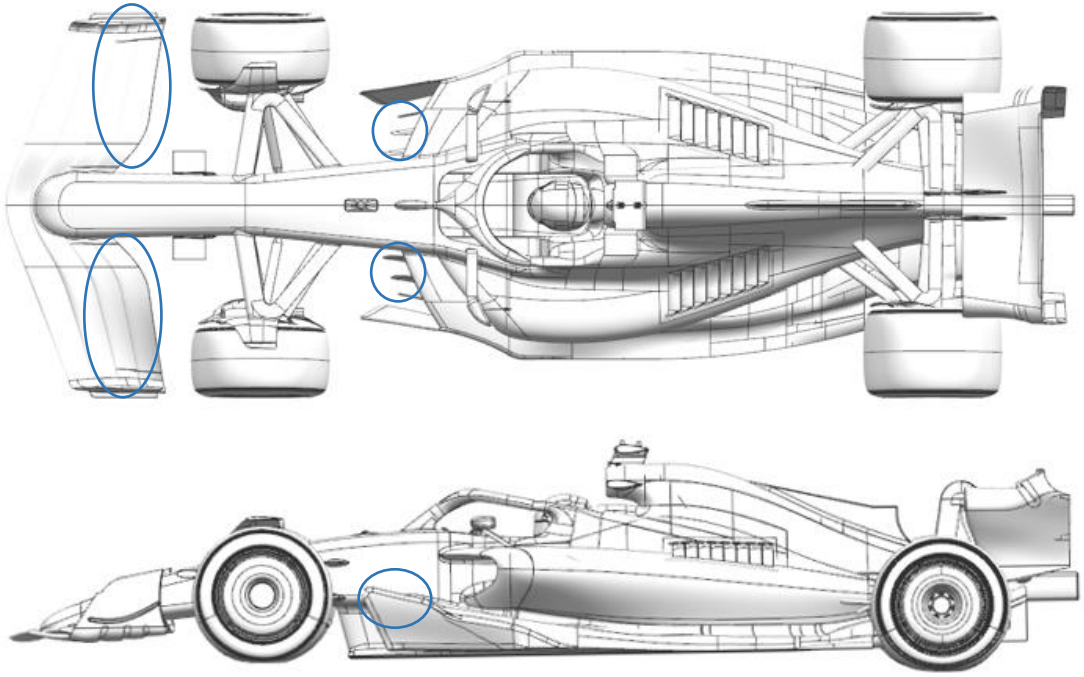
Car Presentation – R22 USA Las Vegas Grand Prix
Red Bull Racing

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Front Wing	Circuit specific - Balance Range	Reduced camber and chord front wing flap elements	Lower load front wing flap elements with reduced chord length and curvature (camber) to balance the expected rear wing level of the Las Vegas circuit.
2	Floor Fences	Performance - Flow Conditioning	Revised forward floor fence leading edge detail of the second fence from the chassis	By elevating the upper edge of the second (inside to out) forward floor fence, a small vortex can be shed to benefit the floor edge downstream.





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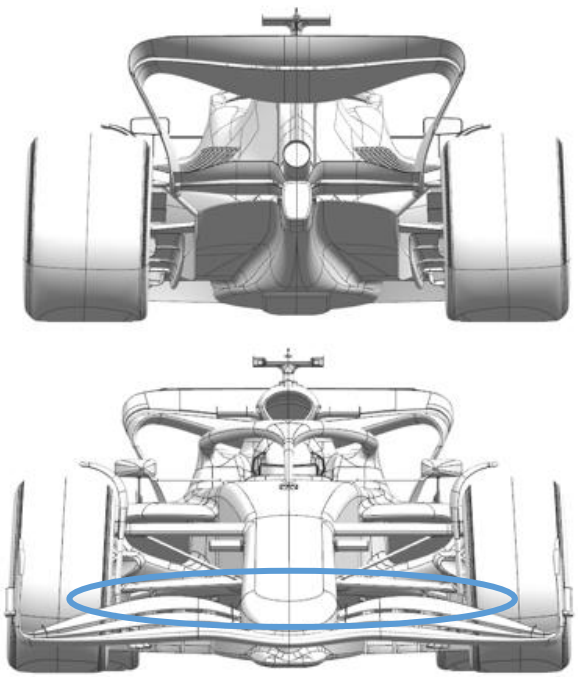
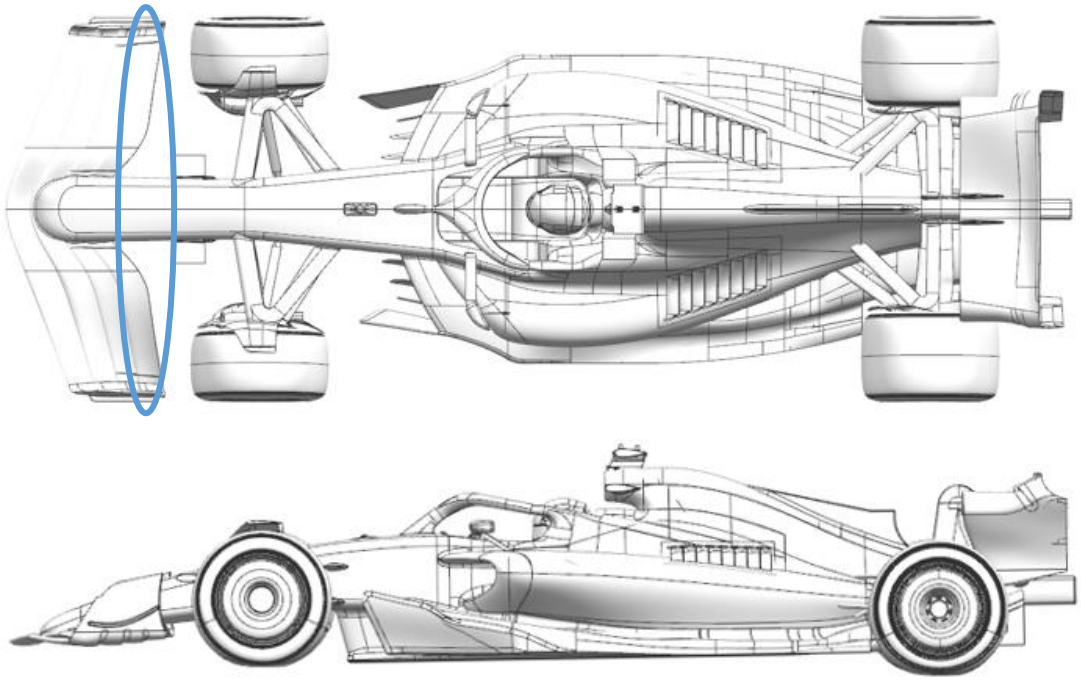
Car Presentation – 2024 Las Vegas Grand Prix
Mercedes-AMG PETRONAS F1 Team

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Front Wing	Circuit specific - Balance Range	Trailing edge of flap trimmed.	Trimming the trailing edge of the flap has been done to reduce front wing assembly load and achieve a sensible aero balance when running a low downforce, low drag rear wing suited to Vegas.





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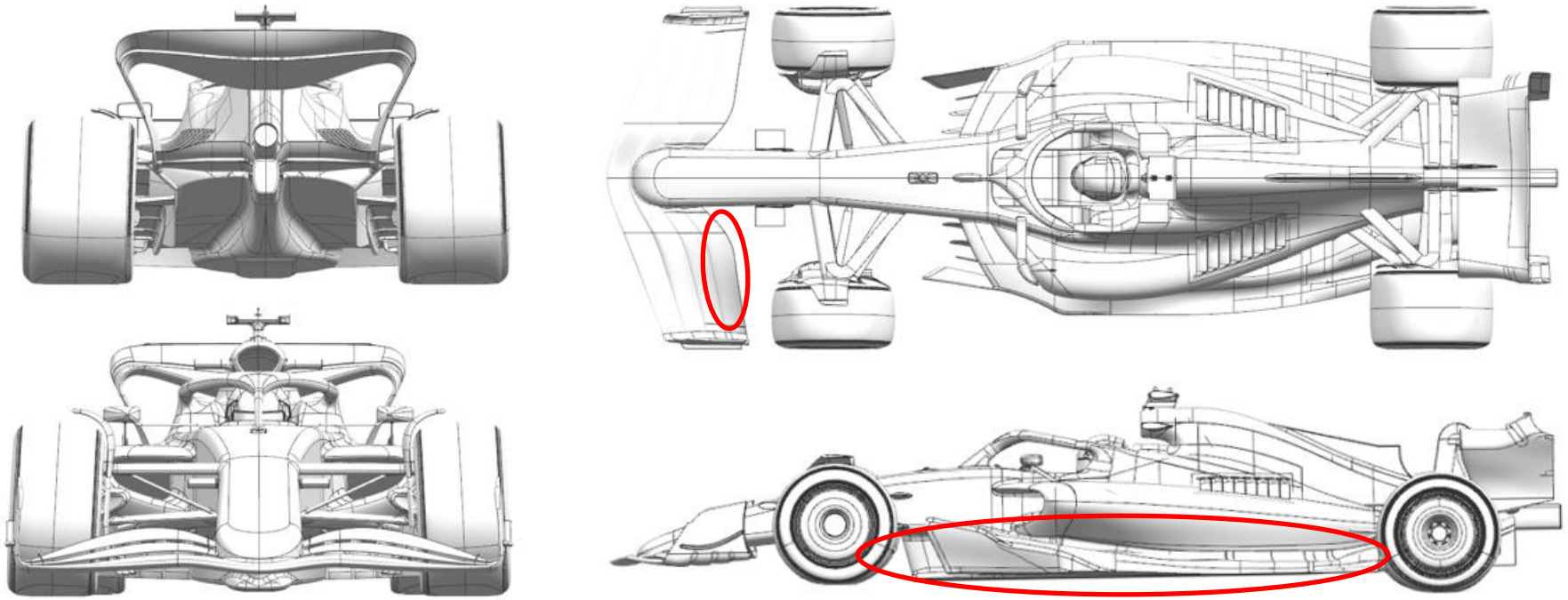
Car Presentation – Las Vegas Grand Prix

SCUDERIA FERRARI

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Front Wing	Circuit specific - Balance Range	Lower Downforce Front Wing Flap design and trims	The depowered front wing flap provides the required aero balance range associated to the optimum downforce level anticipated for Las Vegas. Different trims are available, to allow modulation
2	Floor Fences	Performance - Flow Conditioning	Redistribution of fences profiles and camber	Not event specific, this update features reworked front floor fences targeting an improvement of the losses travelling downstream. The front floor body volume has subsequently reoptimized, together with the floor edge loading and vortex shedding into the diffuser.
3	Floor Body	Performance - Flow Conditioning	Reshaped front volume / expansion	
4	Floor Edge	Performance - Flow Conditioning	Reshaped floor edge	



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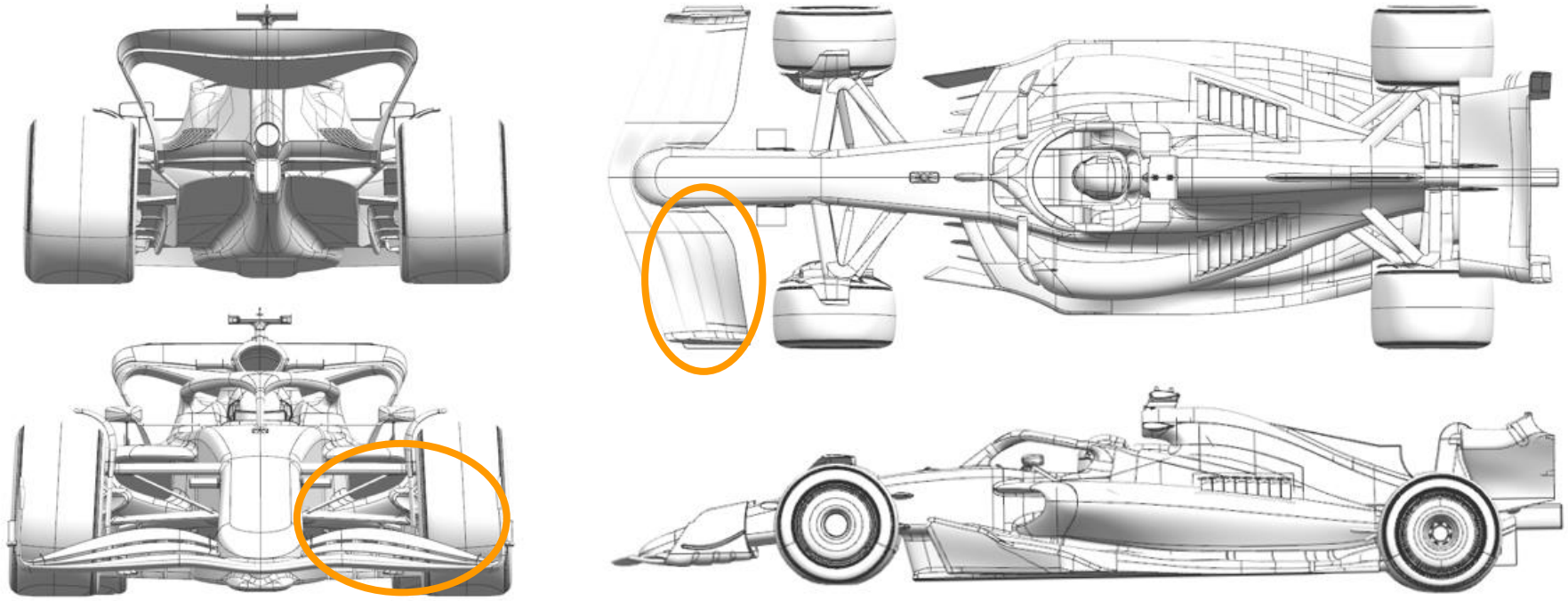
Car Presentation – Las Vegas Grand Prix

McLaren Formula 1 Team

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Front Wing	Circuit specific - Balance Range	New Front Wing Flap	The Front Wing Flap has been redesigned to extend the available aerobalance range, which could be a requirement given the specific circuit layout.



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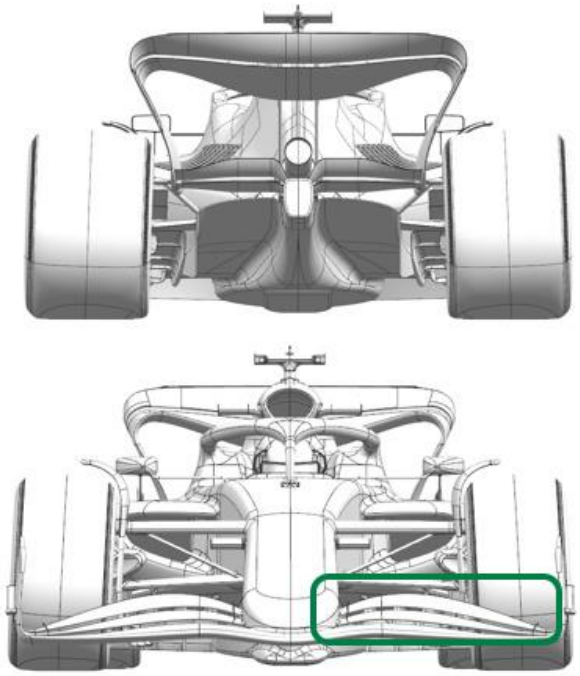
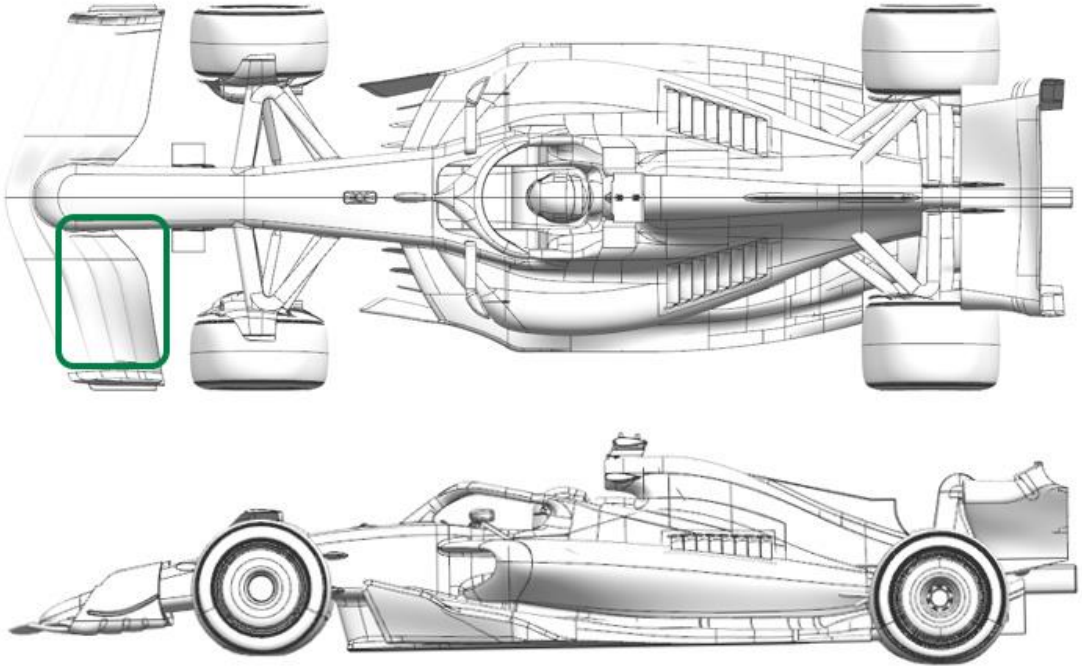
Car Presentation – Las Vegas Grand Prix

Aston Martin Aramco F1 Team

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Front Wing	Circuit specific - Balance Range	A new front wing flap with less incidence and a reduction in mid-span chord.	The flap is less loaded than the other version hence reducing overall wing load to balance the car with reduced rear wing levels.





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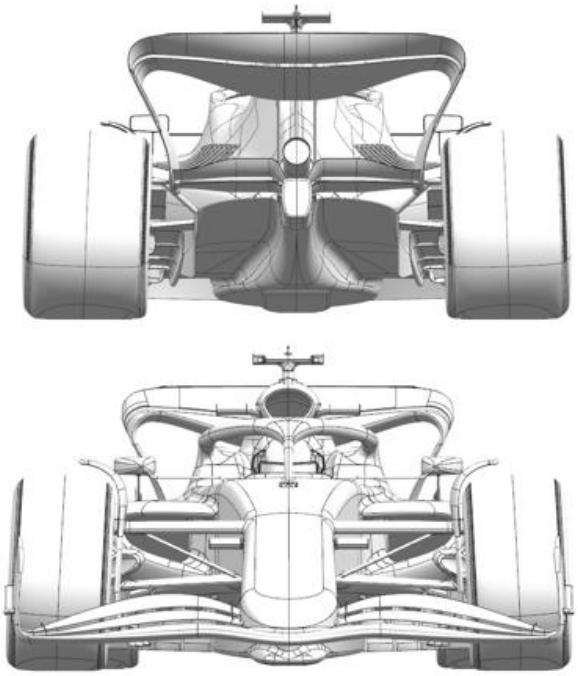
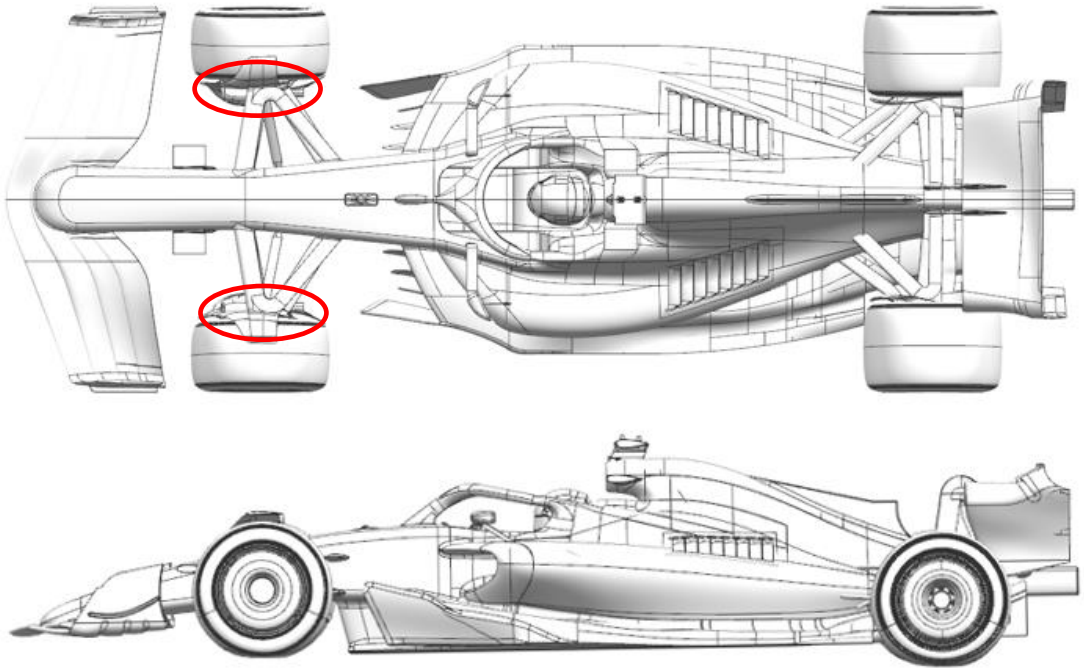
Car Presentation – Las Vegas Grand Prix

BWT Alpine F1 Team

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Front Corner	Performance - Flow Conditioning	Optimisation of the front corner surface	Update on the front drum fence surface offering a better local flow conditioning, a better interaction with front suspension and overall a better build quality.





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Car Presentation – Las Vegas Grand Prix

Williams Racing

No updates submitted for this event.

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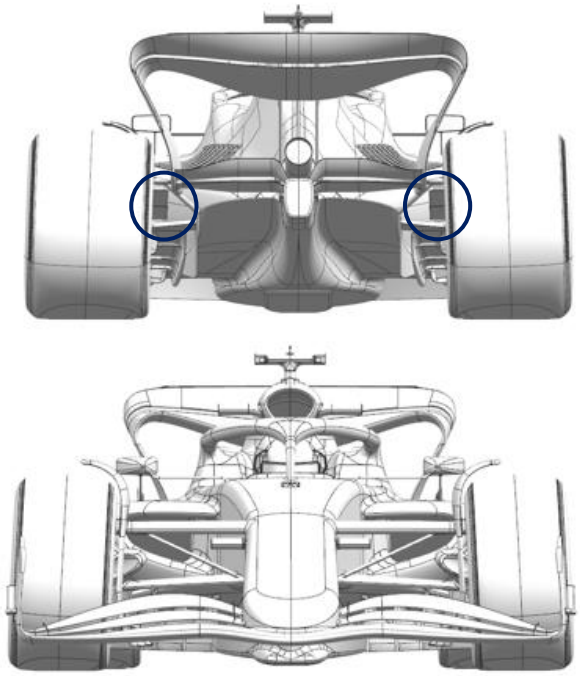
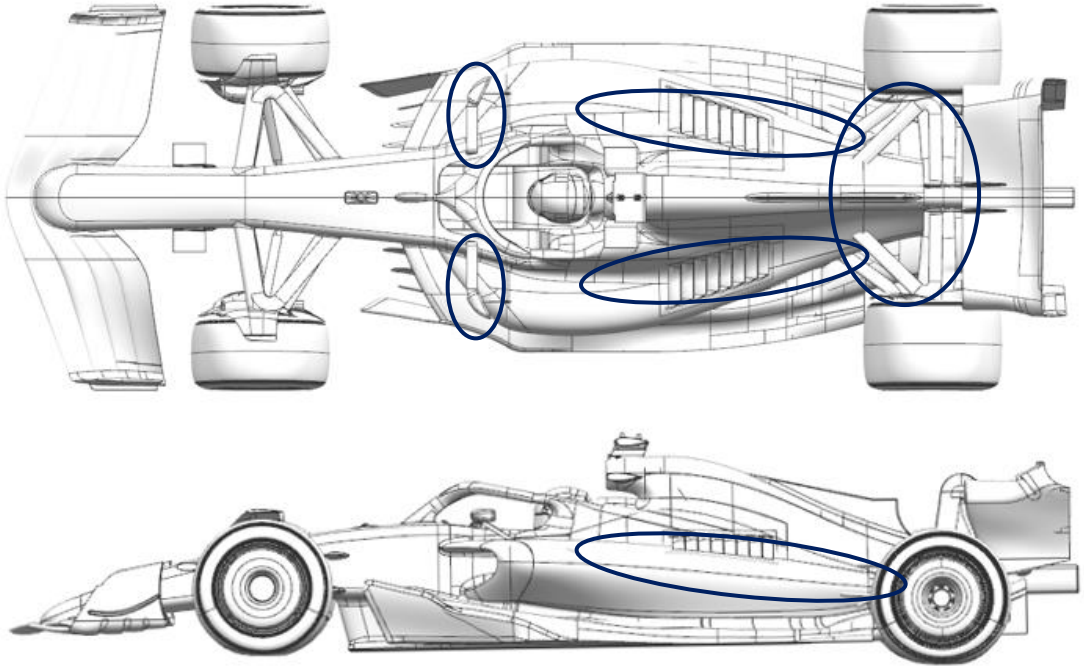
Car Presentation – Las Vegas Grand Prix

Visa Cash App RB

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Coke/Engine Cover	Performance - Flow Conditioning	The ramp down behind the sidepods has been lowered.	Lowering the top deck of the bodywork improves the high-energy flow brought to the rear of the car.
2	Rear Suspension	Other - Local flow alignment	Suspension leg orientations have been modified.	Suspension profiles have been realigned to the flow direction of the updated engine cover.
3	Rear Corner	Performance - Local Load	The geometry of the winglets on the rear corner has been updated.	Winglet profiles are modified to improve flow attachment and increase generated load.
4	Mirror	Circuit specific - Drag Range	A modification to the housing of the mirrors run at Monza.	The circuit requires a low-downforce configuration, so the Monza mirrors make a re-appearance with a further housing modification to clean up the flow.





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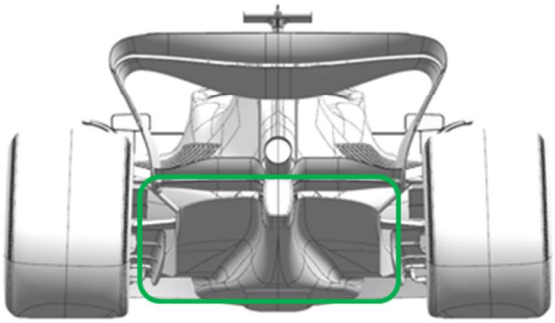
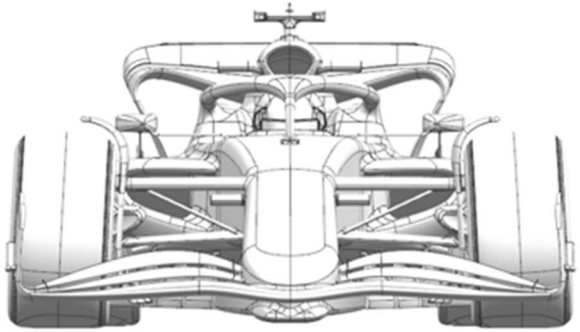
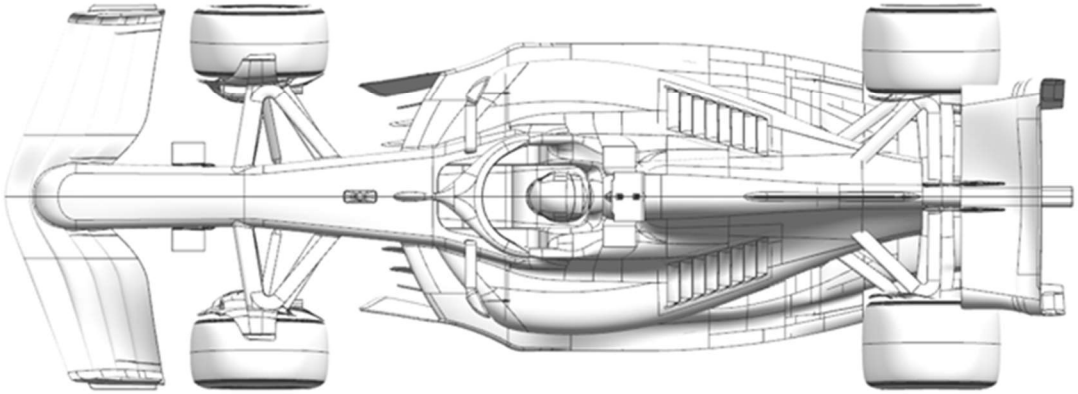
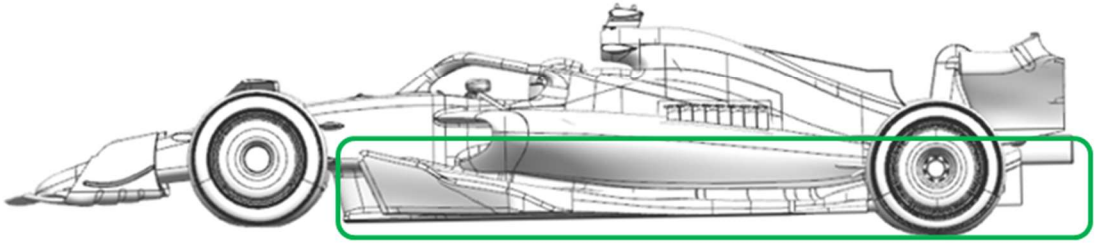
Stake F1 Team KICK Sauber

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Floor Body	Performance - Local Load	The main body of the floor has changed completely compared to its predecessor.	The updated floor in its entirety aims to improve the flow characteristics under the floor by rearranging vortices and maintaining losses under control.
2	Floor Fences	Performance - Local Load	Together with the floor body the fences were redesigned.	The updated floor in its entirety aims to improve the flow characteristics under the floor by rearranging vortices and maintaining losses under control.
3	Floor Edge	Performance - Local Load	Revised floor edge design as part of the new floor concept.	The updated floor in its entirety aims to improve the flow characteristics under the floor by rearranging vortices and maintaining losses under control.
4	Diffuser	Performance - Local Load	Diffuser top and sidewalls were updated as part of the new floor concept.	The updated floor in its entirety aims to improve the flow characteristics under the floor by rearranging vortices and maintaining losses under control.









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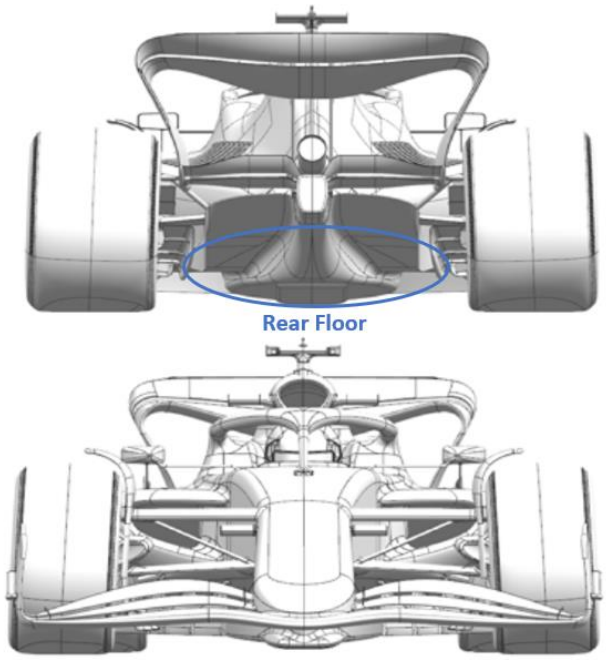
MONEYGRAM HAAS F1 TEAM

	Updated component	Primary reason for update	Geometric differences compared to previous version	Brief description on how the update works (min 20, max 100 words)
1	Floor Body	Performance - Local Load	Rear floor expansion shape modification	This geometry aims to improve the underbody flow expansion with the car close to the ground, extracting more performance in these conditions.


Rear Floor