



2015 ABU DHABI GRAND PRIX

From	The FIA Stewards of the Meeting	Document	17
To	All Teams, All Officials	Date	28 November 2015
		Time	13:03

Title Stewards Document

Description Stewards Document

Enclosed Mercedes Request for Settlement of Matter 2015 Abu Dhabi v1.pdf

Garry Connelly

Steve Stringwell

Derek Warwick

Khaled Bin Shaiban

The FIA Stewards of the Meeting



2015 ABU DHABI GRAND PRIX

From	The Stewards of the Meeting	Document	17
To	All Officials, All Teams	Date	28 November 2015
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Having received the attached "Request for Settlement of a Matter" from Mercedes-Benz Grand Prix Limited operating as Mercedes AMG Petronas F1 Team ("Mercedes") wherein Mercedes states that it considers that there are a number of ambiguities within Appendices 6 and 8 of the 2015 Formula One Sporting Regulations, and requesting the Stewards to settle the matter, the Stewards, having heard from the team representatives and the FIA Formula One Race Director;

DECIDE that this is a matter over which the Stewards have jurisdiction by virtue of Articles 11.9.1 and/or 11.9.2 of the FIA International Sporting Code and accordingly will proceed to make a determination resulting in a decision on each of the specific matters to be settled as outlined in the Mercedes request.

Mercedes is required to appear before the Stewards at 1315 hrs today (Saturday) and invited to make any additional submissions it may wish.

Any other competitor in the 2015 FIA Formula One World Championship or any competitor intending to enter the 2016 FIA Formula One World Championship, or any other interested party, is invited to make submissions to the Stewards on this matter either verbally or in writing, or both. Written submissions must be made no later than 1700 hrs today (Saturday). Verbal submissions will be accepted at a special hearing in the Stewards Room from 1600 hrs today (Saturday). Any party wishing to make a verbal submission must contact the Stewards' Secretary at Race Control to arrange a specific time.

The Stewards will endeavour to hand down their decision on the specific matters prior to the start of the Race on Sunday.

All parties are reminded of their Right of Appeal under the FIA International Sporting Code.

Garry Connelly

Steve Stringwell

Derek Warwick

Khaled Bin Shaiban

FIA Stewards of the Meeting

IN THE MATTER OF THE SETTLEMENT OF A MATTER PURSUANT TO
ARTICLES 11.9.1 AND 11.9.2 OF THE INTERNATIONAL SPORTING CODE

ABU DHABI GRAND PRIX
REQUEST FOR SETTLEMENT OF A MATTER

- **FAO:** Clerk of the Course
Chairman of the Stewards
- **COMPETITOR REQUESTING SETTLEMENT OF A MATTER:** MERCEDES-
BENZ GRAND PRIX LIMITED, operating as MERCEDES AMG PETRONAS F1
TEAM (“**Mercedes**”)
 - ADDRESS: OPERATIONS CENTRE, BRACKLEY, NORTHANTS, NN13
7BD, ENGLAND
 - LICENCE: Issued by DMSB Licence No: BIF 1132673
- **DATE:** 28TH NOVEMBER 2015

Introduction

1. Mercedes considers that there are a number of ambiguities within Appendices 6 and 8 to the 2015 Formula One Sporting Regulations (“the **Regulations**”) as currently drafted and hereby requests the Stewards to settle the matter, pursuant to Articles 11.9.1 and 11.9.2 of the International Sporting Code (“the **Code**”), by clarifying those ambiguities set out at paragraph 27 below.

Factual Background

2. Paddy Lowe of Mercedes wrote to Charlie Whiting of the FIA on 15 October 2015 (see Schedule 1 attached) enclosing a list of questions arising from ambiguities within Appendices 6 and 8 to the Regulations so as to clarify what is, and what is not, permitted by the Regulations.

3. Resolution of the ambiguities is of the utmost importance to Mercedes as it is currently considering the possibility of collaborating with third parties on its testing programme, including the sharing of staff and knowledge, which it believes could be permitted under the current Regulations as drafted. It is understood by Mercedes that other Formula 1 teams may also be considering operating in a similar manner.
4. Charlie Whiting of the FIA replied to Paddy Lowe's letter on 13 November 2015 (see Schedule 2 attached). Mr Whiting stated that he was unable substantively to respond as the questions did not fall within his remit but, rather, in "*...that of the competent bodies for binding interpretations (stewards)...*". Moreover, Mr Whiting agreed that the issues raised by Mercedes were "*...likely to be of interest to all participating teams...*".
5. As a result of the receipt of that response, Mercedes now turns to the Stewards to consider the concerns of Mercedes and to provide a binding interpretation for the benefit of all teams competing in the Championship.

Jurisdiction

The relevant provisions of the Code

6. The Code materially provides as follows:

"11.9.1 The stewards shall have supreme authority for the enforcement of the Code, of national and Supplementary Regulations and of Official Programmes.

11.9.2 They may settle any matter which might arise during an Event, subject to the right of appeal provided for in the Code."

7. Article 20 defines "*Supplementary Regulations*" as:

"Official document issued by the Organising Committee [defined in turn as a "Body approved by the ASN invested by the Organisers of a Competition with all necessary powers for the organisation of a Competition and the enforcement of Supplementary Regulations"] of a Competition [defined in turn as a "single motor sport activity with its own results..."] with the object of laying down the details of a Competition."

8. It follows that the Stewards have supreme authority for the enforcement of the Code and the Regulations, being the official documents issued by the FIA with the object of laying down the details of the FIA Formula One World Championship competition.

9. The Stewards have previously exercised this jurisdiction i.e. under Articles 11.9.1 and 11.9.2 of the Code, at the request of another Formula One team, to clarify ambiguities arising under the Regulations, so as to ensure, in all sporting fairness, that all teams have clarity as to the position. For example, the Stewards' Decision dated 14 April 2013 ("**Decision**") (a copy of which is set out in Schedule 3) clarified the scope of Article 27.6 of the then-current Regulations so as to clarify for the benefit of all teams whether physiotherapists should be specifically included in the 60 operational staff limit under that Article. The authority was exercised under the-then Article 141 of the 2013 Code which has, since the Decision, been split into two separate Articles and renumbered by the FIA as Articles 11.9.1 and 11.9.2 in the current version of the Code.

This matter

10. Pursuant to Article 11.9.1 of the Code, the supreme authority of the Stewards for the enforcement of the Regulations can only fairly be exercised if teams are sufficiently clear of their rights and obligations under those Regulations.
11. Allied to that power is the ability of the Stewards, pursuant to Article 11.9.2, to settle any matter which "*might arise during an Event*". For the reasons set out below, Mercedes considers there to be a number of existing ambiguities in Appendices 6 and 8 to the Regulations. It is possible that such ambiguity may be exploited by a team to give it a competitive advantage at any event, including at the Abu Dhabi Grand Prix 2015, prior to the points being clarified by the Stewards. There need not be current proof of any transgression, since the Article is careful to refer to matters that "*might*" arise. Moreover, and in any event, Mercedes may decide (see para. 3 above) to act in a way which *may*, depending on the way the relevant Regulations are interpreted, be impermissible. The matters set out below (see para 27 below), therefore, arise at the Abu Dhabi Grand Prix 2015, given that the ambiguities remain. The situation is, accordingly, directly analogous to the matter determined by the Stewards in the Decision in which there was no evidence that teams were wrongly applying the quota. The Stewards' interpretation in that case was purely clarificatory, for the benefit of all teams.

12. Further, and importantly, it is apparent that the FIA itself considers that the Stewards have jurisdiction to consider this matter and that a binding interpretation by the Stewards is the appropriate course (see letter from Charlie Whiting referred to at para. 4 above). Also, given that the Stewards' jurisdiction is during the Event, it follows that Mercedes must make its enquiry of the Stewards during the course of an Event in order that it may receive the Stewards' guidance in accordance with the stated position of the FIA.

The relevant Regulations

Appendix 6 of the Regulations (Schedule 4 attached)

13. Pursuant to Regulation 6.3 of the Regulations, a “*constructor*” may only outsource the design and/or manufacture of any Listed Parts to a third party in accordance with the provisions of paragraph 2 of Appendix 6. The word “*outsourcing*” in Regulation 6.3 is undefined.
14. Paragraph 2 of Appendix 6 provides that:
 - a. Listed Parts must be used exclusively within Formula One by only one constructor i.e. two teams cannot use any of the same Listed Parts (see para. 2(a) of Appendix 6).
 - b. “*In the case of the outsourcing of manufacture such third party shall not be a competitor*” (see para. 2(b) of Appendix 6).
 - c. “*In the case of the outsourcing of design, such third party shall not be a competitor or a person who directly or indirectly designs Listed Parts for any competitor*” (see para. 2(c) of Appendix 6).
15. The relevant Listed Parts are as set out in Appendix 6 of the Regulations and consist of the monocoque, survival cell, front impact structures, roll over structures, bodywork, wings, floor and diffuser.

16. Paragraph 3 of Appendix 6 of the Regulations provides that:

“...no competitor shall be entitled to share any information on the Listed Parts including but not limited to the supply of or access to drawings designated by such competitor with another competitor nor to receive or supply consultancy or any other kind of services to another competitor in relation to Listed Parts including but not limited to the supply of or access to drawings...”

17. Any reference to a competitor in Appendix 6 includes an associate of a competitor (see para. 4 of Appendix 6). The definition of associate (at para. 5 of Appendix 6) includes:

“(d) Any person (including any corporate or unincorporated body) which is set up or used by a competitor to circumvent the definition of a constructor or defeat the restrictions on being a constructor in this Appendix 6.”

Appendix 8 to the Regulations (Aerodynamic Testing Restrictions) (Schedule 5 attached)

18. Pursuant to Regulation 22.11:

“Competitors must abide by the aerodynamic testing restrictions set out in Appendix 8.”

19. Paragraph 1.2 of Appendix 8 defines “*Restricted Wind Tunnel Testing*” as:

“...the testing by a Team or any Related Party of that Team, or any agent or sub-contractor of the Team or any of its Related Parties, in a test environment of a representation of an F1 car or subcomponent in order to measure, observe or infer any forces, displacements, pressures or air flow direction resulting directly or indirectly from the incident air flow...”
(emphasis added)

20. That same language emphasised above is reflected in the definition of “*Restricted CFD Simulations*” at paragraph 2.1 of Appendix 8.

21. None of the terms “*Teams*”, “*Related Parties*” and their “*agents or subcontractors*” is defined in Appendix 8.

22. Appendix 8 sets out detailed restrictions relating to what is permitted or restricted in terms of Wind Tunnel Testing and CFD Simulations. In summary, these restrictions consist of the following (the “**Aerodynamic Testing Restrictions**”):
- a. Use of a scale model in a wind tunnel of more than 60% of full size is not permitted (see para. 1.3 of Appendix 8);
 - b. Wind tunnel testing at air speed of more than 50m/s is not permitted (see para. 1.4 of Appendix 8);
 - c. Only one wind tunnel can be nominated by each team to the FIA per 12 month period (see para. 1.5 of Appendix 8);
 - d. The testing fluid must be air at atmospheric pressure (see para. 1.6 of Appendix 8);
 - e. A single run commences each time air speed rises above 5m/s and ends when it falls below 5m/s (see para. 1.7 of Appendix 8);
 - f. Only one model may be used per run and only one model change is permitted per team per wind tunnel per 24 hour period (see para. 1.8 of Appendix 8);
 - g. CFD hardware must be declared to the FIA (see para. 2.5 of Appendix 8);
 - h. The Wind on Time limit is 25 hours and the CFD Teraflops Usage limit is 25 Teraflops (see para. 3.6 of Appendix 8);
 - i. Each team is restricted to a maximum of 65 runs per week and a maximum 60 hours of wind tunnel occupation per week (see para. 3.8 of Appendix 8); and
 - j. Only 2 shifts are permitted each day in the wind tunnel (see para. 3.9 of Appendix 8).
23. Paragraphs 3.3 and 3.4 of Appendix 8 clearly state that any Wind Tunnel Testing or CFD Simulations which fall within Appendix 8 which are “...*performed for the Team by any Related Party of that Team or any agent or sub-contractor of the Team or any of its Related Parties...*” must be included in the calculations which are required to be reported by each Team to the FIA under Appendix 8 “...*as if the [tests] [simulations] were performed by the Team...*”.

24. Similarly, the limit in paragraph 3.8 of Appendix 8 (see sub-paragraph [22](i) above) includes “...*any Related Party of that Team or any agent or sub-contractor of the Team or any of its Related Parties...*”.
25. Paragraph 3.10 prevents the sharing of data from Restricted Wind Tunnel Testing between teams and expressly states:

“Any data acquired during Restricted Wind Tunnel Testing may only be available to the Team that is assigned the calculated Wind Tunnel Occupancy.”

26. The definitions of Restricted Wind Tunnel Testing and Restricted CFD Simulations (see paras. 19 and 20 above) could be interpreted broadly to include any entity acting on behalf of a team, or for the benefit of a team, regardless of the exact nature of any legal relationship between that entity and the team, so as to ensure that all such entities and their activities are bound by the Restricted Wind Tunnel Testing and Restricted CFD Simulations provisions. If those definitions were to be interpreted broadly, this would, therefore, ensure that teams cannot gain an unfair sporting advantage by circumventing or defeating the operation of the Aerodynamic Testing Restrictions through the use of third parties.

Matters to be settled by the Stewards

27. Mercedes hereby requests clarification from the Stewards on the following provisions of the Regulations which Mercedes believes are not clear as currently drafted:

Appendix 6 of the Regulations

- a. We believe that the aerodynamic geometry/surfaces of a Listed Part would fall within the definition of a “*Listed Part*” such that the provisions of Appendix 6 also apply to such aerodynamic geometry/surfaces? Please can you confirm if this is correct?

- b. If so, then it would appear to follow that information relating to such geometry/surfaces cannot be shared with another competitor under paragraph 3 of Appendix 6. Please can you confirm if this is correct?
- c. Given that the design of a Listed Part can be outsourced under Regulation 6.3 and paragraph 2 of Appendix 6, does this also permit the outsourcing of the “*aerodynamic testing*” undertaken to create the design of the Listed Parts to a third party for the ultimate benefit of the competitor?
- d. If such outsourcing is permitted, would the aerodynamic testing of such Listed Parts by third parties fall within the restrictions set out in Appendix 8 to the Regulations? Would the competitor be required to include such aerodynamic testing by a third party in its quotas under Appendix 8 and hence in its report to the FIA?
- e. Paragraph 3 of Appendix 6 clearly prevents a competitor passing data in relation to Listed Parts to another competitor. Does this restriction also apply to non-Listed Parts, in particular in relation to data acquired from a testing programme?
- f. Please can you confirm the meaning of “outsourcing” in paragraph 3 of Appendix 6 to the Sporting Regulations? This is an area of significant uncertainty to Mercedes and, it believes, to other teams.

Appendix 8 of the Regulations

- g. What are the meanings of “*Related Party*”, “*agent*” and “*sub-contractor*” for the purposes of Appendix 8? Could the definition of “*Related Party*” be as per, or similar to, International Accounting Standard 24 as follows:

“A related party is a person or entity that is related to the entity that is preparing its financial statements (in this Standard referred to as the ‘reporting entity’).

(a) A person or a close member of that person’s family is related to a reporting entity if that person:

(i) has control or joint control over the reporting entity;

(ii) has significant influence over the reporting entity; or

(iii) is a member of the key management personnel of the reporting entity or of a

parent of the reporting entity.

(b) An entity is related to a reporting entity if any of the following conditions applies:

(i) The entity and the reporting entity are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).

(ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).

(iii) Both entities are joint ventures of the same third party.

(iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.

(v) The entity is a post-employment benefit plan for the benefit of employees of either the reporting entity or an entity related to the reporting entity. If the reporting entity is itself such a plan, the sponsoring employers are also related to the reporting entity.

(vi) The entity is controlled or jointly controlled by a person identified in (a).

(vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

- h. If the definition of Related Party is as per IAS 24 above, then what is meant by a party having “significant influence” over another party? This is another area of significant uncertainty for Mercedes and, it believes, for other teams.
- i. In particular, would any third party which carries out any aerodynamic testing in relation to any surfaces or parts which are ultimately for the benefit of a competitor, be classified as either a “*Related Party*”, “*agent*” or “*sub-contractor*” of that competitor and, therefore, fall within the restrictions in Appendix 8, regardless of the exact legal form of any relationship between the third party and the competitor?
- j. Specifically, is any aerodynamic testing that a team may ultimately benefit from required to be carried out in that team’s nominated wind tunnel?
- k. If an individual carries out Restricted Wind Tunnel Testing and/or Restricted CFD Simulations for the benefit of a team and then moves to work for a different team, whether that be by way of employment, secondment, outsourcing, consultancy or agency, is there any restriction on the sharing of information in relation to the testing results acquired by that individual?

- l. Are there any restrictions in the Regulations on the sharing of wind tunnel facilities or employees/agents/consultants/contractors by competitors? If not, is there anything in the Regulations to control the disclosure of information on aerodynamic testing between individuals who may physically move between competitors?
- m. If employees, consultants and/or contractors of a competitor "A" are seconded or provided/outsourced to and/or shared/exchanged with a third party or another competitor "B" and such individuals perform aerodynamic testing from which the competitor "A" may benefit (whether by the transfer of knowledge or information or the physical movement of individuals or otherwise), would such testing fall with the restrictions in Appendix 8 and, therefore, be required to be reported by competitor "A" to the FIA?
- n. If a team develops or supplies non-Listed Parts with aerodynamic surfaces for and/or to another team, then in whose Aerodynamic Testing Restriction quota would any aerodynamic testing of such non-Listed Parts fall – the competitor undertaking the testing or the ultimate user? What happens if the same non-Listed Parts are supplied by either another team or a third party to more than one team and/or used by more than one team? How, and by whom, is the aerodynamic testing reported?

Robert How
28/11/15

Schedule 1
Letter from Paddy Lowe to Charlie Whiting dated 15 October 2015



To : **Charlie Whiting,**
FIA Formula One Technical Department

From : **Paddy Lowe**

Subject : **Design of Aerodynamic Geometry**

Ref : **MAMG-FIA-15-0016**

Date : **15th October 2015**

Pages : **5**

Dear Charlie,

FIA Formula One World Championship

Please would you be able to give your opinions on the following series of questions regarding the Aerodynamic Testing Restrictions (SR Appendix 8, "ATR") and the development of associated aerodynamic geometry ("surfaces") [Note: in this context surfaces are not exclusively restricted to Listed Parts specified in SR Appendix 6].

In the questions we often refer to an "external entity". We define an external entity as any organisation (including any corporate or unincorporated body, agency, subcontractor, etc.) which is not a competitor.

Competitors

- A1. At what point in time does an external entity become a competitor if entering F1 for the first time?
- A2. At what point in time does a previous competitor become again a competitor if re-entering F1, having not registered an entry for one F1 season?
- A3. At what point in time does a current competitor competing in a current Championship season become a competitor for a future Championship season?

Provision of Surfaces

- B1. Is it permissible for a competitor to provide surfaces of Listed Parts to another competitor?
- B2. Is it permissible for a competitor to receive surfaces of Listed Parts from another competitor?
- B3. Is it permissible for a competitor to provide surfaces of Listed Parts to an external entity?
- B4. Is it permissible for a competitor to receive surfaces of Listed Parts from an external entity?
- B5. (a) Is it permissible for an external entity which aims to become a competitor to receive surfaces of Listed Parts from another competitor?
(b) If so, is there a time limit for such receipt (in relation to the time at which they become a competitor)?

Design of Surfaces

- C1. Is it permissible for a competitor to design surfaces of Listed Parts for another competitor?
- C2. Is it permissible for a competitor to design surfaces of Listed Parts for an external entity?
- C3. Is it permissible for an external entity to design surfaces of Listed Parts for a competitor?
- C4. Is it permissible for an external entity to design surfaces of Listed Parts for more than one competitor?

Use of Aerodynamic Testing Restriction (ATR) quota

- D1. If staff in our employment conduct aerodynamic testing on our behalf (meaning: for the purposes of designing our surfaces)
 - (a) is this testing controlled according to the ATR quotas allocated to our team?
 - (b) does the testing need to take place within our nominated wind tunnel?
- D2. If consultants or any appointed external entity conduct aerodynamic testing on our behalf (meaning: for the purposes of designing our surfaces)
 - (a) is this testing controlled according to the ATR quotas allocated to our team?
 - (b) does the testing need to take place within our nominated wind tunnel?
- D3. If staff in our employment conduct ATR on behalf of an external entity (meaning: for the purposes of designing surfaces for said entity and not for us) is this testing controlled according to the ATR quotas allocated to our team?
- D4. If an external entity designs surfaces for its own purposes, and then subsequently provides these surfaces to a competitor, would the ATR quotas apply to that competitor for the testing conducted to develop these surfaces?
- D5. When does an external entity need to comply with the ATR?
- D6. Are we free to provide the results obtained within our ATR quota to another competitor
 - (a) for surfaces of parts which are not Listed Parts?
 - (b) for surfaces of Listed Parts?
- D7. Are we free to provide the results obtained within our ATR quota to an external entity?
- D8. What is the meaning of "Related Party" in SR Appendix 8?

Use of Surfaces Design Staff

- E1. If we employ staff or appoint as consultants agents who have worked on the design of surfaces within the employment of another competitor, would any of the previous work/services undertaken by that employee/consultant fall within the ATR quota applicable to us?
- E2. Is it permissible for us to temporarily appoint or contract the services of individuals who have worked on the design of surfaces within the employment of or as a consultant for another competitor, and who remain permanently employed or appointed to perform services by that competitor (i.e. on any basis: subcontract, secondment, internship etc.)?
- E3. Is it permissible for us to allow our employees or consultants who have worked on the design of our surfaces to be temporarily employed by or appointed to perform services for another competitor, and who remain permanently employed by us whilst working for another competitor (on any basis: subcontract, secondment, internship etc.)?
- E4. Is it permissible for us to employ surfaces design staff on a part-time basis, who concurrently work on a part-time basis for another competitor?
- E5. Is it permissible for us to use the surfaces design services of an external entity which also provides surfaces design services for another competitor?
- E6. Is it permissible for us to employ individuals who have worked on the design of surfaces of Listed Parts within the employment of an external entity?
- E7. Is it permissible for us to temporarily employ individuals who have worked on the design of surfaces of Listed Parts within the employment of or as a consultant for an external entity, and who

remain permanently employed by or appointed to perform services for that entity (on any basis: subcontract, secondment, internship etc.)?

- E8. Is it permissible for us to allow our staff who have worked on the design of surfaces within our employment to be temporarily employed by an external entity, and who remain permanently employed by us whilst working for or performing services for the said entity (on any basis: subcontract, secondment, internship etc.)?
- E9. Is it permissible for us to employ surfaces design staff on a part-time basis, who concurrently work on a part-time basis or provide services for an external entity?
- E10. Is it permissible for us to employ staff or appoint them as consultants if they have worked on the design of surfaces within the employment of an external entity?
- E11. Is there any minimum employment contract length for surfaces design staff by a competitor (years/months/days/hours)?
- E12. Is there any minimum isolation period ("gardening leave") for surfaces design staff who change employment from one competitor to another or between a competitor and an external entity?

Transfer of Knowledge, Information and Data

Is it permissible for an employee or consultant of a current competitor to pass data (drawings, wind tunnel and CFD results, etc.) obtained under their ATR quota as follows:

- F1. (a) Electronically or (b) in writing or (c) verbally to an employee or consultant of another competitor?
- F2. (a) Electronically or (b) in writing or (c) verbally to an employee or consultant of an external entity?

Is it permissible for an employee or consultant of a current competitor to receive data (drawings, wind tunnel and CFD results, etc.) as follows:

- G1. (a) Electronically or (b) in writing or (c) verbally from an employee or consultant of another competitor (where data was obtained under that other competitor's ATR)?
- G2. (a) Electronically or (b) in writing or (c) verbally from an employee or consultant of an external entity?

Is it permissible for a person who was previously in the employment of a current competitor to pass data (drawings, wind tunnel and CFD results, etc.) obtained under their ATR quota as follows:

- H1. (a) Electronically or (b) in writing or (c) verbally to an employee or consultant of another competitor?
- H2. (a) Electronically or (b) in writing or (c) verbally to an employee or consultant of an external entity?

Potential ATR Avoidance Scenarios

A future competitor obtains surfaces from us. This future competitor then chooses to conduct independent design of surfaces unconstrained by the ATR quotas.

- I1. Is it permissible for us to permanently employ, temporarily employ, part-time employ or subcontract staff from this future competitor for use in our surfaces development?
- I2. Is it permissible for this future competitor to permanently employ, temporarily employ, part-time employ or subcontract staff from us for use in their surfaces development?

- I3. Is there any limit to the time, frequency and extent to which this future competitor obtains updates of our surfaces?

An external entity obtains surfaces from us. This entity then chooses to conduct independent design of surfaces unconstrained by the ATR quotas.

- J1. Is it permissible for us to permanently employ, temporarily employ, part-time employ or subcontract staff from this external entity for use in our surfaces development?
- J2. Is it permissible for this external entity to permanently employ, temporarily employ, part-time employ or subcontract staff from us for use in their surfaces development?
- J3. Is there any limit to the time, frequency and extent to which this external entity obtains updates of our surfaces?

Another competitor conducts design of surfaces using their own ATR quotas.

- K1. Is it permissible for us to permanently employ, temporarily employ, part-time employ or subcontract staff from this competitor for use in our surfaces development?
- K2. Is it permissible for this competitor to permanently employ, temporarily employ, part-time employ or subcontract staff from us for use in their surfaces development?

Acceptance of Entries

The FIA have indicated that they may reject the entry of teams which have avoided the ATR in the design of their cars (presumably using powers of absolute discretion, SR Article 13.5). Which of the following situations would cause such a rejection?

- L1. A new competitor which has avoided the ATR prior to becoming a competitor
- L2. A new competitor which has avoided the ATR prior to becoming a competitor and which has been in receipt of surfaces from an existing competitor
- L3. A re-entering competitor which has avoided the ATR for a 12-month period by missing one season
- L4. A re-entering competitor which has adhered to the ATR for a 12-month period when missing one season, whilst concentrating ATR quotas entirely on the prospective season
- L5. A competitor which has collaborated with another competitor for the purpose of ATR avoidance (i.e. ATR sharing by two teams, for example by systematic transfers of surfaces design staff)
- L6. A competitor which has collaborated with a future competitor (prior to their becoming a competitor) for the purpose of ATR avoidance (e.g. by provision of surfaces and/or systematic transfer of surfaces design staff)
- L7. A competitor which has collaborated with an external entity for the purpose of ATR avoidance (e.g. by provision of surfaces and/or systematic transfer of surfaces design staff)
- L8. A competitor which has obtained ATR avoidance from an external entity without apparent collaboration (e.g. by systematic transfer of surfaces design staff from a potential future competitor whose entry did not proceed for whatever reason).

Irrespective of your view we ask that this correspondence is kept confidential to MERCEDES AMG PETRONAS and the FIA.

Kind Regards

Paddy Lowe | Executive Director (Technical)



AMG
PETRONAS
FORMULA ONE TEAM

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Schedule 2
Reply of Charlie Whiting to Paddy Lowe dated 13 November 2015



FEDERATION INTERNATIONALE DE L' AUTOMOBILE

To :	Paddy Lowe Mercedes-AMG F1 Team	Ref :	MA.T/011-15
cc :	Marcin Budkowski ; Sebastien Bernard		
From :	Charlie Whiting	Ref :	MA.T/011-15
Date :	13 November 2015	Pages :	1
Subject :	Request for Guidance - Design of Aerodynamic Geometry		

Dear Paddy

Thank you for your email dated 15 October.

I regret that I am unable to respond to your questionnaire, the questions of which do not fall within my remit but that of the competent bodies for binding interpretations (stewards). If these questions were to result in a reflection on the evolution of the regulations, this would be submitted to the governing bodies (Strategy Group and Commission F1).

Moreover, I notice that your questions do not concern compliance with the technical regulations of a new design or a new system, but points concerning the sporting regulations for the most part.

As recalled by the International Court of Appeal on several occasions, our opinions are advisory in nature and are not enforceable against the stewards or the ICA.

Moreover, these questions and any potential responses are mainly of a general nature by opposition to matters relating to a specific case or situation and such exchange is likely to be of interest to all participating teams. The confidentiality request is therefore not appropriate.

In these conditions, I cannot therefore give you my opinion on the questions you ask.

Thank you for your understanding.

Kind regards

A handwritten signature in blue ink, appearing to read 'Charlie Whiting'.

Charlie Whiting

FIA Formula One Technical Department

REMINDER : Any FIA opinions given above are advisory in nature and do not constitute Technical Regulations. It is for the Stewards, and ultimately the FIA International Court of Appeal, to offer binding interpretations of the Technical Regulations

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E-Mail : cwhiting@fia.com

Schedule 3
Stewards' Decision dated 14 April 2013



2013 CHINESE GRAND PRIX

From	The FIA Stewards of the Meeting	Document	33
To	All Teams, All Officials	Date	14 April 2013
		Time	12:16

The Stewards have received a request from Sahara Force India F1 Team in relation to Article 27.6 of the FIA Formula One Sporting Regulations, wherein the Stewards are requested to settle a claim that physiotherapists should be specifically included in the 60 operational staff limit under the Article.

The International Sporting Code in Article 141 gives the Stewards the authority to settle such a claim.

Accordingly the Stewards propose to conduct a hearing to consider this claim.

The hearing will be held at 1pm today (Sunday April 14) in the Stewards Room.

Any competitor ("interested party") who wishes to be heard may attend this hearing to present their case.

Garry Connelly

Steve Chopping

Mark Blundell

Wang Feng

The FIA Stewards of the Meeting



2013 CHINESE GRAND PRIX

From	The FIA Stewards of the Meeting	Document	38
To	All Teams, All Officials	Date	14 April 2013
		Time	14:28

Stewards Decision

The Stewards, having been requested by Sahara Force India F1 Team to settle the claim by the Team that physiotherapists should be included within the 60 operational staff limit prescribed under Article 27.6 of the Sporting Regulations, and having heard from the team representatives of that Team and of Infiniti Red Bull Racing, Scuderia Ferrari and Lotus F1 Team, and the Race Director, determine as follows;

1. Pursuant to Article 141 of the FIA International Sporting Code, the Stewards have the authority to settle this claim. The team representatives agreed.

2. A physiotherapist who is not in any way involved in the operation of the car or its participation in competition, is not included in the limit of 60;

3. A physiotherapist who is in any way involved in the operation of the car or its participation in the competition, is to be included in the limit of the 60;

4. We determine the following functions not to be operational:

a) Those which are directly concerned solely with the health, comfort and nutrition of the driver,

b) Tasks such as providing drinks directly to the driver, providing and organising the driver's kit before sessions e.g. earpieces, balaclava, gloves, helmet, HANS device and assisting him to fit those devices whilst he is not in the car.

5. We determine the following functions to be operational:

The handling or use of any tool, implement, technical data or piece of equipment other than specifically connected with the role of a physiotherapist and with point 4 above.

Garry Connelly

Steve Chopping

Mark Blundell

Wang Feng

The FIA Stewards of the Meeting

Schedule 4
Appendix 6 to the 2015 Formula One Sporting Regulations

APPENDIX 6

1. A constructor shall, in respect of the Listed Parts to be used in its cars in Formula One, only use Listed Parts which are designed by it.
2. The obligation to design and use Listed Parts shall not prevent a constructor from outsourcing the design and/or manufacture of any Listed Parts to a third party (including an associate of such constructor) provided that :
 - a) It retains the exclusive right to use the Listed Parts in Formula One so long as it competes in Formula One.
 - b) In the case of the outsourcing of manufacture such third party shall not be a competitor.
 - c) In the case of the outsourcing of design, such third party shall not be a competitor or a person who directly or indirectly designs Listed Parts for any competitor.
3. No competitor shall be entitled to share any information on the Listed Parts including but not limited to the supply of or access to drawings designated by such competitor with another competitor nor to receive or supply consultancy or any other kind of services to another competitor in relation to the Listed Parts including but not limited to the supply of or access to drawings.
4. Any reference to any competitor shall include any associate of such competitor.
5. An "associate" means :
 - a) Any person (including any corporate or unincorporated body) in which such party directly or indirectly :
 - (i) Owns share capital or business assets; or
 - (ii) Has the power to exercise voting rights; or
 - (iii) Has the power to appoint members of the supervisory board, board of directors or bodies legally representing such a firm or body corporate or unincorporated; or
 - (iv) Has the right to manage the business of such firm or body corporate or unincorporated body; or
 - b) Its controller (where controller means any person who directly or indirectly has in or over any party the rights or powers listed in sub-clause (a) of the definition of associate); or
 - c) Any person (including any corporate or unincorporated body) in which its controller directly or indirectly has the right or powers listed in sub-clause (a) above; or
 - d) Any person (including any corporate or unincorporated body) which is set up or used by a competitor to circumvent the definition of a constructor or defeat the restrictions on being a constructor in this Appendix 6.

LISTED PARTS

Monocoque
Survival cell as defined in Article 1.14 of the F1 Technical Regulations
Front impact structures used to meet the requirements of Articles 16.2 and 16.3 of the F1 Technical Regulations
Roll over structures - roll structures as regulated by Article 15.2 of the F1 Technical Regulations
Bodywork as defined in Article 1.4 of the F1 Technical Regulations and regulated by Article 3 of the F1 Technical Regulations with the exception of airboxes, engine exhausts and any prescribed bodywork geometries
Wings
Floor
Diffuser

Schedule 5
Appendix 8 to the 2015 Formula One Sporting Regulations (Aerodynamic Testing Restrictions)

APPENDIX 8

AERODYNAMIC TESTING RESTRICTIONS

The Aerodynamic Testing Restrictions, and the definitions and rules which will apply to aerodynamic testing, are as follows :

1. Restricted Wind Tunnel Testing

- 1.1 In the context of this Appendix the words bodywork, sprung suspension and brake system air ducts will have the same definition as those provided by Articles 1.4, 1.13 and 11.4 of the F1 Technical Regulations respectively.
- 1.2 Restricted Wind Tunnel Testing is the testing by a Team or any Related Party of that Team, or any agent or sub-contractor of the Team or any of its Related Parties, in a test environment of a representation of an F1 car or subcomponent in order to measure, observe or infer any forces, displacements, pressures or air flow direction resulting directly or indirectly from the incident air flow. The only allowable exceptions from this definition are as follows :
- a) Wind tunnel testing which aims to develop components associated with cooling, or the running of the engine from a boundary commencing at the engine air intake duct, passing through the engine and finishing at the exit of the exhaust tailpipes, provided that there is no direct or indirect measurement of aerodynamic force during the test. In this context, pressure and flow measurements within a duct shall not be considered to be measurements of aerodynamic force.
- For the avoidance of doubt, any wind tunnel testing to develop bodywork parts other than as referred to in sub-paragraph (a) above even without aerodynamic force measurement is within the definition of Restricted Wind Tunnel Testing.
- In some cases a testing rig which was devised to develop components associated with cooling or the running of the engine could have the potential to offer secondary benefits for bodywork development. Specific examples of such rigs and the additional restrictions that apply to them are provided in section 5.
- b) Any aerodynamic test conducted by an F1 car at any Event.
- c) Any aerodynamic test conducted by an F1 car during and at Track Testing as permitted by the F1 Sporting Regulations.
- 1.3 No Restricted Wind Tunnel Testing may be carried out using a scale model which is greater than 60% of full size.
- 1.4 No Restricted Wind Tunnel Testing may be carried out at an air speed exceeding 50m/s measured relative to the scale model referred to in paragraph 1.3.
- 1.5 Restricted Wind Tunnel Testing may only be used in wind tunnels which have been nominated by the Team to the FIA. Each Team may nominate only one wind tunnel for use in any one twelve month period. The first nomination must be made on or before 1 January 2015 and no re-nominations may be made for at least 12 months.
- The FIA will consider, at its absolute discretion, earlier or temporary nominations if a wind tunnel already nominated by a team suffers a long term failure or for the purpose of evaluating alternative wind tunnels.
- 1.6 The Restricted Wind Tunnel Testing fluid must be air at atmospheric pressure.

- 1.7 During Restricted Wind Tunnel Testing, a single run will be deemed to commence each time the air speed rises above 5m/s and will end the first time thereafter when the air speed falls below 5m/s.
- 1.8 During Restricted Wind Tunnel Testing only one model may be used per run and only one model change is permitted per team per wind tunnel per 24 hour period. Compliance with this restriction will be determined upon the time elapsed between the wind speed exceeding 5m/s with successive models, not upon the occupancy of the wind tunnel test section by successive models. For the avoidance of doubt, a model in this context is defined by its underlying spine, motors and sensors. Detail changes to the aerodynamic configuration of a given model remaining in the wind tunnel are permitted.
- 1.9 During Restricted Wind Tunnel Testing, once the air speed rises above 5m/s the bodywork, sprung suspension and brake system air ducts of the test car or subcomponent must remain fixed until the air speed returns below 1m/s with the exception of any freedom set out in section 6.

2. Restricted CFD Simulations

- 2.1 Restricted CFD Simulations are computational fluid dynamic (CFD) simulations by a Team or any Related Party of that Team, or any agent or sub-contractor of the Team or any of its Related Parties, of flows that are gaseous in the case of the full size F1 car and are not classified as Engine Simulations. Any simulation of flows contained within the engine cooling or lubrication systems, air, air/fuel mixtures, combustion process or products of combustion from a boundary commencing at the engine's atmospheric air intake ducts, passing through the engine and finishing at the exit of the exhaust tailpipe will be classified as an Engine Simulation.
- 2.2 For the avoidance of doubt, if any CFD simulation (other than the Engine Simulation defined above) reveals information about flows that are gaseous on the full size F1 car then it is a Restricted CFD Simulation. For example; any CFD simulations conducted at scales other than 1:1 or using non gaseous fluids are still Restricted CFD Simulations as they reveal information about flows that are gaseous on the full size F1 car.
- 2.3 Restricted CFD Simulations refer to the solver part of the process (irrespective of the numerical scheme behind the simulation) plus any mesh adaptation included in a solver optimisation loop. Pre-processing, mesh creation and post processing of CFD simulations are unrestricted. Only the calculation part of the process (iteration time) shall be included in the Restricted CFD Simulations.
- 2.4 Non restricted CFD Simulations can be made for the purpose of optimising CFD methodology, provided they use a rigid car geometry which has been simulated in CFD more than 30 months ago. This car geometry may not be changed, added to, removed from, morphed or modified.
Only geometry manipulations (e.g. in CAD clean-up or meshing software) having the sole purpose of reproducing exactly the same geometry previously solved in CFD (to a tolerance of 1.5mm scaled to a 1:1 car) are allowed. This tolerance is introduced only to allow for unintentional and incidental changes in geometry detail caused by the revisions in software and process. For the avoidance of doubt, static changes to car attitude (ride height, roll, yaw and steer) are permitted. Dynamic attitude changes as well as front wing flap angle, rear wing upper most element position or tyre shape changes are not permitted. Modifications to surface and volume mesh resolution and type as well as the extent of the far field domain are allowed.
- 2.5 Restricted CFD Simulations may only be carried out using hardware that has been nominated by the Team to the FIA.
The declaration of the hardware by the Team to the FIA will include :
 - a) The name and model number of the Processing Unit.

- b) Number of Processing Unit cores in the cluster.
- c) Peak number of double precision floating point calculations per cycle per core of the Processing Unit.
- d) Further to clause 2.5(c), in the case of an Intel CPU with either the Sandybridge or Ivybridge chipset where the team chooses not to exploit the AVX feature; the team must explicitly declare and be able to demonstrate that they are NOT using the AVX feature in the CFD solve process. If the non-usage of the AVX feature is proven to the auditor, the Intel Sandybridge and Ivybridge chipset cores can be rated as 4 flop/cycle/core rather than as 8 flop/cycle/core.
- e) Further to clause 2.5(c), in the case of a Processing Unit without a double precision floating point operating capability the number of natural precision operations per cycle per core will be used instead. As an example, a single precision only GPU core will count the number of single precision floating point operations per cycle.
- f) Processor speed at which the Processing Unit is configured to run at 100% CPU load.
- g) Any off load engines used within the cluster.
- h) Maximum Teraflops (flop=double precision floating point operation) the system can use. This may exclude any AVX floating point operations if declared under 2.5(d) or include natural precision operations under 2.5(e).

2.6 The calculation used for the declaration of the 8 week Aerodynamic Testing Period shall be carried out as below.

$$\text{TotFLOPS} = (\text{MFPPC} * \text{CCF} * \text{NCU} * \text{NSS}) / (604,800 * 8 * 1000)$$

Where :

TotFLOPS = The total number of TeraFLOPs used per CFD solve run.

MFPPC = Peak double precision floating point operations per cycle per core of the Processing Unit (excluding AVX if declared under 2.5(d) or using natural precision operations under 2.5(e) if the core is not double precision capable).

CCF = Peak Processing Unit clock frequency in GigaHertz achieved during the CFD solver run. This will be the peak frequency theoretically achievable during the run based on one of the following :

- a) The standard clock frequency value from the Processing Unit Manufacturer's specification sheet (if overclocking or enhanced modes are not used in the run).
- b) The maximum "turbo", "HPC" or other enhanced mode frequency value.
- c) The maximum overclocked frequency value.

NCU = Number of Processing Unit cores used for the run.

NSS = Number of solver wall clock seconds elapsed during the run. NB Message passing time during calculation should be included.

All information required for auditing should be present in the output from the run including the CCF value.

For the avoidance of doubt, any offload processing for example FPU, FPGA, GPU/GPGPU, VFP, softfp etc. should be included and calculated using the same method as above.

3. Combined Restricted Wind Tunnel Testing and Restricted CFD Simulation Restriction

- 3.1** The usage limits for Restricted Wind Tunnel Testing and Restricted CFD Simulations are expressed in terms of Wind On Time, number of runs, tunnel occupancy and CFD Teraflops Usage during an Aerodynamic Testing Period.
- 3.2** An Aerodynamic Testing Period is an eight week period used for evaluation of these restrictions. As soon as one Aerodynamic Testing Period finishes, a new one begins. The start and finishing dates for each Aerodynamic Testing Period for a given calendar year will be published by the FIA at the start of each calendar year.
- 3.3** Wind On Time is defined as the amount of time (in hours) per week, averaged over the Aerodynamic Testing Period, where the wind tunnel air speed exceeds 15m/s for Restricted Wind Tunnel Testing. For the avoidance of doubt any Restricted Wind Tunnel Testing performed for the Team by any Related Party of that Team, or any agent or sub-contractor of the Team or any of its Related Parties during an Aerodynamic Testing Period must be included in this calculation as if the tests were performed by the Team.
- 3.4** CFD Teraflops Usage is defined as the average number of teraflops of computing power used for the purpose of making Restricted CFD Simulations during the Aerodynamic Testing Period. For the avoidance of doubt, computer resource used for Restricted CFD Simulations that fail or are aborted by the user must still be included in the CFD Teraflops Usage calculation. For the further avoidance of doubt any Restricted CFD Simulations performed for the Team by any Related Party of that Team, or any agent or sub-contractor of the Team or any of its Related Parties during an Aerodynamic Testing Period must be included in this calculation as if the simulations were performed by the Team.
- 3.5** Each Team must limit Restricted Wind Tunnel Testing and Restricted CFD Simulations so that at the end of each Aerodynamic Testing Period it can be demonstrated that the Team has operated according to the Limit Line.
- 3.6** The Limit Line is defined as follows :
- $$WT \leq WT_limit (1 - CFD/CFD_limit)$$
- Where :
- WT = Wind On Time
WT_limit = 25 hours
CFD = CFD Teraflops Usage
CFD_limit = 25 Teraflops
- 3.7** The limit in CFD simulation ("CFD_limit" in the Limit Line) will be revised every three years, starting from 1st January 2014, to a new performance level to take account of changes to CFD hardware ownership and running costs.
- 3.8** Each Team, including any Related Party of that Team, or any agent or sub-contractor of the Team or any of its Related Parties must also limit Restricted Wind Tunnel Testing to a maximum of 65 runs per week and a maximum of 60 hours of tunnel occupancy per week both averaged over the aerodynamic testing period. Only two shifts of Occupancy may be carried out by a Team in any one calendar day. At the end of each Aerodynamic Testing Period it will also have to be demonstrated that the Team has operated according to these Limits.
- 3.9** During Restricted Wind Tunnel Testing, the first shift of Occupancy will be deemed to commence the first time the air speed is above 5m/s on a given calendar day, and will end at a time, declared by the team, when the air speed falls below 5m/s on the same calendar day. A second shift of Occupancy will be deemed to commence the first time the air speed is above 5m/s following the end of the first shift of Occupancy (on the same calendar day) and will end, either when the air speed falls below 5m/s for the last time on the same calendar day or, at the end of the calendar day in the event a Run is still in progress.

3.10 Any data acquired during Restricted Wind Tunnel Testing may only be available to the Team that is assigned the calculated Wind Tunnel Occupancy.

4. Reporting and Benchmarking

4.1 Each Team must declare to the FIA in writing the computer resource that is employed for the purpose of Restricted CFD Simulations. If the hardware is changed or upgraded then a new declaration must be submitted to the FIA within one month of the change.

4.2 Each Team must declare to the FIA in writing the wind tunnel resource that is employed for the purpose of Restricted Wind Tunnel Testing. If a different facility is to be used or if the existing facility is significantly changed or upgraded then a new declaration must be submitted to the FIA within one month of the change.

4.3 Each Team shall report to the FIA details of its Restricted Wind Tunnel Testing and Restricted CFD Simulations for the preceding Aerodynamic Testing Period within 14 days of the end of that Aerodynamic Testing Period. The data must be provided in the format specified by the FIA. This declaration shall be based on records of the solution time of each Restricted CFD Simulation to a precision of at least the nearest second and on records of the Wind On Time of each wind tunnel run performed during Restricted Wind Tunnel Testing to a precision of at least the nearest second.

4.4 In order to check on the hardware employed by the Teams and as a means of assuring common application of the restrictions set out in this Appendix, the FIA will arrange for independent benchmarking inspections of both Wind Tunnel and CFD activities to be carried out from time to time. Recommendations arising from these inspections will be incorporated into this Appendix.

4.5 These provisions will apply from the 1st January 2015 onwards (as this is the first day of the first Aerodynamic Testing Period of 2015). The remaining reporting periods for 2015 and 2016 will be arranged as follows.

a) The aerodynamic reporting periods for 2015 and 2016 will be :

2015	Start Date	End Date	2016	Start Date	End Date
Period 1	01/01/15	01/03/15	Period 1	21/12/2015	14/02/2016
Period 2	02/03/15	26/04/15	Period 2	15/02/2016	10/04/2016
Period 3	27/04/15	21/06/15	Period 3	11/04/2016	05/06/2016
Period 4	22/06/15	30/08/15	Period 4	06/06/2016	31/07/2016
Period 5	31/08/15	25/10/15	Period 5	01/08/2016	09/10/2016
Period 6	26/10/15	20/12/15	Period 6	10/10/2016	04/12/2016

b) Aerodynamic Reporting Periods 4 (2015) and 5 (2016) occupy 10 calendar weeks in order to span the factory shutdown. Wind-On Time and Teraflops, Occupancy and Runs will be averaged over this reporting period, or any other period which may exceed 8 weeks, by summing the total activity in the period and then averaging over an 8 week block exactly as for a normal reporting period.

5. Exceptions to definition of Restricted Wind Tunnel Testing

5.1 Free testing is permitted (and therefore not within the definition of Restricted Wind Tunnel Testing) for development of suspension and steering systems (Article 10 of the F1 Technical Regulations), brake systems (Article 11 of the F1 Technical Regulations), wheels and tyres (Article 12 of the F1 Technical Regulations) and for development and calibration of pressure sensing instrumentation (such as pitot tubes, multi-directional probes, Kiel tubes etc), provided such tests do not concurrently test (or in any way provide incidental data or knowledge) concerning performance or endurance of parts or systems classified as bodywork.

- 5.2 Steady State and Dynamic engine dynamometer work with an F1 car or subcomponent may be performed (and therefore not within the definition of Restricted Wind Tunnel Testing) provided that :
- a) The bodywork used in the test has no front wing assembly (described in Article 3.7.1 of the F1 Technical Regulations) or rear wing assembly (described in Article 3.10.1 of the F1 Technical Regulations) present.
 - b) No devices designed to measure directly or indirectly aerodynamic forces or flow field characteristics are installed in the facility used.
 - c) No sensor installed on the car or subcomponent which are capable of measuring displacements, pressures or air flow direction of the external airstream resulting directly or indirectly from the incident air flow may be logged. Logging files have to be available, if required, during the independent benchmarking inspection.
 - d) The gas flow exiting from the exhaust system is ducted away from the testing area before impacting on any bodywork component (other than the exhaust itself).
- 5.3 Wind Tunnel Testing for the sole purpose of the conditioning of Wind Tunnel infrastructure or the development of Wind Tunnel infrastructure (including all of its sub systems such as rolling road, model motion system, force balance, wind tunnel model spine, sensors etc) and methodology may be performed (and therefore not within the definition of Restricted Wind Tunnel Testing) subject to complying with either of the following restrictions :
- a) The front wing group (described in Article 3.7.1 of the F1 Technical Regulations) and the rear wing group (described in Article 3.10.1 of the F1 Technical Regulations) must be removed from the wind tunnel for the duration of the testing.
 - b) A model of fixed aerodynamic configuration is used which is more than 12 months old, and that no modification is made to the previously tested geometry.
- 6. Bodywork Items that may be adjusted during a Restricted Wind Tunnel Testing Run**
- 6.1 The following degrees of freedom are permitted during the course of a Restricted Wind Tunnel Testing run :
- a) The flap angle of a front wing may be adjusted.
 - b) The incidence of the rear most and uppermost element of the top rear wing may be adjusted.
- 6.2 For the avoidance of doubt, during Restricted Wind Tunnel Testing, changes to the state of the model that reflect conditions encountered on the full size car while driving on the track (for example ride height, roll, steer, yaw, exhaust flow) are permitted.