IMSA TECHNICAL BULLETIN IWSC #24-18r1

To: All IMSA WeatherTech SportsCar Championship Competitors

From: IMSA Competition

Date: January 16, 2024

Re: IMSA Balance of Performance: ROAR Before the 24 revised

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In accordance with Attachment 2 of the IMSA WeatherTech SportsCar Championship SSR, the following Balance of Performance values are set for the indicated Car Models. The column listed as current is the current specification after any adjustment is applied and thus the required specification for the Event(s). These decisions come into effect immediately and are applicable until further notice.

This revision to Technical Bulletin 24-18 serves to address limitations of the new Homologation for the Aston Martin Vantage GT3 EVO. Updated BoP parameters for this Car Model have been issued in the updated GTD table as a result.

Attachment 2.2. GENERAL PHILOSOPHY

2.2.1. Goals

A. To ensure the Demonstrated Performance of the best example of each Manufacturer's Car Model is within a targeted performance window that allows for competitive equivalency.

2.2.6. Application of Penalties

A. Deliberately providing false information, attempting to influence the BoP process through manipulating performance by any means or displaying a level of performance above or below the expected result in any Session, by any entity specified below, may be penalized to the full extent listed in Art. 57.

i. Competitor.
ii. Constructor.
iii. Manufacturer.

2.2.7. Final Authority

A. IMSA is the final authority with respect to the Balance of Performance process and all related decisions.

i. Decisions of IMSA regarding BoP are Conclusive and not subject to protest or appeal.

Regular IMSA & Manufacturer group meetings are the only forum for transparent and collaborative BOP discussion. Manufacturer representatives remain fully apprised and are the point of contact for all customer inquiries.

GTP	Vehicles		Mass	ICE	Power	Energy		Fuel	Notes
	Manufacturer		Minimum No Fuel/Driver (kg)	Nmax (rpm)	Maximum Power (kW)	Maximum Stint Energy (MJ)	Stint Energy Replenishment Rate (MJ/sec)	Type	
			current						
	Acura	ARX-06	1072	9512	520	920	23.000	R80	
	BMW	M Hybrid V8	1031	8000	514	908	22.700	R80	
	Cadillac	V-Series.R	1030	8800	510	902	22.550	R80	
	Porsche	963	1051	8158	519	917	22.925	R80	

GTP Maximum Power (kW)

Engine Speed (N/Nmax)	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520
<0.550	236	237	237	238	238	239	239	240	240	241	241	242	242	243	243	244	244	245	245	246	246	247	247	248	248	249	249	250	250	251	251	252	252	253	253	254	254	255	255	256	256
0.550	236	237	237	238	238	239	239	240	240	241	241	242	242	243	243	244	244	245	245	246	246	247	247	248	248	249	249	250	250	251	251	252	252	253	253	254	254	255	255	256	256
0.575	258	259	259	260	260	261	261	262	262	263	264	264	265	265	266	266	267	267	268	268	269	270	270	271	271	272	272	273	273	274	274	275	275	276	276	277	277	278	278	279	279
0.600	277	278	278	279	279	280	281	281	282	282	283	284	284	285	285	286	287	287	288	288	289	290	290	291	291	292	292	293	293	294	295	295	296	296	297	297	298	298	299	299	300
0.625	297	298	298	299	299	300	301	301	302	302	303	304	304	305	305	306	307	307	308	308	309	310	310	311	312	312	313	314	314	315	316	316	317	317	318	319	319	320	321	321	322
0.650	317	318	318	319	320	320	321	322	322	323	324	324	325	325	326	327	327	328	329	329	330	331	331	332	333	333	334	335	335	336	337	337	338	338	339	340	340	341	342	342	343
0.675	337	338	338	339	340	341	341	342	343	343	344	345	345	346	347	348	348	349	350	350	351	352	352	353	354	355	355	356	357	357	358	359	359	360	361	362	362	363	364	364	365
0.700	358	359	359	360	361	362	362	363	364	364	365	366	366	367	368	369	369	370	371	371	372	373	374	374	375	376	377	377	378	379	380	380	381	382	383	383	384	385	386	386	387
0.725	378	379	380	380	381	382	383	383	384	385	386	386	387	388	389	389	390	391	392	392	393	394	395	395	396	397	398	399	399	400	401	402	403	403	404	405	406	407	407	408	409
0.750	397	398	399	399	400	401	402	403	403	404	405	406	407	407	408	409	410	411	411	412	413	414	415	416	416	417	418	419	420	421	422	422	423	424	425	426	427	427	428	429	430
0.775	415	416	417	418	418	419	420	421	422	423	424	424	425	426	427	428	429	429	430	431	432	433	434	435	435	436	437	438	439	440	441	441	442	443	444	445	446	446	447	448	449
0.800	431	432	433	434	435	436	436	437	438	439	440	441	442	443	444	445	445	446	447	448	449	450	451	452	453	454	454	455	456	457	458	459	460	461	462	463	463	464	465	466	467
0.825	445	446	447	448	449	450	451	452	453	454	455	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	469	470	471	472	473	474	475	476	477	478	478	479	480	481	482
0.850	456	457	458	459	460	461	462	463	464	465	466	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	485	486	487	488	489	490	491	492	493	494
0.875	466	467	468	469	470	471	472	473	474	475	476	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505
0.900	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512
0.925	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517
0.950	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520
0.975	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518
1.000	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	505	506	507	508	509	510	511	512	513	514
1.025	410	411	412	413	413	414	415	416	417	418	419	419	420	421	422	423	424	424	425	426	427	428	429	430	430	431	432	433	434	435	436	436	437	438	439	440	441	441	442	443	444

Linear interpolation will be used to determine intermediate power levels between displayed engine speed break points

LMP2	Vehicles		Mass	Engine				Aero	Fuel			Notes
	Constructor		Minimum No Fuel/Driver (kg)	Make	Specification	Volume (L)	Maximum RPM	Configuration	Type	Total Capacity (L)	Minimum Full Refueling Time (sec)	
			current				current			current		
	Ligier	JS P217	950	Gibson	2023	4.2	8000 (1st to 5th) 8500 (6th)	See Table	E20	75.0	40.0	2023 Engine Intake and RPM Configuration. Max RPM: 8000 1-5th Gear Max RPM: 8500 6th Gear
	ORECA	07	950	Gibson	2023	4.2	8000 (1st to 5th) 8500 (6th)	See Table	E20	75.0	40.0	2023 Engine Intake and RPM Configuration. Max RPM: 8000 1-5th Gear Max RPM: 8500 6th Gear

* Aero configuration is defined via the Aero Configuration table on the following page.

LMP2

LMP2 AERODYNAMIC CONFIGURATIONS		
		Assemblies
Constructor		
Ligier	JS P217	As homologated sprint configuration (FIA)
ORECA	07	As homologated sprint configuration (FIA)

FRONT AERODYNAMIC CONFIGURATIONS			
Optional Front Aerodynamic Configurations are Independent			
Dive Planes		Packers / Inserts	Other
Permitted Options		Permitted Configurations	Permitted Options
OPTION 1	None	As homologated sprint configuration (FIA)	None
OPTION 2	LDF		
OPTION 3	HDF		
OPTION 1	Double	As homologated sprint configuration (FIA)	None
OPTION 2	Lower only		

REAR AERODYNAMIC CONFIGURATIONS

Optional Rear Aerodynamic Configurations are Independent

		Tail Wicker			Rear Wing				Rear Wing Flap Wicker		
Constructor		Permitted Options	Type	Height	Permitted Range	Assembly	Main plane	Flap	Permitted Options	Span	Height
			mm	mm		Position	Degrees	Degrees		mm	mm
Ligier	JS P217	OPTION 1	Fitted	12.5	Range Minimum:	7.3°	As homologated		N/A		
		OPTION 2	Removed	-	Range Maximum:	18.0°					
ORECA	07	OPTION 1	Fitted	16.3	Range Minimum:	Position 9	-8.6	20.5	OPTION 1	Full	10.0
		OPTION 2	Removed	-	Range Maximum:	Position 1	+1.0	33.3	OPTION 2	Removed	-

"Option" items are permitted to be chosen separately in each category.
Either option of diveplane may be chosen with either option of tail wicker and either option of rear wing wicker and with any rear wing position within the range shown in the table

GTD
GTD PRO

Vehicles		Mass	Engine			Ride Height	Rear Wing	Fuel					Notes
Manufacturer		Minimum No Fuel/Driver (kg)	Restrictor Diameter (mm)		Maximum RPM	Minimum Ground Clearance (mm)	Min Angle (deg)	Type	Lambda	Total Capacity (L)		Minimum Full Refueling Time (sec)	
		current	qty.	current	current	current	°		λ	adj	current		
Acura	NSX GT3	1320			7500	50.0	+4.8	IMSA 100	0.88		109.0	40.0	EVO II
Aston Martin	Vantage GT3 EVO	1335			7200	50.0	+4.8	IMSA 100	0.91		108.0	40.0	
BMW	M4 GT3	1310			7250	50.0	+2.4	IMSA 100	1.10		98.0	40.0	
Corvette	Z06 GT3.R	1335	1	50.0	8000	50.0	+3.3	IMSA 100	0.88		103.0	40.0	
Ferrari	296 GT3	1355			8000	50.0	+2.8	IMSA 100	0.90		105.0	40.0	
Ford	Mustang GT3	1315	2	35.0	8250	50.0	+6.8	IMSA 100	0.88		109.0	40.0	
Lamborghini	Huracan GT3 EVO2	1350	1	50.0	8500	50.0	+3.8	IMSA 100	0.91		109.0	40.0	
Lexus	RC F GT3	1370	2	40.0	7200	50.0	+5.3	IMSA 100	0.86		107.0	40.0	
McLaren	720S GT3 EVO	1340			8000	50.0	+2.8	IMSA 100	0.88		111.0	40.0	
Mercedes	AMG GT3	1390	2	33.5	7700	50.0	+2.5	IMSA 100	0.90		100.0	40.0	
Porsche	911 GT3 R (992)	1305	2	36.0	9400	50.0	+6.5	IMSA 100	0.89		95.0	40.0	

Acura NSX GT3

Engine Speed	Boost Ratio
[rpm]	current
2000	1.870
4000	1.870
4500	1.874
5000	1.920
5500	1.948
6000	1.963
6200	1.967
6300	1.977
6400	1.980
6500	1.978
6600	1.973
6700	1.962
6800	1.947
7000	1.914
7500	1.856
7800	1.000

Aston Martin GT3 EVO

Engine Speed	Boost Ratio
[rpm]	current
2000	1.510
4000	1.510
4250	1.549
4500	1.588
4750	1.637
5000	1.686
5250	1.721
5500	1.755
5750	1.794
6000	1.794
6250	1.794
6500	1.794
6750	1.765
7000	1.745
7200	1.745
7500	1.000

BMW M4 GT3

Engine Speed	Boost Ratio
[rpm]	current
2000	2.058
3000	2.058
3500	2.058
4000	2.113
4500	2.179
5000	2.268
5250	2.328
5500	2.406
5750	2.494
6000	2.513
6250	2.533
6500	2.454
6750	2.363
7000	2.223
7250	2.117
7500	1.000

Ferrari 296 GT3

Engine Speed	Boost Ratio
[rpm]	current
2000	1.903
4000	1.903
4500	2.203
5000	2.444
5500	2.428
5750	2.434
6000	2.440
6250	2.443
6500	2.445
6750	2.422
7000	2.399
7250	2.364
7500	2.330
7750	2.265
8000	2.200
8500	1.000

McLaren 720S GT3 EVO

Engine Speed	Boost Ratio
[rpm]	current
2000	1.681
4000	1.681
4500	1.675
5000	1.668
5500	1.662
5750	1.642
6000	1.623
6250	1.594
6500	1.565
6750	1.522
7000	1.478
7250	1.444
7500	1.411
7750	1.406
8000	1.401
8300	1.000