CIVA / FAI International

Aerobatic Judging Seminar

Part 4 – FPS and the Judging Analyses

Remember! a Judge is …

- *Detective*
- *Examiner*
- *Analyst*
- *Interpreter*
- *Reviewer*
- *Theatre critic*
- *Commentator*
- *Pilot …*

A competition aerobatic sequence is a demonstration of aircraft control requiring extreme levels of technical ability and discipline from the Pilot.

The Pilot attempts to convince the Judges that the figures are flown exactly according to the rules.

The Judges view the performance to discover where the rules are not fully met. They award downgrades for imperfections and errors seen.

An aerobatic Judge uses ALL of these skills to mark the performance properly.

Calculating and Measuring Contest Results Judge Performance

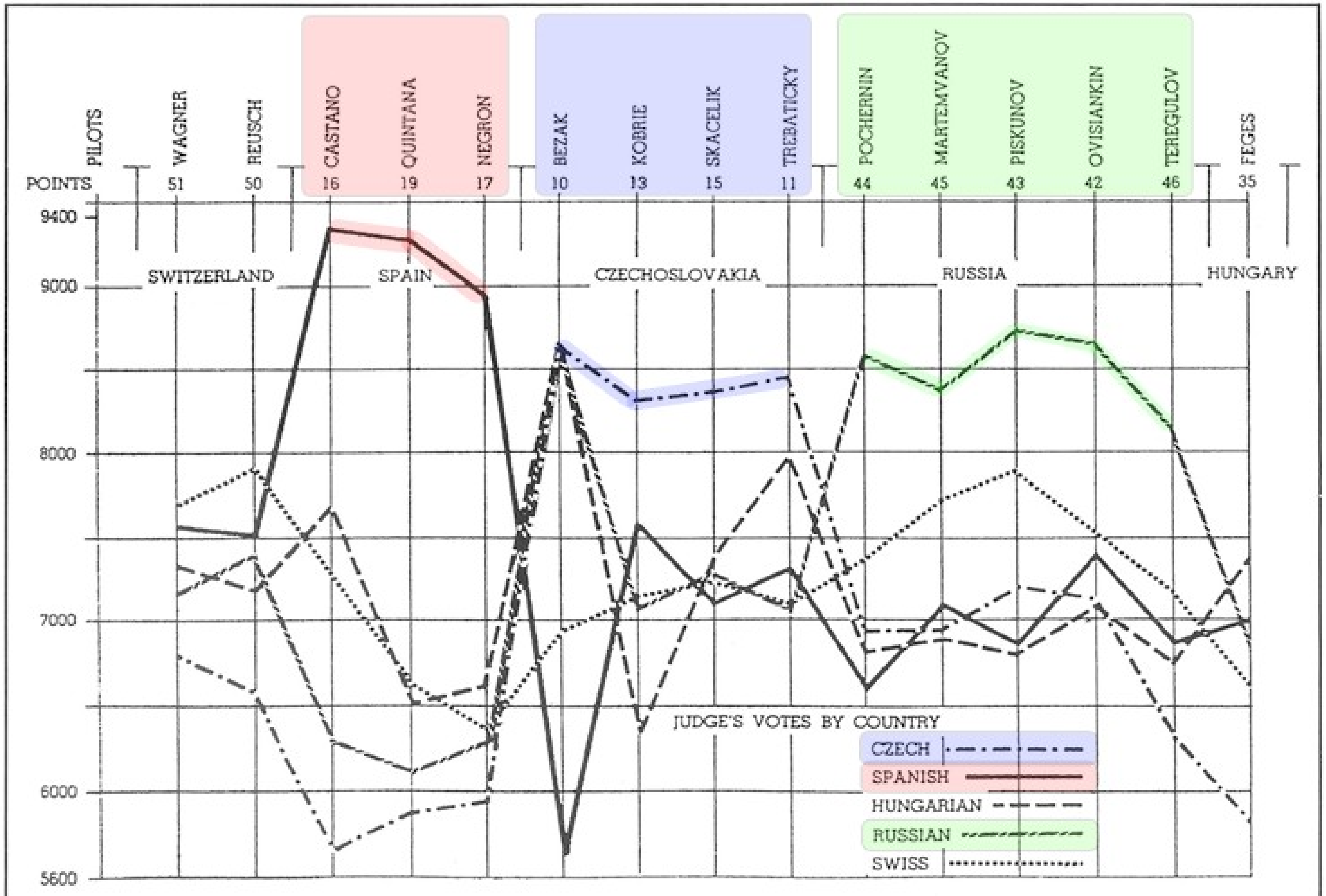
Let's look at:

1. **Why and how CIVA calculates the Pilots scores so that they are FAIR**
2. **How we review the performance of each Judge, comparing their marks with the statistical "average" of the output from whole judging panel**

CIVA / FAI
Seminar

Why 'FairPlay' and ACRO?

Is this what you'd call "Fair play" ?



Graph of the judging in WAC 1964, Bilbao.

The FairPlay Statistical System

Why do we need it ?

- Judges don't all see the same things all the time
- We must eliminate style and unconscious bias

- Small differences are OK
- Major differences are problems to be resolved in a sensitive and appropriate manner

Causes:

- Poor team work
- Poor understanding
- Poor application of the rules

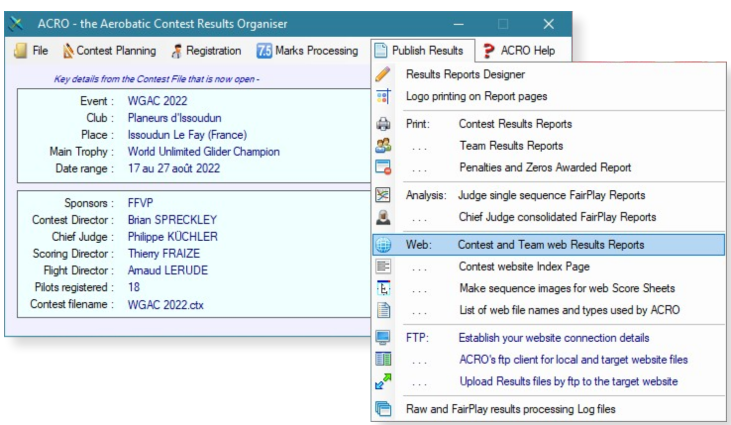
How does FPS work ?

1. Divides the figures into suitable groups by K-factor & figure type
2. Normalises the groups of marks to eliminate individual judging style
3. Sets 'wrong' HZ's and marks and also any 'AV's to "*Missing*"
4. Tests every mark, and if any are not acceptable or "*Missing*" it replaces them with a calculated Fitted Value
5. Makes a table of scores, normalises them and tests again for BIAS
6. Subtracts the penalties to give the sequence Final Results

The ACRO scoring software includes both Raw Grade scoring and the CIVA FairPlay System

For ACRO – look at:
https://www.acro-online.net/

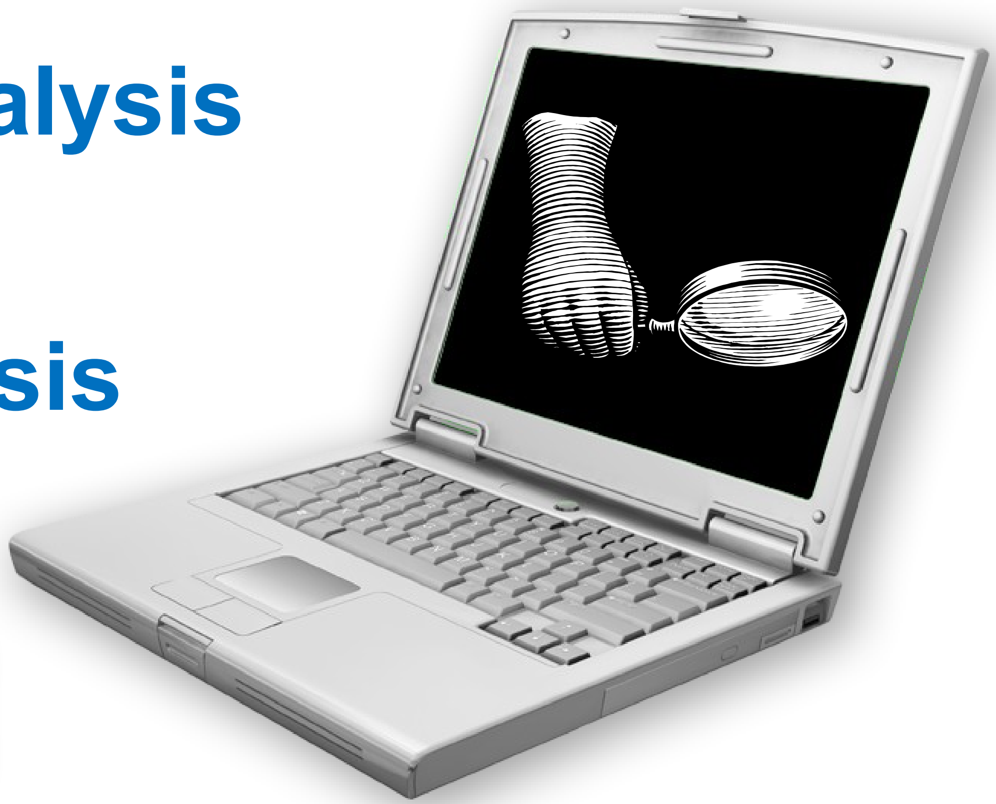
Includes a very detailed explanation of the complete FairPlay system



CIVA / FAI Seminar

In ACRO - Two useful analyses:

- The Judges Individual Analysis
- The Judges Overall Analysis



Judge Individual Analysis example

The judges raw grade for each pilot is shown in italic type.

The normalised grade is shown below the raw grade, rounded to 2 decimal places. ¶

¶ Note the system works in double-precision mode using 16 significant characters, for example 123.456789012345

The printed output is rounded to two decimal places for clarity.

Example ONLY !

The standard data describing the event, judge, place, date, level and sequence.

Pilots are presented in the rank order of their final FPS scores PRIOR to the deduction of penalties.

Where an FPS fitted value is substituted for the judges grade it is boxed in red and the anomaly identified.

Reasons are:
Hi – the grade is too high
Lo – the grade is too low
6R – the 60% rule is applied

Pilots with the same nationality as the judge have a different back-colour to show this association

The FPS Ranking Index (RI) for this judge.

Summary of the grades revised to fitted values.

The Histogram shows judges use of each raw grade compared to post-FPS all judges average use.

Histogram key.

Single Sequence FPS Analysis for Judge 6 Violeta Geminaite (LTU)

WAC 2022, Lotnisko Leszno, 3rd to 13th AUG 2022

Unlimited - Power, Programme 3: Free Unknown #2

Colour codes: *= Own nation* *= Panel or neutral* *= Low value* *= High value*

FP Rank before Penalties	Fig-1	Fig-2	Fig-3	Fig-4	Fig-5	Fig-6	Fig-7	Fig-8	Fig-9	Fig-10	Fig-11	Fig-12	Fig-13	Fig-14	Posi	No.	From RI marks x K's: RI / FP	J-rank	Diff
1: Florent Oddon	*8.0*	*9.5*	*8.5*	*9.0*	*8.0*	*8.5*	*9.0*	*9.0*	*9.0*	*9.0*	*9.5*	*9.0*	*9.0*	*8.0*	*8.5*	*0*	*4461.25*	*1*	
FRA Extra 330SC F-TGCI	8.03	9.35	8.25	8.66	7.84	8.31	8.66	8.38	8.99	8.66	9.50	8.85	8.84	7.79	8.83		4460.72		
2: Rob Holland	*9.0*	*9.0*	*8.0*	*8.5*	*8.5*	*8.5*	*8.0*	*9.0*	*8.5*	*9.0*	*8.5*	*8.5*	*9.0*	*8.0*	*9.0*	*0*	*4395.66*	*3*	*-1*
USA MXS F-WPAE	8.87	8.73	7.84	8.31	8.17	8.43	7.65	8.85	8.30	8.38	8.25	8.22	8.91	7.79	9.50		4391.65		
3: Olivier Masurel	*8.5*	*8.0*	*8.0*	*9.0*	*8.5*	*9.0*	*8.5*	*9.0*	*8.0*	*8.5*	*7.5*	*8.5*	*8.5*	*8.0*	*9.0*	*0*	*4344.82*	*4*	*-1*
ESP Extra 330SC D-ECYZ	8.45	8.24	7.78	8.66	8.38	8.92	8.17	8.38	7.87	8.16	8.49	8.18	8.30	7.79	9.50		4354.95		
4: Louis Vanel	*8.5*	*9.5*	*8.5*	*8.5*	*8.5*	*9.0*	*8.0*	*9.5*	*9.0*	*8.5*	*9.0*	*8.5*	*8.0*	*7.5*	*8.0*	*0*	*4305.17*	*5*	*-1*
FRA Extra 330SC F-HMKF	8.45	9.35	8.25	8.22	8.38	8.92	7.69	9.00	8.99	8.16	8.91	8.18	7.75	7.32	8.17		4304.04		
5: Alexandre Orlowski	*8.0*	*9.5*	*8.5*	*9.5*	*8.0*	*9.0*	*8.5*	*9.5*	*9.0*	*8.5*	*9.0*	*8.5*	*9.0*	*8.0*	*9.0*	*0*	*4446.63*	*2*	*+3*
FRA Extra 330SC F-TGCI	8.03	9.35	8.25	9.09	7.84	8.92	8.17	9.00	8.99	8.16	8.91	8.18	8.84	7.79	9.50		4446.84		
6: Jeff Boerboon	*8.5*	*Lo 7.0*	*8.0*	*9.0*	*8.0*	*8.0*	*8.0*	*8.5*	*9.0*	*9.5*	*8.0*	*8.5*	*9.5*	*8.0*	*8.5*	*1*	*4266.15*	*7*	*-1*
USA Extra 330SC F-HMEL	8.45	8.73	7.84	8.92	7.69	7.87	7.65	8.18	8.84	9.00	7.78	8.22	9.50	7.79	8.83		4277.31		
7: Victor Lalloue	*8.0*	*8.5*	*8.5*	*7.0*	*7.0*	*9.0*	*8.0*	*8.5*	*8.0*	*8.0*	*8.5*	*8.0*	*8.0*	*7.5*	*8.0*	*0*	*4021.39*	*13*	*-6*
FRA Extra 330SC F-TGCJ	8.03	8.11	8.25	6.91	6.78	8.92	7.69	7.76	7.87	7.65	8.32	7.50	7.75	7.32	8.17		4019.24		
8: Castor Fantoba	*8.0*	*8.0*	*9.0*	*8.5*	*8.5*	*9.0*	*8.5*	*9.0*	*7.5*	*8.5*	*8.5*	*8.5*	*8.5*	*7.0*	*8.0*	*0*	*4208.89*	*9*	*-1*
ESP Suchoi 26 M EC-HPD	8.03	7.84	8.73	8.25	8.22	8.85	8.16	8.92	7.31	7.76	8.17	8.32	8.30	6.84	8.17		4209.36		
9: Thomas Libaud	*8.0*	*9.0*	*8.5*	*7.0*	*8.0*	*9.0*	*9.5*	*9.0*	*8.5*	*8.0*	*8.5*	*8.0*	*8.5*	*8.0*	*8.5*	*0*	*4251.43*	*8*	*+1*
FRA Extra 330SC F-HMKF	8.03	8.73	8.25	6.91	7.84	8.92	9.14	8.38	8.43	7.65	8.32	7.50	8.30	7.79	8.83		4249.47		
10: Florian Bergér	*6.5*	*9.0*	*7.5*	*8.5*	*7.0*	*9.0*	*8.0*	*9.0*	*7.5*	*7.0*	*7.5*	*7.5*	*8.0*	*7.5*	*8.5*	*0*	*3904.22*	*16*	*-6*
33: Dennis Stächelin	*7.0*	*7.5*	*8.5*	*6.5*	*6.0*	*HZ*	*5.0*	*8.0*	*5.5*	*8.0*	*7.0*	*8.5*	*7.0*	*7.0*	*8.0*	*0*	*3210.07*	*34*	*-1*
GER Extra 330SC F-HLAS	7.20	7.31	8.11	6.38	6.04	HZ	4.60	7.69	5.07	7.13	6.73	8.32	6.65	6.84	8.17		3209.34		
34: Andrei Mihai Serbu	*8.0*	*9.0*	*8.0*	*5.0*	*Lo 0.0*	*8.5*	*5.0*	*8.0*	*7.0*	*8.0*	*8.5*	*HZ*	*7.0*	*6.5*	*7.0*	*1*	*2978.93*	*36*	*-2*
ROU Extra 330SC YR-EXC	8.03	8.73	7.78	5.17	5.18	8.31	4.80	7.13	6.75	7.65	8.32	HZ	6.65	6.37	6.83		3212.72		
35: Alex Balcells Querol	*6.5*	*8.5*	*6.5*	*6.0*	*6.0*	*8.5*	*6.5*	*HZ*	*5.0*	*7.0*	*8.5*	*8.5*	*7.5*	*6.5*	*6.5*	*0*	*3312.93*	*30*	*+5*
ESP Extra 330SC D-ECYZ	6.79	8.11	6.38	6.04	5.71	8.31	6.25	HZ	4.51	6.63	8.32	8.18	7.20	6.37	6.17		3312.40		
36: Leone Gambardella	*7.5*	*Hi 6.5*	*6.5*	*7.5*	*6.0*	*8.5*	*7.0*	*5.0*	*5.5*	*7.0*	*9.0*	*6.0*	*6.5*	*5.0*	*8.0*	*1*	*3246.86*	*32*	*+4*
GRE CAP 232 D-ETOJ	7.62	0.15	6.25	6.87	5.62	8.31	6.85	5.17	5.18	6.05	8.91	5.63	6.11	4.94	8.17		3054.78		
37: Markus Leibundgut	*7.0*	*7.5*	*7.5*	*9.0*	*8.0*	*9.0*	*7.5*	*HZ*	*HZ*	*8.5*	*9.5*	*7.5*	*7.5*	*0.0*	*7.0*	*0*	*2845.00*	*38*	*-1*
SUI Extra 330SC HB-MLG	7.20	6.83	7.21	8.73	7.65	8.92	7.32	HZ	HZ	7.76	9.50	7.31	7.20	0.00	6.83		2841.48		
38: Alexander Van Den Broeck	*6.0*	*8.5*	*7.5*	*4.0*	*5.0*	*8.0*	*6.0*	*7.0*	*5.0*	*7.0*	*8.0*	*6.0*	*7.0*	*4.0*	*6.0*	*2*	*2929.55*	*37*	*+1*
BEL Extra 330SC F-HMTM	6.37	8.11	7.32	CHZ	4.64	7.69	5.77	5.89	4.51	6.63	7.72	CHZ	6.65	3.99	5.50		2539.64		
39: Philippe Varinot	*6.0*	*8.5*	*6.0*	*HZ*	*5.0*	*8.0*	*6.5*	*9.0*	*7.0*	*6.0*	*7.5*	*HZ*	*HZ*	*5.0*	*6.5*	*0*	*2335.20*	*39*	
LUX CAP 232 F-HIST	7.46	8.11	5.92	HZ	4.64	7.69	6.25	8.38	6.75	5.62	7.13	HZ	HZ	4.94	6.17		2470.94		
40: Hanspeter Rohner	*HZ*	*HZ*	*6R 6.5*	*7.0*	*8.0*	*8.5*	*6.5*	*5.5*	*HZ*	*7.5*	*Lo 7.0*	*6.0*	*HZ*	*3.0*	*7.5*	*6*	*1712.84*	*41*	*-1*
SUI Extra 330SC HB-MTR	6.77	HZ	3.18	6.26	7.65	8.31	6.38	5.60	HZ	CHZ	8.97	CHZ	6.55	3.04	7.50		2264.29		
41: Gianfranco Cillario	*7.0*	*9.0*	*5.0*	*HZ*	*HZ*	*HZ*	*6.0*	*8.0*	*6.5*	*5.5*	*8.0*	*HZ*	*HZ*	*HZ*	*6.5*	*0*	*1834.71*	*40*	*+1*
ITA CAP 232 F-GXCM	7.20	8.73	4.98	HZ	HZ	HZ	5.77	7.13	6.19	5.11	7.72	HZ	HZ	HZ	6.17		1830.44		
42: Manuel Rey	*7.5*	*HZ*	*6.0*	*9.0*	*HZ*	*8.0*	*6.5*	*8.0*	*6.0*	*0.0*	*4.0*	*8.0*	*HZ*	*0.0*	*5.5*	*1*	*1704.08*	*42*	
ESP Extra 330SC D-ECYZ	7.31	HZ	5.62	8.73	HZ	7.69	6.19	7.13	5.92	0.00	3.84	7.72	HZ	CHZ	4.84		1696.68		
	1	*2*	*3*	*1*	*1*	*0*	*1*	*1*	*1*	*2*	*1*	*4*	*1*	*1*	*0*	*20*	*2*		*142*

Figure Anomalies Summary

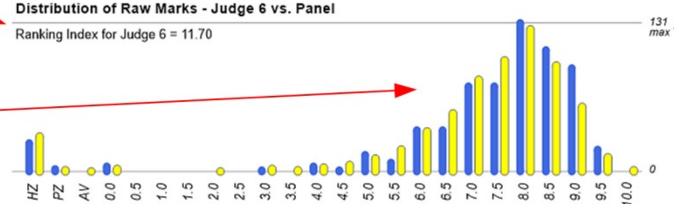
	Judge	*O/all*
Mark *to* CHZ	8	60
PZ *to* CHZ	-	2
AV *to* CHZ	-	1
AV *to* Mark	-	2
PZ *to* Mark	1	9
HZ *to* Mark	2	13
Lo *to* Mark	5	31
Hi *to* Mark	2	13
The 60% Rule	1	7

Judge Anomalies vs. totals from all Judges

This Judge: Raw Marks
Panel Avge: After FPS

Distribution of Raw Marks - Judge 6 vs. Panel

Ranking Index for Judge 6 = 11.70



Calculations by: FairPlay v2 (non-scoring CJ + CHZ Summary)
Aerobatic Contest Results Organiser, ACRO Version 5.2 Build: 18/01/23
This report created at 10:23 on Monday 23 January 2023

CIVA / FAI Seminar

In this column the number of FPS fitted values for this pilot is cumulated.

The upper number in each pair is the judges raw score for each pilot, cumulated from the raw data prepared for the RI and each figure's K factor.

The lower number is the FPS score for this judge per pilot, cumulated from the judges own final FPS grades and each figure's K factor.

This is the rank for each pilot based on this judges raw score.

The **difference** between the judges raw pilot rank and the pilot's final overall FPS rank (excl. penalties) is given.

Where the FPS confidence test shows the judges sequence score to be too high or low and replaces it with a fitted value, the score is boxed in red and the anomaly identified.

A Hard Zero is here replaced by a fitted value because the Chief Judge did not give a CHZ.

Cumulative totals line for anomalies in the above data.

Number of times the most used grade was applied.

Judge Overall Analysis example

The standard data describing the sequences in this analysis and the event, place and date.

The use of marks by each judge, cumulated in 5 categories.

Cumulative totals in each analysis area from all judges.

Comparison of Judges marking style against the Panel Average style

The FPS figure anomalies from each judge, cumulated in 9 categories.

The FPS sequence anomalies from each judge, cumulated by pilots nationality.

Example ONLY !

Analysis of Judges Combined Anomalies

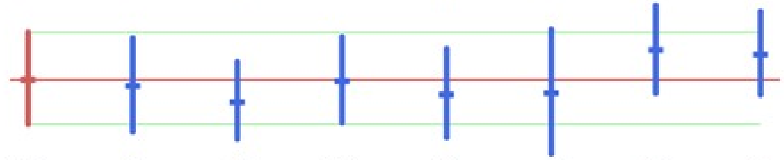
Sequences: Programme 1: Free Programme (UNL), Programme 2: Free Unknown (UNL)

17th FAI EAC
Touzim CZE
02. - 12.Sep.2010

	All Judges		RUS		FRA		UKR		RUS		HUN		SUI		LTU	
			Vladimir Kotelnikov		Francis Itier		Lyudmila Zelenina		M. Bezdenezhnykh		Gabor Talabos		Georges Brocard		Algis Orlickas	
Use of Marks:	No	%	RI 4.61 [2]		RI 5.00 [2]		RI 5.44 [2]		RI 5.68 [2]		RI 6.34 [2]		RI 7.94 [2]		RI 10.37 [2]	
HZ - Hard Zeros	74	*1.1*	11	*1.1*	10	*1.0*	12	*1.2*	10	*1.0*	10	*1.0*	10	*1.0*	11	*1.1*
PZ - Perception Zeros	35	*0.5*	6	*0.6*	1	*0.1*	3	*0.3*	7	*0.7*	15	*1.5*	2	*0.2*	1	*0.1*
Marks from 0.0 to 6.5	988	*14.1*	151	*15.1*	173	*17.3*	137	*13.7*	156	*15.6*	200	*20.0*	110	*11.0*	61	*6.1*
Marks from 7.0 to 10.0	5888	*84.1*	828	*82.8*	816	*81.6*	845	*84.5*	825	*82.5*	774	*77.4*	875	*87.5*	925	*92.5*
AV - averages	15	*0.2*	4	*0.4*	0	*0.0*	3	*0.3*	2	*0.2*	1	*0.1*	3	*0.3*	2	*0.2*
Total marks ... (Pilots/Judge)	7000		1000 ... (81)		1000 ... (81)		1000 ... (81)		1000 ... (81)		1000 ... (81)		1000 ... (81)		1000 ... (81)	

		All Judges	RUS	FRA	UKR	RUS	HUN	SUI	LTU
Style Comparison:	*Average:*	7.39	7.34	7.20	7.38	7.27	7.28	7.64	7.61
	Style:	1.59	1.61	1.34	1.48	1.54	2.17	1.52	1.45

Average and Style of Judges Raw Marks compared to normalised all-Judges average
(Style = 2 x SD)



Vertical axis scale:
1 mark = 31mm

		All Judges	RUS	FRA	UKR	RUS	HUN	SUI	LTU
Raw Marks Factors:	*Average %:*	100	99	97	100	98	98	103	103
	Style %:	100	102	85	93	97	137	96	91

Figure anomalies	No	%	RUS	FRA	UKR	RUS	HUN	SUI	LTU
HZ to fitted value	5	*0.1*	-	1	1	-	2	-	1
Mark to confirmed HZ	7	*0.1*	-	2	-	1	2	1	1
PZ to confirmed HZ	0	*0.0*	-	-	-	-	-	-	-
PZ to fitted value	23	*0.3*	3	1	-	4	14	1	-
AV to confirmed HZ	1	*0.0*	-	-	-	-	1	-	-
AV to fitted value	14	*0.2*	4	-	3	2	-	3	2
Lo to fitted value	70	*1.0*	9	6	12	11	13	7	12
Hi to fitted value	44	*0.6*	8	4	6	1	11	5	9
The 60% Rule	7	*0.1*	1	1	1	1	1	1	1
Total figure anomalies	171		25	15	23	20	44	18	26

Sequence anomalies		All Judges		RUS		FRA		UKR		RUS		HUN		SUI		LTU	
CZE	Czech Republic	3 Lo	3 Hi	-	3 Hi	-	-	-	-	1 Lo	-	-	-	1 Lo	-	1 Lo	-
FRA	France	2 Lo	3 Hi	-	-	-	2 Hi	-	1 Hi	2 Lo	-	-	-	-	-	-	-
GER	Germany	5 Lo	6 Hi	2 Lo	-	-	1 Hi	-	1 Hi	-	-	-	2 Hi	1 Lo	-	2 Lo	2 Hi
GBR	Great Britain	1 Lo	2 Hi	-	-	-	-	-	-	-	-	-	1 Hi	-	-	1 Lo	1 Hi
HUN	Hungary	1 Lo	1 Hi	-	-	1 Lo	-	-	-	-	-	-	-	-	-	-	1 Hi
RUS	Russia	7 Lo	4 Hi	-	-	2 Lo	1 Hi	-	-	-	3 Hi	-	-	3 Lo	-	2 Lo	-
SUI	Switzerland	2 Lo	1 Hi	1 Lo	-	-	-	-	-	-	-	1 Lo	-	-	1 Hi	-	-
ISR	Israel	1 Lo	0 Hi	-	-	-	-	-	-	-	-	-	-	-	-	1 Lo	-
EXP	Expain	2 Lo	1 Hi	-	-	-	-	-	-	1 Lo	-	-	-	1 Lo	-	-	1 Hi
Total sequence anomalies		24 Lo	21 Hi	3 Lo	3 Hi	3 Lo	4 Hi	-	2 Hi	4 Lo	3 Hi	1 Lo	3 Hi	6 Lo	1 Hi	7 Lo	5 Hi

Aerobatic Contest Results Organiser, Version 3.0 build 28-12-10
Calculations by: FairPlay (non-scoring CJ + CHZ Summary) method
This report created at 14:56 on 29 December 2010

Number of sequences judged by each judge.

The FPS RI for each judge, either for a single sequence or averaged for multiple sequences.

Total data in this category per judge.

Percentage that this category represents of each judge's marks.

Totals of figure anomalies in each category per judge.

Grand total of figure anomalies per judge.

Totals of sequence Hi's and Lo's per nationality from each judge.

Data is boxed in blue where the judge and pilot nationalities match.

Grand total of sequence Hi's and Lo's from each judge.

CIVA / FAI Seminar

How to 'de-code' your

Pilots ACRO Raw Marks sheet

The bold header shows the pilot, nationality, team flag and aeroplane details, the level and sequence being flown and the event, place and date.

Figure numbers and K-factors and (for Free programmes) the SuperFamily for each figure.

For a non-scoring Chief Judge, the gradable figures are labelled "OK" whilst figures given a Confirmed Hard Zero are shown as "CHZ".

The Chief Judge has awarded this figure a "Confirmed Hard Zero" and any non-HZ Judges marks are accordingly boxed.

The Positioning mark and if applicable the Harmony mark are shown by their first 4 characters.

Each of the Penalty categories is listed together with the quantity given, the value of the penalty, the deduction(s) to be made in each case, and the total awarded.

The ACRO version and FairPlay settings are shown above the time and date of the report.

Example ONLY !

Raw Marks Check-Sheet

Joe Bloggs Extra 330SC G-ABCD (GBR)

Level: Advanced, Sequence: Programme Q: Known Compulsory

Aerobatic Championships, Mid-Europe, 10-15 August 2011

Chief Judge: Nick Buckenham (GBR) - non-scoring

Judges: 2 - Guy Auger (FRA), 3 - Maciej Bialek (POL), 4 - Bernard Courtois (FRA), 5 - Violeta Gedminaite (LTU)
6 - Philippe Küchler (SUI), 7 - Vladimir Razhin (RUS), 9 - Gabor Talabos (HUN), 10 - Kimmo Virtanen (FIN)
11 - Lyudmila Zelenina (UKR), 12 - Algis Olickas (LTU)

Fig No.	K Factor	CJ	J2	J3	J4	J5	J6	J7	J9	J10	J11	J12	Av'ge marks	Equiv. scores
1	41	OK	8.0	9.0	7.5	8.0	5.5	7.5	8.0	6.0	6.5	9.0	*7.5*	*307.5*
2	41	OK	7.5	6.0	6.5	6.0	AV	8.0	6.0	8.0	8.0	6.0	*5.6*	*227.8*
3	14	OK	7.0	8.0	9.0	7.5	5.0	5.0	8.0	6.5	6.0	8.0	*7.0*	*98.0*
4	17	CHZ	HZ	$\boxed{0.0}$	$\boxed{0.0}$	$\boxed{4.5}$	$\boxed{4.5}$	HZ	$\boxed{2.0}$	$\boxed{3.5}$	$\boxed{0.0}$	$\boxed{4.5}$	*0.0*	*0.0*
5	31	OK	6.0	7.5	5.0	8.0	8.0	8.0	6.5	7.5	6.5	6.5	*7.0*	*215.5*
6	29	OK	5.0	6.5	6.0	4.5	6.0	5.0	9.0	7.5	8.0	5.0	*6.3*	*181.3*
7	34	OK	5.5	7.0	6.5	7.5	7.5	6.5	5.0	6.5	5.0	6.5	*6.4*	*215.9*
8	28	OK	7.5	6.0	8.0	6.5	$\boxed{HZ}$	6.0	6.5	7.5	9.0	5.0	*6.9*	*192.9*
9	20	OK	6.5	5.0	7.5	7.5	6.5	6.5	8.0	5.0	8.0	7.5	*6.8*	*136.0*
Posi	40		7.5	5.5	6.0	6.5	5.5	5.5	7.0	5.0	5.0	5.0	*5.9*	*234.0*

Penalties:	Qty	Value	Deduct
Too Low	0	200	0.0
Too High	0	30	0.0
Box Outs	1	20	20.0
Interruptions	0	100	0.0
Insertions	1	100	100.0
Missed Slot	0	200	0.0
Trg. Violation	0	30	0.0
Faulty W/Rocks	0	30	0.0
Other Penalty	0	10/sec	0.0
Total awarded:			120.0

Max. possible score: 2950.0

Raw equiv. score total: *1808.8*

Minus 120 penalty points: *1688.8*

Pre-FP score estimate: *57.2%*

Joe Bloggs

Pilots signature:

Calculations by: FairPlay (non-scoring CJ + CHZ Summary)
Aerobatic Contest Results Organiser, Version 3.1 Build 29-03-12
This report created at 09:03 on 06 April 2012

The Chief Judge (here with non-scoring or scoring status) and the Judges details are listed in full.

An "Average" mark has been requested by this Judge, and FPS will subsequently provide a Fitted Value.

For information purposes only and to assist Pilots to quantify the relative value achieved in each figure, the two right-most columns display the average mark for all Judges together with the "equivalent" score.

These are NOT formal FPS steps, nor is this data used in any subsequent calculations.

This Hard Zero (HZ) will be replaced by an FPS Fitted Value because the majority decision for this figure, as recorded by the Chief Judge, was not a Confirmed Hard Zero (CHZ)

This is the maximum possible score for this sequence.

For information purposes only, the three lines in italic script quantify the possible "equivalent" pre-FPS score derived from the raw marks, and a valuation of the percentage that would be achieved by this estimation.

Again … these are NOT formal FPS steps, nor is this data used in any subsequent calculations.

CIVA / FAI Seminar

PILOTS . . .

- AVOID LOWS: DON'T FLY
  ANYWHERE NEAR THE LOW LINE !
- Don't get clever with the rules
- Do ***not*** show off – Safety is always crucial
- Before you part with your Euros/$/Roubles . . . .
  Read the Rules & Ask for Advice!
- Get the opinion of your Team Manager
- Check with the Chief Judge if the problem that
  you have is a technical issue
- Be factual . . . . NOT emotive !

JUDGES and PILOTS

- Treat judges fairly EVEN IF YOU THINK THEY ARE *rubbish* !! They do actually work very hard
- Do not expect them to favour the “Home Team”
- Remember that during a competition a judge may have looked at as many as 4,500 figures, and He/She *will* make mistakes. That is why we have at least 7 judges.

Open Forum

- Go on – ASK A QUESTION !!
- What do you think ?
- What can you add ?
- What *else* would you like explained ?

Feedback ?