

AGENDA ITEM 6.1

REPORT OF THE PRESIDENT OF THE INTERNATIONAL JURY

XXIV. WORLD AEROBATIC CHAMPIONSHIPS

Granada, Spain

24 June – 4 July 2007



Mike Heuer

Introduction

The XXIV World Aerobatic Championships were held in Granada, Spain on 24 June to 4 July 2007 at the Armilla Military Base. The organizers had the full cooperation of the Spanish Air Force in organizing the event.

51 pilots from 11 countries competed in the event. One of these pilots was an independent (Hubie Tolson of the USA).

The World Aerobatic Champion is **Ramon Alonso** of Spain. Ramon flew his Sukhoi SU-31 (EC-HGL) to victory and it was the culmination of a long career in aerobatics. Ramon was previously the European Aerobatic Champion in 2002 in Lithuania. He started his aerobatic competition career in 1987 at the EAC in Speichersdorf, Germany and also served as the CIVA Delegate of Spain for many years.

Women's World Aerobatic Champion is **Svetlana Kapanina** of Russia. This was Svetlana's sixth capture of the World title. She flew a Sukhoi SU-26M3 (RF00631) to victory.

Team Champion's in the Men's Division were (1) France, (2) Spain, and (3) Russia. In the Women's Division were (1) Russia and (2) USA. The requirement to have three Teams present to award Team Champion titles was waived for this WAC as only two Women's Teams were present for the competition.

My congratulations to all the winners.

The International Jury

The International Jury specifically oversees the operation of the board of judges, the flight line, the meteorological observations, the computer scoring, and Line Judges. In other words, the Jury's work is principally concentrated on the operational areas of the competition itself. In



addition, we hear complaints and protests, act on technical problems with competition aircraft, supervise briefings and drawings of lots, control the Unknown programmes, and hold meetings with the organisers as necessary. It is work which requires detailed knowledge of the wording and intent of the regulations.

Our Jury this year was comprised of Bob Chomono (France) and L-G. Arvidsson (Sweden). I would like to thank each of them for their time and efforts. Each contributed in their own way and all spent long hours at the airport and willing to do anything necessary to properly carry out their duties.

This was the second Championships for me with a 3-person Jury, since CIVA's decision in November 2005 to reduce the Jury size to help with organizational costs. Last year at WAAC, working with a 3-person Jury was not a problem. Of course, much of the time we had nothing to do in Poland because of bad weather and there were no Line Judges.

However, this year in Spain, the workload was much greater. I believe the Jury was too small. The workload was not only a concern but when it came time to make important decisions, such as protests, having more people to discuss these matters is a huge asset. Nevertheless, I cannot recommend a 5-person (4 plus President) Jury at this time (as allowed in Sporting Code, General Section) because I remain concerned about contest organizational costs. Let us give it another year.

Some months before the contest, the organizers applied to the Bureau of CIVA to delete the Line Judges. This was denied by the Bureau.

Arrival at the Contest

Experience has shown on many occasions that it is very wise for the Jury President and/or Chief Judge to arrive early in order to advise the Contest Director on any organizational difficulties which invariably arise in the days immediately preceding the competition. I did arrive two days early and was able to get some work done before the competition began. It was very useful and I appreciated the Spanish organization accommodating me during that time. We were housed at a 4-star hotel, the Gran Hotel MA Luna de Granada.

Prior to the start of the competition, the Jury members were able to inspect the facilities and the competition setup. The Judges' position setup was supervised by Graham Hill, Assistant to the Chief Judge.

Box markings and the contest layout were satisfactory. Practice by various Team members had been taking place at Armilla prior to the WAC and they reported to me the markings met CIVA standard even before I actually arrived on site.

Unfortunately, there was no office space made available to the International Jury and in order to be close to the flight line, we moved into the Scoring Office at the base of the tower. In the end,



this worked out well as we worked closely with Michel Dupont throughout the competition and close proximity helped us resolve problems quickly. Working conditions were difficult, as Michel states in his report to CIVA, as it was very hot in the building and there was no ventilation.

The Jury did not have any transport available except for the buses which brought the Judges to the airport each morning and returned them late at night. If we required to be taken out to inspect line judge positions or to the judging line, this had to be arranged with the Contest Director.

The Jury also did not have any radios available or mobile phones, except our personal ones, and communication was difficult. Because the radio communications were mostly conducted in Spanish, I doubt if it would have been helpful in any event. Graham Hill brought his own radios to communicate with the Jury. When important communication was necessary, we frequently walked to whoever or wherever we needed.

Briefing for Judges

A briefing for Judges was held on the first day and a currency examination was administered in accordance with the rules.

Judges' Position

The Judges' positions were satisfactory though the afternoon position was very difficult and dusty. The Judges had to work in environmental conditions that were very trying and I pay tribute to their dedication and hard work.

Judges were provided comfortable chairs and umbrellas. The Chief Judges' station was also satisfactory and was in a tent with refreshment and video equipment.

Video equipment was adequate and was used by the Chief Judge on appropriate occasions.

A Jury member was present at the judging line at all times during the competition.

Computer & Scoring

The computer scoring for the WAC was done this year using the latest version of the CIVA Aerobatic Contest Managing System (ACMS) developed by Michel Dupont. Michel was on hand at WAC to run the program and was assisted by Françoise Chomono. He has reported in detail on his own experiences at WAC and I will not repeat them here.



Michel has done thousands of hours of work these past several years on CIVA's behalf and I pay tribute to his volunteerism and dedication to this project. He provided a software program we badly needed and which was a huge improvement over previous versions.

As Michel's report indicates, much of his work over the past winter and spring was devoted to a improved implementation of the Fair Play System (FPS). My thanks to Michel for his dedication to CIVA and our sport and to Alan Cassidy and Steve Green who have worked diligently as members of the FPS Development Group to fine-tune our program.

Three problems did surface prior to or during the competition:

1. The first shipment of sheets for the Axiome optical reader (which was on hand and brought by Michel personally to Granada) were lost. The second shipment's sheets were misprinted and unusable. Thus, Francoise and Michel were forced to manually enter all scores into ACMS during WAC. It was a tremendous work.
2. Problems in processing of soft zeros were uncovered and corrected after the WAC and in time for the EAAC in Finland. We took the decision not to alter the ACMS during WAC because it might make it unstable. The issues were very small and affected pilots very far down in the standing. Michel covers this in detail in his report.
3. JPI did not work properly. Thus, the International Jury was not able to carry out ACMS judging analysis in accordance with the rules. Manual analysis was done, however, and made available to the Chief Judge.

JPI has now been fixed in ACMS and as soon as it is fully verified, this data will be provided all Judges who participated in WAC.

I would ask CIVA to appreciate what the scoring personnel do for the contest and how it is essential they have the proper equipment and facilities to work. The scoring people not only process the scores - they produce start lists, and print all of the Form A's for the reader when it is in use, print provisional and official results, and make themselves available to the International Jury at all times to resolve problems. Their work makes a competition possible.

My thanks to Michel Dupont and Francoise Chomono.

Unknowns

Regulations concerning the selection of Unknown figures and teams submitting Unknown sequence proposals continue to work very well. Teams propose Unknowns in sufficient numbers to offer the Jury excellent choices. The sequences are usually well thought out and flyable. This year, 8 countries submitted Unknown proposals for Programme 2 and 5 countries for Programme 3. These sequences are attached to this report.



There were no protests over the Unknown sequences approved by the International Jury.

Line Judges

As indicated in the Chief Judge's report as well as "urgent proposals" submitted after the event, it can easily be said the most controversial aspect of WAC this year was the line judging.

Penalties for boundary infringements in Programme Q were removed by the International Jury for all pilots as the sighting devices were not properly in place for the entire flight programme. The reason for this will be explained by Contest Director Antonio Quintana. However, for all subsequent programmes the proper devices were in place and well constructed. They were inspected by the other two members of the International Jury who also have photographs of the devices available for anyone who wishes to see them.

"Box outs" were called in by the four Line Judges to a Spanish person at the Chief Judge's station (Antonio Quintana's daughter who was very cooperative and conscientious). She kept her own sheets. When a box out was verified by two Line Judges, this information was passed on to Fred Weaver, who sat next to the Chief Judge at all times, and penalties recorded on a master worksheet. Penalties were indicated on forms sent back to the Scoring Office.

Copies of the worksheets were provided all Teams later in the contest. However, I do agree with the observation that this could have been handled in a more satisfactory way. Sheets kept by the Line Judges themselves (and available for later pilot inspection) as well as a Chief Judge's Penalty Worksheet in a standard CIVA format and used at all Championships must be required. I have attached some ideas for forms to this report.

The Jury received complaints from Teams that the sheets should be made available for inspection and possible protest. For the WAC in Granada, these "sheets" were the worksheets kept at the Chief Judge's station. These were later distributed in the mailboxes to all Teams. But a more formal method is needed and I will be sure to provide all contest organizers in 2008 with standard CIVA forms.

The problem may also have arisen as a result of the fact that a WAC has not used Line Judges since 2003 in the USA. European organizers are not used to having them. However, I pledge to do everything possible to make sure the "box outs" are recorded in a way that is more transparent and open in the future and this information will be provided all competitors.

I feel the rules we have today are adequate to handle future Championships and do not recommend any changes.

Protests and Complaints

There were several protests filed during WAC.



Protest and complaint details and information regarding their disposition is as follows:

Protestor	Summary	Jury Action
USA Spain	The protests alleged that Pilot #51 in Programme 2 (Oleg Schpolyanskiy) did not fly figure #3 in his sequence in accordance with Form B. Figure #3 included a 2-point roll on a vertical down line. Two HZ's, one SZ, and 5 marks were awarded this figure by the Judges (ranging from 6.0 to 8.5). The Spanish protest contended that a $\frac{3}{4}$ roll followed by a $\frac{1}{4}$ roll were flown instead of the 2-point roll.	Protest upheld. The video was reviewed by all Jury members and it was determined that the pilot over-rotated the first portion of the roll by a considerable amount (in excess of 45 degrees). Though an HZ was possible here, depending on the amount of over-rotation, the Jury decided to change all non-zero marks to SZ's to give the benefit of doubt to the pilot. However, there was no doubt on the part of the Jury the very least the figure deserved was an SZ if not an HZ.
Russia	The protest contended that all box penalties for Programme 1 should be considered invalid because penalty sheets were not available to the pilots for checking.	Protest denied. The organization did make these sheets available to all Teams, though late, and the Jury determined the procedure for recording "outs" was satisfactory during Programme 1. The Jury did not agree to delete the penalties as this would have been unfair to competitors who managed to fly the sequence without penalty.
Spain	Pilot #26 (Juan Velarde) was awarded a CHZ by the Chief Judge for figure #5 in his sequence which included an 8-point roll. Judges awarding an HZ (5 of the 8) contended only 7 points were performed.	Protest upheld. The Jury reviewed the video and determined the pilot did fly an 8-point roll. The CHZ was removed.
Spain	Complaint. Spain contended that Pilot #32 in Programme 3 (Renaud Ecalle) signaled start of the sequence improperly by performing the wing-dips on a vertical line and then pulling to inverted to begin the sequence.	No action by the Jury. Regulations were not clear on this point and benefit of doubt given to the pilot.
Spain	Complaint. Pilot Sergio Pla contended he should not have received 4 box outs.	The Jury reviewed the master worksheet and determined that 4 outs were properly recorded



		for figures 5, 7, 9, and 10. No action taken by the Jury.
Great Britain	Protest was for outs given to Mark Jeffries (Pilot #29) in Programme 3 on figure #1. The figure was a spin and the protest contended it was not possible for it to have been outside the box.	Protest upheld. Jury member Bob Chomono witnessed the flight and agreed with the protest.
Great Britain	Protest was for outs given to Pilot #39 in Programme 3. The protest agreed two outs were proper but three outs were not.	Protest upheld. Chief Judge confirmed the British view.

There were other verbal “complaints” during the WAC which the Jury dealt with but I have no written record of these. These are dealt with throughout the day as the Jury members circulate around the airfield doing their work. These were disposed of as they came up. The complaint system is a good one and I encourage it as it can head off protests later.

I would remind Teams that the Jury only wants to see a fair result for Championships and if there are problems during the competition, we encourage you to bring them to our attention for correction. No contest is perfect but we try hard every day to make them better.

Technical Issues

There were no significant mechanical issues with aircraft during WAC. The Jury did not have to take any actions during the Championships regarding mechanical failures or utilize the “sterile area”. There were some minor breakages but these were repaired and pilots ultimately flew. No flights were lost due to mechanical failure.

The Final Freestyle

In the case of Granada, Programme 4 was not really “Final”. I do not believe this name is appropriate anymore. The Spanish organizers had requested that Programme 4 be flown on July 1st (a Sunday) so spectators could enjoy the Championships.

At first, I thought it was necessary to get the approval of the Team Managers to do this, but on examination of the Minutes of the CIVA meeting in 2006, we found that the organizers had requested this as a part of their bid for the Championships and the bid, of course, was approved. The Jury took this as approval to run Programme 4 on July 1st. No Team Manager agreement was necessary.

A very nice crowd of spectators turned out on that day and it was successful. Pilot names to fly in Programme 4 were submitted by Team Managers at my request. 16 pilots ultimately flew the



programme. Most pilots flew actual 4-Minute Freestyles – others used it as a practice opportunity which provided little to the spectators who had come to watch more spectacular sequences. I was quite disappointed in this but happy to see the majority of the pilots flying the sequence in the spirit it was intended.

In Conclusion ...

This was a very tough competition – with flying at this level and intensity, emotions can become raw and compounded with the heat, there were many stressful moments. It was one of the most difficult I have attended in my 21 years of service on International Juries.

Of course, the reward comes at the end for all of us on the Jury, as the contest comes to a close with all flight programmes flown (finished early in Granada) and above all, safely and without incident. It is also a pleasure to work with individuals like Manuel Ugarte and Juan Castano who, above all, are gentlemen and friends.

That said, my thanks to Antonio Quintana, the Contest Director, for his cooperation with the International Jury and honoring our requests and answering our questions. Spain has now organized three World Aerobatic Championships in the past decade and should be commended for this. It is an enormous, complicated, and expensive enterprise and Antonio has taken on the Director's job for two WAC's in a row.

My thanks and congratulations to Antonio Quintana and the entire Spanish organization.

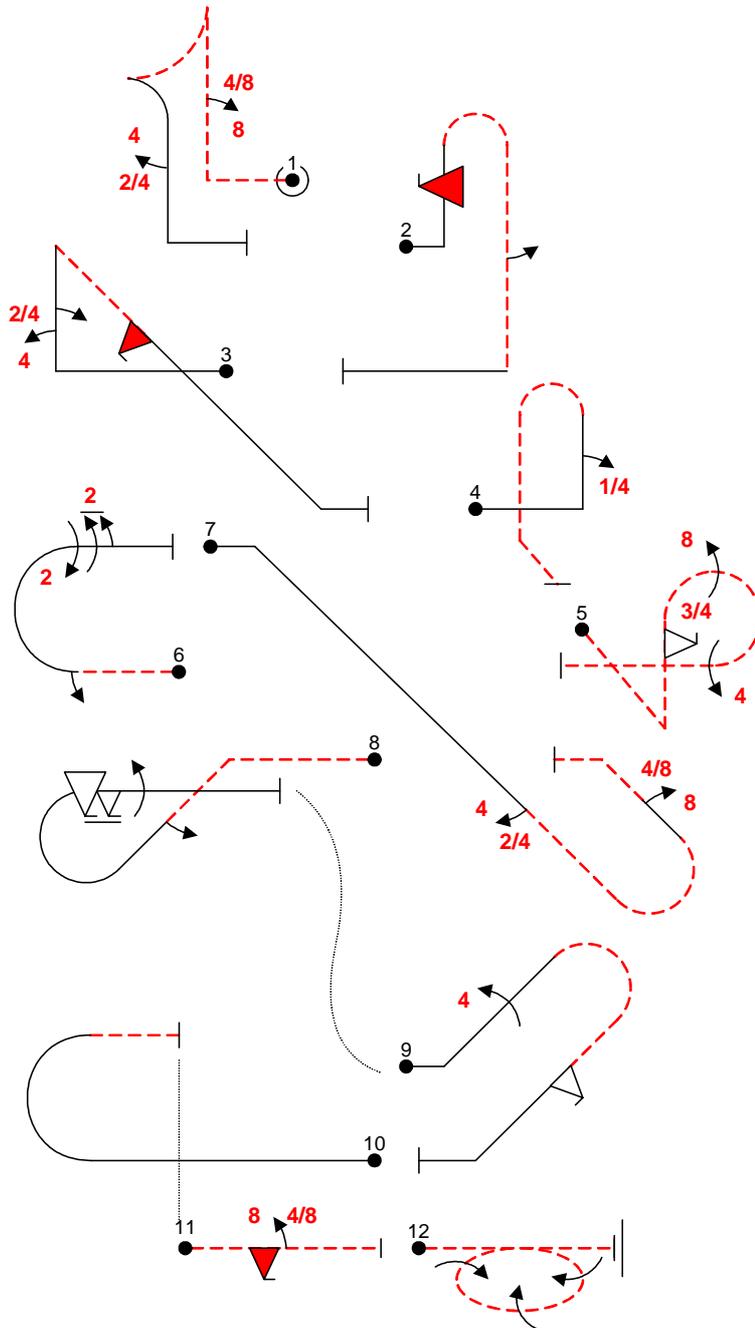


WAC 2007 - Granada, Spain **June 2007** **FORM B**

Unlimited 1st Unknown

← wind/vent

Fig 1	6.2.4 9.8.1.2 9.4.5.2	17 11 5	33
Fig 2	8.3.1 9.10.6.4 9.1.5.2	15 19 4	38
Fig 3	1.18.1 9.4.1.2 9.1.1.2 9.10.4.2	13 9 8 13	43
Fig 4	8.4.1 9.1.1.1	16 6	22
Fig 5	8.33.2 9.9.6.3 9.8.3.4 9.4.3.4	16 17 15 11	59
Fig 6	7.4.2 9.1.3.2 9.2.3.4 9.2.3.6	6 4 9 12	31
Fig 7	8.16.3 9.4.4.2 9.8.2.2	16 5 9	30
Fig 8	8.38.4 9.1.4.2 9.9.3.6 9.1.3.4	11 4 14 8	37
Fig 9	8.18.1 9.4.2.4 9.9.9.2	14 13 13	40
Fig 10	7.1.1	6	6
Fig 11	1.1.2 9.10.3.2 9.8.3.2	3 13 7	23
Fig 12	2.9.2	23	23
Total K = 385			





WAC 2007 - Granada, Spain		FORM B
Pilot ID #	Unlimited 2nd Unknown	Flight #

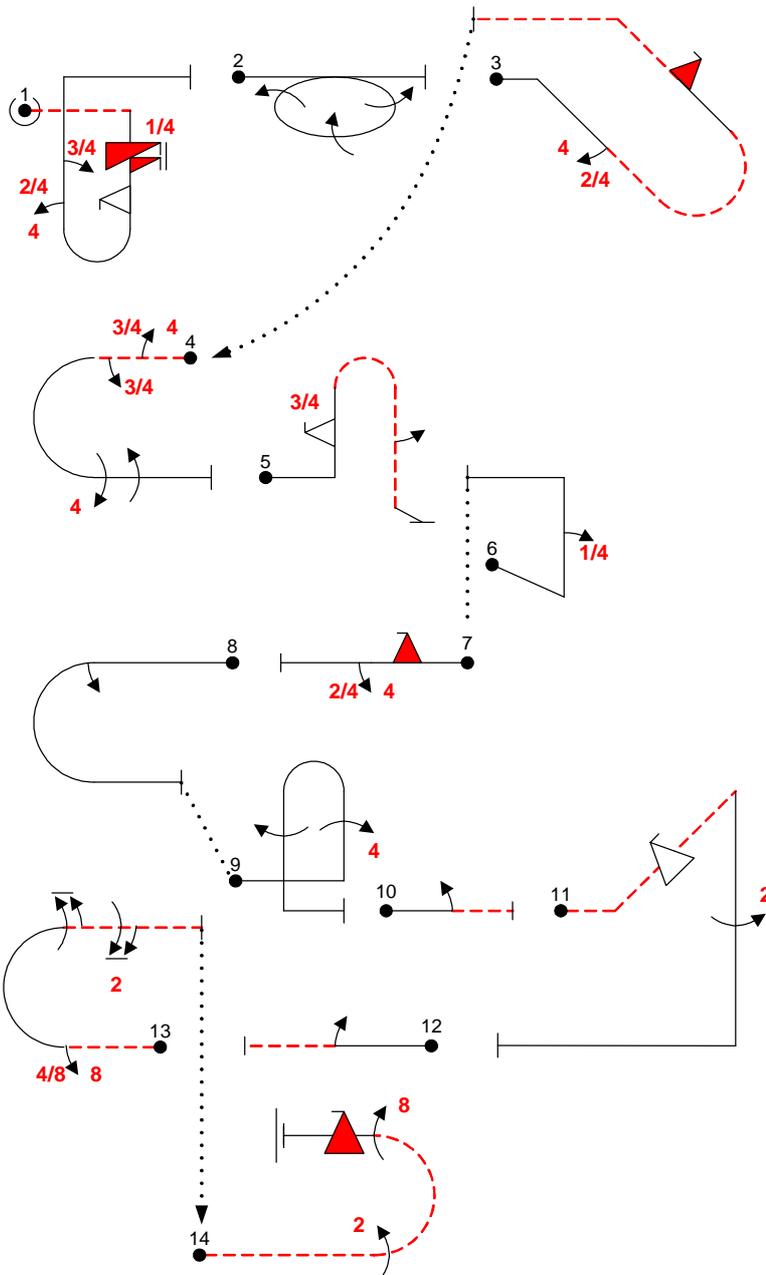
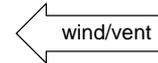


Fig 1	8.2.4	14	50
	9.12.1.5	6	
	9.9.5.2	11	
	9.4.1.2	9	
	9.1.1.3	10	
Fig 2	2.14.3	28	28
Fig 3	8.16.3	16	38
	9.4.4.2	5	
	9.10.7.2	17	
Fig 4	7.1.4	6	39
	9.4.3.3	8	
	9.1.3.3	6	
	9.4.3.4	11	
	9.1.3.4	8	
Fig 5	8.3.1	15	34
	9.9.1.3	15	
	9.1.5.2	4	
Fig 6	1.6.1	10	16
	9.1.1.1	6	
Fig 7	1.1.1	2	22
	9.10.8.2	15	
	9.4.3.2	5	
Fig 8	7.3.3	6	10
	9.1.3.2	4	
Fig 9	8.1.1	13	36
	9.4.1.4	15	
	9.1.5.4	8	
Fig 10	1.1.3	2	6
	9.1.3.2	4	
Fig 11	1.13.2	13	37
	9.9.7.4	15	
	9.2.5.4	9	
Fig 12	1.1.3	2	6
	9.1.3.2	4	
Fig 13	7.3.2	7	36
	9.8.3.2	7	
	9.1.3.6	10	
	9.2.3.6	12	
Fig 14	7.1.2	8	47
	9.2.3.4	9	
	9.8.3.4	15	
	9.10.8.4	15	
Total K = 405			

Pilot
ACC



Overall Results & Final Standings											
24th World Aerobatic Championships Granada (Spain)											
Jury President: Mike HEUER											
Chief Judge: John GAILLARD											
Contest Director: Antonio QUINTANA											
Rank	Country	Pilot	Registration	Type	[Known]	Free	Unknown 1	Unknown 2	[Final free]	Total	pp %
1	ESP	Ramón ALONSO	EC-HGL	SU 31	2180.1771	3447.9101	3120.1383	3294.7548	3244.3300	9862.8032	78.90
2	FRA	Renaud ECALLE	F-GOJB	CAP 231	2529.8613	3507.7598	3076.7967	3261.8121	3215.2042	9846.3686	78.77
3	RUS	Mikhail MAMISTOV	RF00631	SU 26M3	2419.3990	3285.8463	3056.1647	3267.4951	2881.2778	9609.5061	76.88
4	RUS	Svetlana KAPANINA	RF00631	SU 26M3	2431.9832	3463.0102	2962.9901	3124.4521	3103.2556	9550.4524	76.40
5	ESP	Cástor FANTOBA	EC-HPD	SU 26	2547.7913	3299.4566	2985.7678	3050.8296	3061.1060	9336.0540	74.69
6	FRA	Olivier MASUREL	F-GMRG	CAP 232	2393.1022	3496.7487	2937.5419	2888.8709	2876.6249	9323.1615	74.59
7	USA	Michael RACY	RF00665	SU 26M3	2458.6235	3374.6461	2935.4063	2924.0286		9234.0810	73.87
8	GBR	Gerald COOPER	G-SKEW	CAP 232	2357.3979	3313.4231	2884.1364	3021.9202		9219.4797	73.76
9	GBR	Mark JEFFERIES	G-IIUI	Extra 300S	2313.5938	3303.2906	2847.4941	3049.6022	2967.0810	9200.3869	73.60
10	FRA	Kathel BOULANGER	RA3325K	Sukhoi 31	2372.2146	3423.7210	2795.8198	2964.5164		9184.0572	73.47
11	RUS	Elena KLIMOVICH	RF00389	SU-31M2	2253.9452	3252.5806	2870.5374	2919.8240	2569.7728	9042.9420	72.34
12	FRA	Matthieu ROULET	F-GIXY	CAP 232	2417.7404	3395.6155	2745.1822	2824.7105		8965.5082	71.72
13	USA	David MARTIN	N232X	CAP 232	2424.6190	3258.1002	2841.7734	2801.4294	3003.2542	8901.3030	71.21
14	USA	Zach HEFFLEY	RA3456K	SU 26	2168.6741	3143.8804	2825.6661	2920.9267	3379.2642	8890.4732	71.12
15	ESP	Juan VELARDE	EC-HYU	SU 26	2301.2163	3267.4453	2683.5442	2916.9224	3014.0728	8867.9119	70.94
16	RUS	Victor CHMAL	RF00631	SU 26M3	2437.4092	3324.9297	2846.6481	2667.9956	2755.5060	8839.5734	70.72
17	RUS	Oleg SHPOLYANSKIY	RF00665	SU 26M3	2527.4442	2985.3405	2953.4826	2855.5078	2639.6979	8794.3309	70.35
18	RUS	Alexander KROTOV	RF00665	SU 26M3	2394.5321	3299.9430	2773.2899	2717.8877		8791.1206	70.33
19	USA	Mike RINKER	RA3296K	SU 26MX	2256.9329	3151.1349	2674.4916	2685.8219		8511.4484	68.09



CIVA 2007
Vilnius, Lithuania

20	RUS	Larissa RADOSTEVA	RF00389	SU-31M2	2337.1208	3020.4962	2581.4316	2907.0040	2510.9129	8508.9318	68.07
21	USA	Debby RIHN-HARVEY	N232DD	CAP 232	2330.1196	3193.5124	2532.7736	2716.7932	2387.4523	8443.0792	67.54
-	-	Hubert G. TOLSON	RA3456K	SU 26	2200.8489	3054.2795	2486.6021	2809.3924		8350.2740	66.80
22	GBR	Tom CASSELLS	F-GOTC	CAP 232	2457.0371	3252.9906	2656.6855	2269.0878		8178.7639	65.43
23	ESP	Anselmo GÁMEZ	EC-HYU	SU 26	2273.6991	3187.8842	2556.7671	2414.2649		8158.9162	65.27
24	RUS	Anatoly BELOV	RF00389	SU-31M2	2344.8726	3061.0078	2479.6824	2601.5125	2158.0767	8142.2027	65.14
25	USA	Dan CLARK	N397DC	Patriot 300	2111.5284	2894.2883	2353.6602	2872.7051		8120.6536	64.97
26	RUS	Andrey BESPALOV	RF00631	SU 26M3	2466.0043	3262.3598	2188.2704	2615.4564		8066.0866	64.53
27	GBR	Nick ONN	G-XXVI	SU 26	2291.7536	3043.6176	2403.3616	2536.6426		7983.6218	63.87
28	SUI	Pierre MARMY	HB-MSO	SU 26	942.3995	2980.6418	2106.8040	2830.0105		7917.4563	63.34
29	CZE	Martin SONKA	OK-HXC	SU 31 M	2345.0258	3036.0730	2164.8141	2693.5422		7894.4293	63.16
30	GER	Philipp STEINBACH	D-EYKS	Xtreme 3000	1808.6978	2666.4873	2431.9985	2764.0790		7862.5648	62.90
31	USA	Vicki CRUSE	N26HB	EDGE 540	2299.4632	2867.9503	2358.5317	2521.7046		7748.1866	61.99
32	USA	Robert ARMSTRONG	N232DD	CAP 232	2293.3671	3109.8366	1956.3670	2619.8972		7686.1008	61.49
33	CZE	Martin MUCK	OK-HXC	SU 31 M	2245.7844	2840.9930	2452.3173	2381.2030		7674.5133	61.40
34	ISR	Michael GOLAN	4X-CXM	Extra 300L	1829.8196	2754.9124	2403.0286	2470.4989		7628.4399	61.03
35	ESP	Juan SOCIAS	EC-JRQ	SU 26	2206.5592	3026.4798	2342.3473	2222.1844		7591.0115	60.73
36	ITA	Sergio DALLAN	I-JECT	SU 31	2348.0994	3255.4741	2271.7383	1996.1938		7523.4062	60.19
37	USA	Allyson PARKER-LAUCK	N540SE	Staudacher	2216.3343	2871.7832	2447.6904	1927.7038		7247.1774	57.98
38	ESP	Sergio PLÁ	N1315B	Velox	1883.0400	2933.7388	2050.1147	1720.5367		6704.3902	53.64
39	JPN	Muroya YOSHIHIDE	RA3296K	SU 26MX	2185.3298	2823.3176	2079.1760			4902.4936	39.22
40	ESP	Jorge MACIAS ALONSO	N540SE	Staudacher	1929.1783	2810.5288	2085.6370			4896.1658	39.17
41	FRA	Frédéric CHESNEAU	F-GVSY	Extra 300	2193.7859	2811.6999	2065.5581			4877.2580	39.02
42	RUS	Alexander KURYLEV	RF00389	SU 31M2	1995.7443	3189.8139	1606.9915			4796.8054	38.37
43	GBR	Kester SCROPE	G-IIUI	Extra 300S	2248.6746	2549.8706	2230.2398			4780.1104	38.24



44	USA	Chandy CLANTON	N26HB\	EDGE 540	2433.6670	2665.9802	1955.0058			4620.9860	36.97
45	SUI	Hanspeter ROHNER	F-GXCP	CAP 232	2087.4230	2917.3307	1700.0994			4617.4301	36.94
46	GBR	Richard GEE	G-IIVI	CAP 232	2223.5052	2657.4584	1941.2300			4598.6884	36.79
47	ITA	Marco BOSONI	I-JECT	SU 31	1972.6435	2985.5559	1537.0932			4522.6491	36.18
48	ITA	Irene PASINI	EC-JRQ	SU 26	1783.6387	2546.9281	1798.9413			4345.8694	34.77
49	CZE	Jan ADAMEC	OK-HXC	SU 31 M	2024.7144	2264.6422	1785.2595			4049.9017	32.40
50	GER	Matthias DOLDERER	N8JX	Extra 300S	2098.1256	2319.7979	1692.3955			4012.1934	32.10

National Team Results - Men				
24th World Aerobatic Championships Granada (Spain)				
Jury President: Mike HEUER				
Chief Judge: John GAILLARD				
Contest Director: Antonio QUINTANA				
Rank	Country	Country points	Pilot	Pilot points
1	FRA	28135.0383		
			Renaud ECALLE	9846.3686
			Olivier MASUREL	9323.1615
			Matthieu ROULET	8965.5082
2	ESP	28066.7691		
			Ramón ALONSO	9862.8032
			Cástor FANTOBA	9336.0540
			Juan VELARDE	8867.9119



3	RUS	27243.4104		
			Mikhail MAMISTOV	9609.5061
			Victor CHMAL	8839.5734
			Oleg SHPOLYANSKIY	8794.3309
4	USA	27025.8572		
			Michael RACY	9234.0810
			David MARTIN	8901.3030
			Zach HEFFLEY	8890.4732
5	GBR	26598.6305		
			Gerald COOPER	9219.4797
			Mark JEFFERIES	9200.3869
			Tom CASSELLS	8178.7639
6	CZE	19618.8443		
			Martin SONKA	7894.4293
			Martin MUCK	7674.5133
			Jan ADAMEC	4049.9017



National Team Results - Women				
24th World Aerobatic Championships		Granada (Spain)		
Jury President: Mike HEUER				
Chief Judge: John GAILLARD				
Contest Director: Antonio QUINTANA				
Rank	Country	Country point	Pilot	Pilot point
1	RUS	27102.3262		
			Svetlana KAPANINA	9550.4524
			Elena KLIMOVICH	9042.9420
			Larissa RADOSTEVA	8508.9318
2	USA	23438.4432		
			Debby RIHN-HARVEY	8443.0792
			Vicki CRUSE	7748.1866
			Allyson PARKER-LAUCK	7247.1774