

## AGENDA ITEM 5.1

### REPORT OF THE PRESIDENT OF THE INTERNATIONAL JURY

Mike Heuer

### XXIII. WORLD AEROBATIC CHAMPIONSHIPS Burgos, Spain



#### Introduction

The XXIII World Aerobatic Championships were held in Burgos, Spain on 22 June through 2 July 2005. This was the second time the WAC had been held in Burgos in recent years, the last occasion being in 2001 during the World Air Games in Spain.

48 pilots from 8 nations competed at WAC. There were no independent entries. The countries competing were: France, Russia, USA, Great Britain, Italy, Germany, Spain, and Switzerland. This represented a considerable decrease from past Championships. As recently as 1998, 19 countries and 73 pilots competed in the WAC. The decrease in competitors is worrisome for CIVA and should be addressed in our discussions.

#### New World Champions



The new World Aerobatic Champion is Sergey Rakhmanin of Russia who flew his Sukhoi SU-26M3 (RF-0177) to victory by achieving 80.79% of the points possible. This was Mr. Rakhmanin's second WAC victory in a row and a particularly noteworthy achievement – the first time this has occurred since 1986 when Petr Jirmus captured his second victory in the WAC that year. He was followed in second place by Oleg Schpolyanski of Russia and Renaud Ecalle of France.

Achieving her fifth victory as Women's World Aerobatic Champion was Svetlana Kapanina of Russia. This is a singular achievement in aerobatics and I was pleased to see Ms. Kapanina recognized by FAI during their "High Flyers" night in Paris during the FAI General Conference in October. No doubt, Ms. Kapanina is one of the finest aerobatic pilots of all time.



Also worthy of mention, of course, is veteran aerobatic competitor Klaus Schrodte of Germany who again captured the Manfred



Strossenreuther Trophy for winning Programme 4 (The Four Minute Free). Mr. Schrodtt has been a consistent winner of this flight and also a frequent competitor in the World Grand Prix of Aerobatics and the Red Bull Air Race.

Men's Team Champions were **(1) Russia, (2) France, and (3) USA.**

Russia took home the Nesterov Trophy. The lack of Women's Teams resulted in no presentation of the FAI Challenge Trophy for the third WAC in a row. I call your attention to a proposal made by the USA to offer our ladies who do compete some relief in this regard. I support the USA proposal which will be discussed later in the Agenda.

My congratulations to all of the winners. Aerobatics is fortunate to have pilots of such quality and skill and they are truly our air sports heroes.

### **The International Jury**

The International Jury specifically oversees the operation of the board of judges, the flight line, the meteorological office, the computer scoring, and boundary 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 Robert Chomono (France); Ernst Paukner (Germany); Lars Frölander (Sweden); and Liz Cook (Australia). I would like to thank each of them for their time and efforts. It was a well functioning team of people who have much experience in our sport. Each contributed in their own way and all spent long hours at the airport and were willing to do anything necessary to properly carry out their duties.

Some months before the contest, the organizers made the decision to delete the Line Judges. This was a disappointment to the International Jury as we all believe this is an essential part of a World Championships. I believe the Chief Judge felt the same way. However, from a Jury workload point-of-view, this reduced our burden and Jury members were occasionally free of duties since there were no Line Judges to monitor.

### **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.

However, my personal schedule did not permit me to arrive in Spain before 21 June. The organizers were kind enough to meet me at the Madrid airport and transport me to Burgos. My

driver was Manuel Ugarte, Assistant Contest Director. I worked closely with Manuel on many occasions in the coming days and it was a great pleasure for me.

Prior to the start of the competition, the Chief Judge and Jury members were able to inspect the facilities and the competition setup. Box markings and the contest layout were very good. All box markings met CIVA standard.

In addition, and most importantly, Hans Vogtmann had already been on the contest site for several days, serving in his function as Chief CIVA Steward, and helped the organizers prepare for the competition. Hans and I spoke several times by telephone prior to my arrival in Spain. His contribution to the success of the XXIII WAC cannot be overemphasized.

### **Judges' Position**

The Judges' positions were satisfactory. Judges were provided comfortable chairs and umbrellas. The Chief Judges' station was also quite good, being set up under a large tent with plenty of room and with the scoring office connected by wireless signal. The wireless was sporadic during the course of the competition but when the system was working, it was in constant use by competitors to view their scores. The monitor for competitor use was set up in the main airport building.



Video equipment was adequate and was used on several occasions, including one instance where the Chief Judge and his Assistant (Brian Howard of the USA) were the only ones to spot a zero. If there are any doubts about the need for video, this instance alone dispelled them.



A Jury member was present at the judging line at all times during the competition. No problems with the proper administration of rules were ever reported.

Prior to the contest start, Chief Judge John Gaillard and Brian Howard administered a recurrency exam to all Judges and conducted a briefing as required by CIVA Regulations.

### **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 Jürgen Leukefeld.

Michel has done thousands of hours of work these past three 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. He will report separately on the ACMS.

As mentioned before, a computer, optical reader, and radio links were set up at the Chief Judge's station. There were problems with the links and they were not always in operation. Jürgen Leukefeld is shown in the photo at the Chief Judge's position, scanning in scoresheets. Mr. Leukefeld could be seen walking between the Scoring Office in the main building and the Chief Judge's position on countless occasions, carrying scoresheets when the radio link was inoperative. I am quite sure he wore out a pair of shoes and logged many kilometers.



Because Michel's work is strongly affected by the changes we make in the Regulations, I appointed him as an "ex officio" member of the Rules Sub-Committee last year and he attended the Sub-Committee meeting in Burgos.

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, produce start lists, and print all of the Form A's for the reader. Their work makes a competition possible.

### **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. Both Unknowns were flown at WAC as provided in Sporting Code and CIVA Regulations. They are attached to this report for your review and historical records.

The First Unknown was a British proposal. It was subsequently protested by the German and Italian Teams. As a result of the protest, the sequence was modified and posted at 16.45 on 27 June 2005. The resulting sequence was flown at WAC. As a matter of note, climbing figures were added to make the sequence more flyable in the conditions at Burgos and to reduce altitude loss.

The Second Unknown was proposed by the French Team and was not protested. It was posted at 15.00 on 29 June 2005 and flown without change at WAC.

CIVA Regulations call for a 24 hour period to elapse between the final selection of the Unknown and the start of the flight programme. With bad weather, this can be a difficult problem in order to finish the competition, particularly if protests extend the time during which Unknowns are under consideration or being changed.



Therefore, like the President of the Jury at AEAC 2005, Osmo Jalovaara, **I also support a reduction in the time period from 24 to 18 hours and propose this to CIVA.**

**Protests**

A total of 5 protests were filed during WAC. The details and their disposition is detailed below:

<b>Country</b>	<b>Pilot(s)</b>	<b>Protest</b>	<b>Jury Action</b>
Italy and Germany	On behalf of Team	First Unknown. The protest requested that climbing figures be added to the sequence to enhance its safety.	Upheld
Italy and USA	Paolo Zoppi Juan Socias Michael Racy	The protest contended that the first three pilots of Programme 1 flew in wind conditions that were out of limits. While the wind exceeded the limits after Mr. Zoppi's flight, the Jury could find no evidence that the wind was out of limits during his flight. A wind observation had been taken at 17.40 and was in limits. A balloon observation taken at 18.15 was out of limits. The Zoppi flight was at 17.53. He was the last of the pilots concerned. The others flew in limits.	Denied
Spain	Juan Velarde	The pilot received a penalty of 250 points on Programme 1 for flying low on figure #6. Six of the ten Judges awarded a "low" call. The protest requested a video review. The Jury decided not to view the video as it would be impossible to determine altitude. The Jury elected not to override the decision of the Judges.	Denied
Germany	On behalf of Team	<p>Protest filed by Germany against flights of Renzo Voceri and Maurizio Costa of Italian Team in Programme 2. Mr. Voceri ended inverted after figure #4 and inserted a figure but no penalty was awarded by Chief Judge. The protest also questioned the quality of figure #12 for both Voceri's and Costa's flight.</p> <p>The Jury reviewed the videos and determined that a ½ roll had been inserted after figure #4. 150 penalty points were assessed by the Jury and the scores corrected.</p> <p>The Jury decided not to change the scores on</p>	<p>Upheld regarding the insertion of a figure.</p> <p>Denied on the quality of figure #12 for the two pilots.</p>



		figure #12 for Voceri or Costa.	
Italy	On behalf of Team	The protest contended that Programme 1 could not begin as the wind did not permit it to start into the “prevailing wind” with the Judges position in use. The Jury decided to delay the contest in view of the winds.	Upheld

### Technical Issues

There were several mechanical problems with aircraft during the WAC.

The American pilot, Debby Rihn-Harvey experienced RPM drop during engine run-up prior to flight. She returned to the flight line and subsequently repaired the problem and flew later in the programme.

Another American pilot, Hubie Tolson, also aborted before take-off due to oil pressure problems. He subsequently found fuel in the oil. A quick oil change was accomplished and his flight completed before the end of the programme.

Alex McLean had the rudder jam on the Sukhoi SU-31 during one of the flights. He did a beautiful job of handling the problem, with great skill, and brought the aircraft to a safe landing.

One of the French aircraft had a fairing come off during flight. Again, this was subsequently repaired.

One matter bears mentioning regarding technical faults. Though the rules do not specify this precisely, it has always been the interpretation of the International Jury that a pilot must complete his flight by the end of that flight programme. The US Team Manager questioned the Jury decision that Mr. Tolson must complete his flight by the end of the programme or he would lose his slot entirely.

I believe the sense of the rules is quite clear. It is obvious that if a pilot was permitted to fly after that flight programme had been completed, due to a technical fault, there would be no “limit” on when that could take place. Indeed, if the pilot was awaiting parts to arrive for his or her aircraft, it could be many days after the flight programme – in vastly different weather conditions. Also, the publication of the final results of that programme would be delayed. Clearly, this is unacceptable. My recommendation is to codify this in the rules.

**I propose we specify that all pilots must have flown their sequences by the end of the flight programme and they cannot be re-scheduled later, even if due to technical fault.**

### The Flight of Programme 4

The Spanish requested that Ramon Alonso be permitted to fly Programme 4, though he had been absent from the competition prior to this programme. Ramon’s son had been injured in an



accident and he had been spending many days and nights at hospital, making it impossible for him to attend WAC and enter the competition for the entire period.

This request required that certain sections in Sporting Code and CIVA Regulations be waived. This can only be done by unanimous agreement of all members of the International Jury and Team Managers.

A meeting of Managers was held and there was 100% agreement to permit Ramon Alonso to fly. I supported this decision as did all members of the Jury. Ramon had been through some very difficult times with his son, we were all glad to see him on the last days of the competition, and he has been a strong competitor for many years. I was very happy to see this courtesy extended to him. Altogether, everyone who wanted to fly Programme 4 was ultimately flown – though the argument continues to be made that we are flying too many. However, the weather was good and everyone was pleased.

### **In Conclusion ...**

The WAC was a success. I ask everyone to please remember that all flight programmes were flown and World Champions named. Despite a few technical problems, the event was flown with complete safety.

As always, there were lessons learned. One of my strongly held views is that there can never be too much “communication” on a contest site – and this was occasionally a problem in Burgos with the language differences. But I also believe that Antonio Quintana and his staff were firmly committed to putting on a successful WAC. I believe Spain accomplished this and they deserve our thanks and congratulations.

My thanks also to our Chief Judge, John Gaillard. John has now served as the Chief at WAC more than any other person in aerobatic history. He runs the judges’ line professionally and efficiently – and yet never misses a pilot error. I have always been impressed with his ability to administer the Board of Judges and yet pay close attention to the flying at the same time. This is not an easy task. It was a pleasure to work with him once again – as well as the many volunteers who helped at the Chief Judge’s station during the course of the WAC.

I pay tribute to the Judges – the men and women who labor hard and long for almost two weeks in order to produce a new World Champion. When they return to the hotel in the evening, they are often exhausted and sun-burned. Yet they accomplish their tasks day after day, year after year. So many return to the WAC for many years. It is an honor to work with them and to have their skills and experience.

Also, a tribute to those who have died since the WAC – Jean-Michel Delorme of France and Marta Meyer of the USA. It was a privilege to call them our friends.

It was an honor for me to serve as President of the International Jury at the XXIII. World Aerobatic Championships and I thank CIVA for this privilege.

23rd World Aerobatic Championships		2005	FORM B
Pilot ID #	Unlimited 1st Unknown		Flight #

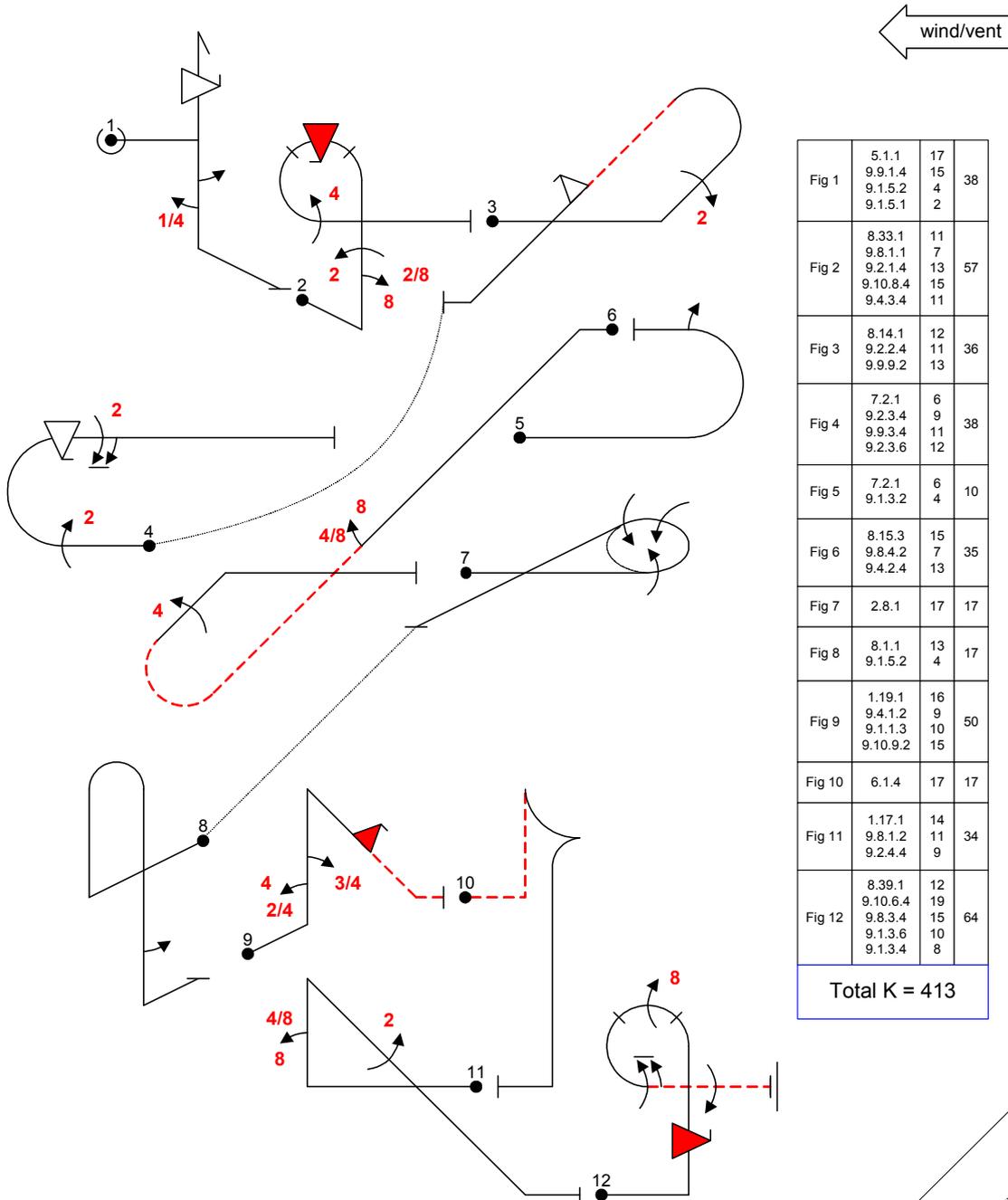
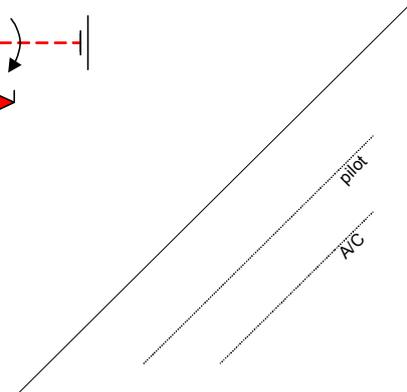


Fig 1	5.1.1 9.9.1.4 9.1.5.2 9.1.5.1	17 15 4 2	38
Fig 2	8.33.1 9.8.1.1 9.2.1.4 9.10.8.4 9.4.3.4	11 7 13 15 11	57
Fig 3	8.14.1 9.2.2.4 9.9.9.2	12 11 13	36
Fig 4	7.2.1 9.2.3.4 9.9.3.4 9.2.3.6	6 9 11 12	38
Fig 5	7.2.1 9.1.3.2	6 4	10
Fig 6	8.15.3 9.8.4.2 9.4.2.4	15 7 13	35
Fig 7	2.8.1	17	17
Fig 8	8.1.1 9.1.5.2	13 4	17
Fig 9	1.19.1 9.4.1.2 9.1.1.3 9.10.9.2	16 9 10 15	50
Fig 10	6.1.4	17	17
Fig 11	1.17.1 9.8.1.2 9.2.4.4	14 11 9	34
Fig 12	8.39.1 9.10.6.4 9.8.3.4 9.1.3.6 9.1.3.4	12 19 15 10 8	64
<b>Total K = 413</b>			

Created Using Aresti 7™ software. ACCassidy@aol.com



World Aerobatic Championships 2005		FORM B
Pilot ID #	Unlimited 2nd Unknown	Flight #

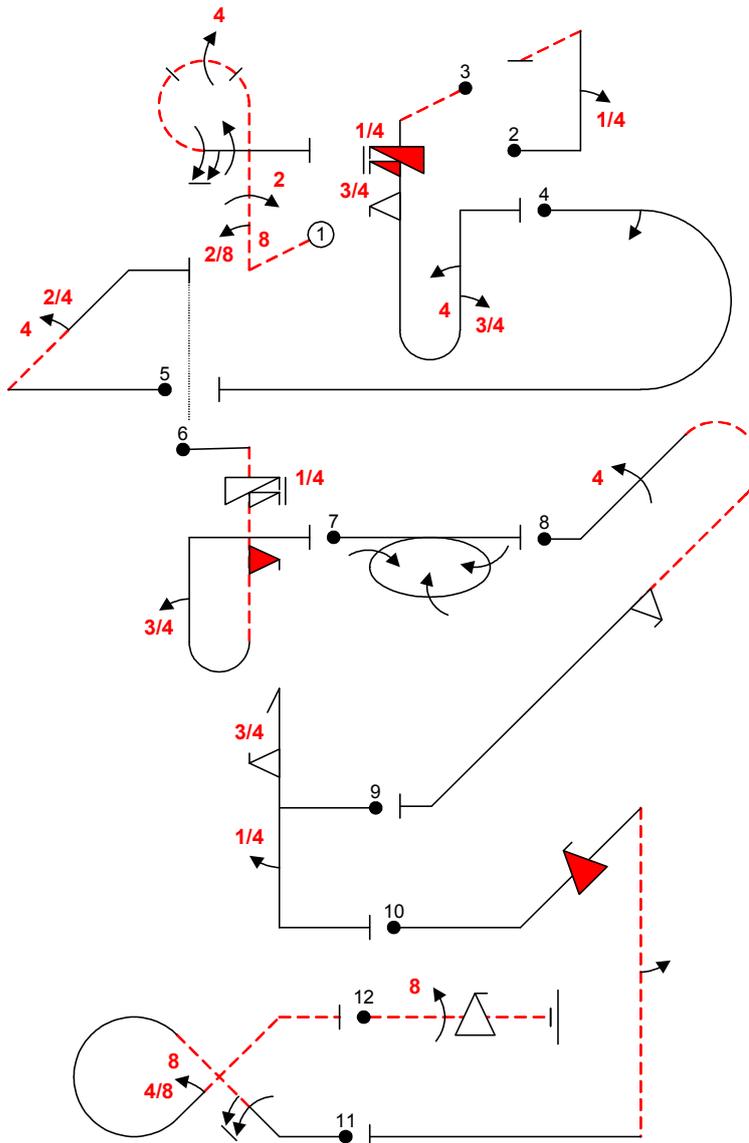
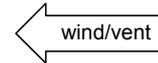
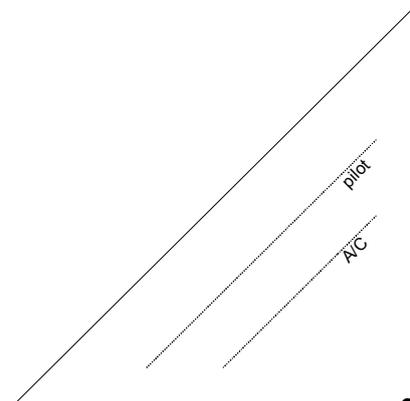


Fig 1	8.39.2 9.8.1.1 9.2.1.4 9.4.3.4 9.1.3.6 9.1.3.4	14 7 13 11 10 8	63
Fig 2	1.7.1 9.1.1.1	9 6	15
Fig 3	8.2.4 9.12.1.5 9.9.5.3 9.4.1.3 9.1.1.2	14 6 11 12 8	51
Fig 4	7.3.3 9.1.3.2	6 4	10
Fig 5	1.11.1 9.4.2.2	9 7	16
Fig 6	8.3.3 9.11.1.5 9.10.5.2 9.1.1.3	15 4 13 10	42
Fig 7	2.9.1	22	22
Fig 8	8.18.1 9.4.2.4 9.9.9.2	14 13 13	40
Fig 9	5.1.1 9.9.1.3 9.1.5.1	17 15 2	34
Fig 10	1.12.1 9.10.7.4 9.1.5.2	13 17 4	34
Fig 11	7.22.1 9.1.2.6 9.8.2.2	16 12 9	37
Fig 12	1.1.2 9.8.3.4 9.9.8.4	3 15 13	31
<b>Total K = 395</b>			





**XXIII. WORLD AEROBATIC CHAMPIONSHIPS**  
**Final Results – Overall**

Rank	NAC	Pilot	Registration	Model	[Known]	Free	Unknown 1	Unknown 2	[4 Minute]	Total	pp %
1	RUS	Sergei RAKHMANIN	RF-00177	SU-26M3	2630.6125	4131.1301	3,741.4697	3518.5508		11391.1506	80.79
2	RUS	Oleg SHPOLYANSKI	RF-00177	SU-26M3	2594.4602	4271.1560	3,487.5099	3471.3072	3016.7770	11229.9731	79.65
3	FRA	Renaud ECALLE	I-REBY	CAP-232	2664.9530	4305.8462	3,467.9353	3413.5246	3155.2095	11187.3061	79.34
4	RUS	Svetlana KAPANINA	RF-38352	SU-26M3	2626.7197	4169.5959	3,451.6448	3493.8912	2681.3377	11115.1319	78.83
5	RUS	Mikhail MAMISTOV	RF-38352	SU-26M3	2606.6893	3972.4495	3,368.4281	3555.1409		10896.0185	77.28
6	FRA	Jean-Michel DELORME	F-TGCC	CAP-232	2488.3856	3903.1032	3,359.9294	3559.7816	2979.1877	10822.8142	76.76
7	ESP	Castor FANTOBA	EC-HPD	SU-26	2460.7180	3827.4298	3,439.2876	3434.8741	2829.2375	10701.5915	75.90
8	USA	Kirby CHAMBLISS	N-540HA	EDGE	2524.9134	3968.6828	3,471.7810	3239.2658		10679.7296	75.74
9	RUS	Victor CHMAL	RF-38352	SU-26M3	2478.3483	3932.0520	3,230.8192	3403.7085	3149.3438	10566.5797	74.94
10	RUS	Andrey BESPALOV	RF-00178	SU-26M3	2485.0227	3872.2853	3,395.5461	3239.8248		10507.6562	74.52
11	FRA	Francois LEVOT	F-TGCD	CAP-232	2477.3581	3643.5319	3,427.4699	3400.9176	2760.3308	10471.9194	74.27
12	RUS	Elena KLIMOVICH	RF-00178	SU-26M3	2575.7046	3764.2050	3,308.8242	3370.1806	2821.9152	10443.2098	74.07
13	USA	Robert ARMSTRONG	N-3434F	CAP-231	2597.3025	3798.8648	3,301.3237	3307.9257	2748.2651	10408.1142	73.82
14	GBR	Tom CASSELS	F-GOTC	CAP-232	2161.5817	3545.5823	3,331.8150	3275.9805	2523.0094	10153.3778	72.01
15	RUS	Svetlana FEDORENKO	RF-00178	SU-26M3	2584.0811	3735.4399	3,164.0599	3143.9591	2336.0648	10043.4589	71.23
16	USA	Zach HEFLEY	N-131BW	SU-31	2581.3231	3651.4569	3,052.4249	3251.3109	3144.6281	9955.1927	70.60
17	FRA	Laurent NARJOUX	F-TGCC	CAP-232	2414.0156	3711.5706	3,081.0860	3135.1737		9927.8303	70.41
18	RUS	Larisa RADOSTEVA	RF-38352	SU-26M3	2470.9092	3254.6310	3,336.2650	3296.7410		9887.6370	70.13
19	USA	Hubert TOLSON	N-131BW	SU-31	2546.2216	3679.7961	2,872.7809	3214.8108	3068.3736	9767.3878	69.27
20	USA	Debby RIHN-HARVEY	N-232DD	CAP-232	2253.9271	3734.8689	3,212.8380	2814.3718	2381.2156	9762.0787	69.23
21	FRA	Matthieu ROULET	F-GTOJ	CAP-232	2417.5106	3047.6861	3,386.1732	3182.6169		9616.4762	68.20
22	ITA	Maurizio COSTA	I-REBY	CAP-232	2492.9693	3659.7854	2,926.6757	3028.7992	2445.6509	9615.2603	68.19
23	GBR	Gerald COOPER	G-SKEW	CAP-232	2395.0575	3326.7232	3,271.6804	2965.8052		9564.2088	67.83



**CIVA 2005**  
**Oberschleissheim, Germany**

24	FRA	Pascale ALAJOUANINE	F-GRPA	CAP-232	2521.6647	3848.5269	3,232.3606	2303.3000		9384.1875	66.55
25	FRA	Nicolas IVANOFF	F-GTOJ	CAP-232	2206.1189	3290.5509	3,251.8434	2827.7749	3056.0223	9370.1692	66.46
26	RUS	Vladimir POPOV	RF-00177	SU-26M3	2342.1313	3232.3061	3,012.9774	3000.8258		9246.1093	65.58
27	ITA	Elena CORTE	I-REBY	CAP-232	2077.4699	3463.9436	2,837.0310	2632.2472		8933.2218	63.36
28	USA	David MARTIN	N-232X	CAP-232	2520.0105	2942.9962	2,803.9534	3146.4005	2877.6084	8893.3501	63.07
29	GER	Klaus SCHRODT	D-EJKS	Extra 300S	2182.4782	2858.0939	3,265.4948	2680.6753	3183.2579	8804.2640	62.44
30	USA	Vicki CRUSE	N-111CD	EDGE	2363.2590	3360.7356	2,451.4352	2889.1418		8701.3126	61.71
31	FRA	Kathel BOULANGER	RA-3325K	SU-31	2288.9604	2835.0415	2,857.1531	3005.0605		8697.2551	61.68
32	SUI	Pierre MARMY	HB-MSO	SU-26	2009.5388	3203.4170	2,699.3546	2776.0768	2712.3698	8678.8484	61.55
33	ITA	Renzo VOCERI	D-ESOF	Extra-300L	2209.5039	3246.5396	2,581.5730	2705.9798		8534.0924	60.53
34	ESP	Juan VELARDE	EC-HPX	SU-29	2254.8952	3143.9840	3,063.5660	2207.7082		8415.2582	59.68
35	GER	Klaus LENHART	D-EWKL	Extra-300L	2185.4440	2997.1582	2,659.9877	2303.3443	2712.5553	7960.4902	56.46
36	USA	Allyson PARKER-LAUCK	N-330TA	PANZL	2318.8080	2812.9267	2,704.2017	1859.2219		7376.3503	52.31
37	ITA	Paolo ZOPPI	F-GJGM	CAP-232	1791.5085	2551.0941	2,965.4801			5516.5742	39.12
38	USA	Janet FITZKE	N-321JA	EDGE 540	2204.4259	3300.9800	2,162.4916			5463.4716	38.75
39	GBR	Nick ONN	G-XXVI	SU-26	2076.3641	2434.6789	2,727.0074			5161.6863	36.61
40	ITA	Sergio DALLAN	I-JECT	SU-31	2352.7383	2139.9909	2,926.8463			5066.8372	35.94
41	ITA	Guido GIRAUDO	F-GJGM	CAP-232	2052.8003	2474.6239	2,591.7697			5066.3936	35.93
42	ESP	Juan SOCIAS	EC-HPX	SU-29	1763.7458	2790.7956	2,077.6439			4868.4395	34.53
43	SUI	Hans-Peter ROHNER	F-GXCM	CAP-232	2143.2420	2470.6115	2,347.2851		2479.3748	4817.8966	34.17
44	USA	Michael RACY	RF-00177	SU-26M3	958.8530	1555.3826	3,109.5732			4664.9558	33.08
45	ITA	Daniele LOCATELLI	D-ETZE	Extra-300L	2079.9465	2623.7006	1,955.5079			4579.2085	32.48
46	GBR	Val RAHMANI	G-XXVI	SU-26	2160.5196	2274.0982	2,141.0464			4415.1446	31.31
47	ESP	Alex MC LEAN	EC-HGL	SU-31	2387.6734	3138.9655				3138.9655	22.26
48	ITA	Irene PASINI	D-ESOF	Extra-300L	2015.4351	1832.6205	292.6296			2125.2501	15.07



**XXIII. WORLD AEROBATIC CHAMPIONSHIPS**  
**Final Results – Women**

Rank	NAC	Pilot	Registration	Model	[Known]	Free	Unknown 1	Unknown 2	[4 Min]	Total	pp %
1	RUS	Svetlana KAPANINA	RF-38352	SU-26M3	2626.7197	4169.5959	3451.6448	3493.8912	2681.3377	11115.1319	78.8300
2	RUS	Elena KLIMOVICH	RF-00178	SU-26M3	2575.7046	3764.2050	3308.8242	3370.1806	2821.9152	10443.2098	74.0700
3	RUS	Svetlana FEDORENKO	RF-00178	SU-26M3	2584.0811	3735.4399	3164.0599	3143.9591	2336.0648	10043.4589	71.2300
4	RUS	Larisa RADOSTEVA	RF-38352	SU-26M3	2470.9092	3254.6310	3336.2650	3296.7410		9887.6370	70.1300
5	USA	Debby RIHN-HARVEY	N-232DD	CAP-232	2253.9271	3734.8689	3212.8380	2814.3718	2381.2156	9762.0787	69.2300
6	FRA	Pascale ALAJOUANINE	F-GRPA	CAP-232	2521.6647	3848.5269	3232.3606	2303.3000		9384.1875	66.5500
7	ITA	Elena CORTE	I-REBY	CAP-232	2077.4699	3463.9436	2837.0310	2632.2472		8933.2218	63.3600
8	USA	Vicki CRUSE	N-111CD	EDGE	2363.2590	3360.7356	2451.4352	2889.1418		8701.3126	61.7100
9	FRA	Kathel BOULANGER	RA-3325K	SU-31	2288.9604	2835.0415	2857.1531	3005.0605		8697.2551	61.6800
10	USA	Allyson PARKER-LAUCK	N-330TA	PANZL	2318.8080	2812.9267	2704.2017	1859.2219		7376.3503	52.3100
11	USA	Janet FITZKE	N-321JA	EDGE 540	2204.4259	3300.9800	2162.4916			5463.4716	38.7500
12	GBR	Val RAHMANI	G-XXVI	SU-26	2160.5196	2274.0982	2141.0464			4415.1446	31.3100
13	ITA	Irene PASINI	D-ESOF	Extra-300L	2015.4351	1832.6205	292.6296			2125.2501	15.0700



**XXIII. WORLD AEROBATIC CHAMPIONSHIPS**  
**Final Results – Men’s Teams**

Rank	Country	Total Points	Pilot	Pilot's Points
1	RUS	33,517.1422		
			Sergei RAKHMANIN	11391.1506
			Oleg SHPOLYANSKI	11229.9731
			Mikhail MAMISTOV	10896.0185
2	FRA	32,482.0397		
			Renaud ECALLE	11187.3061
			Jean-Michel DELORME	10822.8142
			Francois LEVOT	10471.9194
3	USA	31,043.0365		
			Kirby CHAMBLISS	10679.7296
			Robert ARMSTRONG	10408.1142
			Zach HEFLEY	9955.1927
4	GBR	24,879.2729		
			Tom CASSELS	10153.3778
			Gerald COOPER	9564.2088
			Nick ONN	5161.6863
5	ESP	23,985.2892		
			Castor FANTOBA	10701.5915



**CIVA 2005**  
**Oberschleissheim, Germany**

---

			Juan VELARDE	8415.2582
			Juan SOCIAS	4868.4395
6	ITA	23,665.9269		
			Maurizio COSTA	9615.2603
			Renzo VOCERI	8534.0924
			Paolo ZOPPI	5516.5742



**XXIII. WORLD AEROBATIC CHAMPIONSHIPS**  
**Final Results – Programme 4**

Rank	Country	Competitor	Registration	Model	[Final free]	pp %
1	GER	Klaus SCHRODT	D-EJKS	Extra 300S	3183.2579	79.58
2	FRA	Renaud ECALLE	I-REBY	CAP-232	3155.2095	78.88
3	RUS	Victor CHMAL	RF-38352	SU-26M3	3149.3438	78.73
4	USA	Zach HEFLEY	N-131BW	SU-31	3144.6281	78.62
5	USA	Hubert TOLSON	N-131BW	SU-31	3068.3736	76.71
6	FRA	Nicolas IVANOFF	F-GTOJ	CAP-232	3056.0223	76.40
7	RUS	Oleg SHPOLYANSKI	RF-00177	SU-26M3	3016.7770	75.42
8	ESP	Ramon ALONSO	EC-HGL	SU-31	3000.7822	75.02
9	FRA	Jean-Michel DELORME	F-TGCC	CAP-232	2979.1877	74.48
10	USA	David MARTIN	N-232X	CAP-232	2877.6084	71.94
11	ESP	Castor FANTOBA	EC-HPD	SU-26	2829.2375	70.73
12	RUS	Elena KLIMOVICH	RF-00178	SU-26M3	2821.9152	70.55
13	FRA	Francois LEVOT	F-TGCD	CAP-232	2760.3308	69.01
14	USA	Robert ARMSTRONG	N-3434F	CAP-231	2748.2651	68.71
15	GER	Klaus LENHART	D-EWKL	Extra-300L	2712.5553	67.81
16	SUI	Pierre MARMY	HB-MSO	SU-26	2712.3698	67.81
17	RUS	Svetlana KAPANINA	RF-38352	SU-26M3	2681.3377	67.03
18	GBR	Tom CASSELS	F-GOTC	CAP-232	2523.0094	63.08
19	SUI	Hans-Peter ROHNER	F-GXCM	CAP-232	2479.3748	61.98
20	ITA	Maurizio COSTA	I-REBY	CAP-232	2445.6509	61.14
21	USA	Debby RIHN-HARVEY	N-232DD	CAP-232	2381.2156	59.53
22	RUS	Svetlana FEDORENKO	RF-00178	SU-26M3	2336.0648	58.40