

# *The Journal of FAI Space Modelling*

## The British Space Modelling Association

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**Editorial** Just gets better and better!! Check out the massive World Cup array below, the size of entry and the standard of flying and it all adds up to Cloud 9! Significant too, another country entered the World Cup roster – MOLDOVA! Congratulations to *Ion Matveichuc*, who became the first competitor to represent his homeland, at Murmansk's Polar Cup.

Crucially though – and for the first time – we have the *International Rocketry Challenge* (IRC) Finals from the Farnborough International Airshow. Teenagers from the USA, France and the UK lofted eggs to prescribed altitudes and flight durations. Just like the novel S2/P-Payload rules for FAI Space Modelling. It is very healthy to be able to record that in the USA alone, the *Team America Rocketry Challenge* has attracted some 60,000 young people in event all over the North American continent. Plenty of evidence to suggest that this is being mirrored in other countries too – some 65 school in the UK participated in the UKAYRoC series this year alone. It was a shame that only three Teams contested the IRC this time, Canada lost their sponsorship and Japan couldn't come as it was at a difficult time in the school year. This payload class is really catching the imagination...lots of different shapes of airframe seem to work equally well. Lots of different propellant selections too and nice that many of these come from the High Street.

Plenty more in this issue too, but it's really about World Cups, World Cups and yet more

World Cups!! No need for me to write any more words here, over to the real world!

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**Aerospace Industries  
Association (AIA), GFAS  
and ADS Group Ltd  
*proudly present..***

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**International Rocketry  
Challenge 2012 ~**  
*Farnborough International  
Airshow : 12-14 July*  
*'12...MAGIC!!*

FARNBOROUGH was going to be BIG for your Editor this year. In the wake of the UKAYRoC Finals in June, he was called to be Range Safety Officer at the *International Rocketry Challenge* (IRC), featuring teams from the United States of America, France and the United Kingdom. Sponsored generously by *Aviation Industries Association (AIA)*, *ADS Group Ltd* and *GFAS*, this event has proven to a stellar success over the last few years. There were to have been teams from Canada and Japan, but lack of sponsorship on the one hand and a difficult time in the school year sadly ruled this out.

IRC...what's it all about? Objectives:  
Boosting a fragile payload – 2 hen's eggs  
Target Altitude – 244m / 800 feet  
Target Duration – 43 to 47 seconds

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Simply, if you are higher or lower than 800 feet, you lose points; early or late on arrival, you lose points, Zero is the optimum score. Break the egg(s) and it's a DQ..

Conditions would be challenging, with the weather we'd endured in the UK for many weeks. Your Editor was working with Elizabeth Donnelly of *ADS Group Ltd*, John Hochheimer of the NAR and Anne Ward of *AIA*. Some disappointment was expressed when the decision was taken to relocate to nearby Queen's Parade sports ground, from 'airside' at the show...tho' as RSO, I was much happier! All teams set up and flew competently in gusty conditions, Team UK not quite right, a turbulent boost and the egg capsule hitting a fence on the way back. Team France performed admirably, as did Team USA...and the tension was building as the officials punched calculators and checked the Eggs. 2012's result is shown... expect more in the next issue:

<b>1 Team France</b>	<i>Lycee Desmetiers Louis Bleriot</i>
<b>2 Team USA</b>	<i>Madison West, Wisconsin</i>
<b>3 Team UK</b>	<i>The Perse School, Cambridge</i>

...Team UK broke an egg on the fence! The top two were close and plaudits to *Lycee Desmetiers Louis Bleriot* ..Vive la France!!

Naturally too, the IRC was yet another trial of the proposed S2/P-Payload rules. Well Done to all concerned.

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### **Buzau Cup 2012 ~ Buzau- ROM : 25-27 May '12...Cool!**

**ROMANIA** is never slow at coming forward and their latest World Cup was magic. Russia, Serbia, Bulgaria and the hosts came to the rampa and performed brilliantly in conditions far from perfect. Podiums:

<b>S4A-Boost Glider World Cup (24 starters)</b>	
1 Daniel MANOLACHE	ROM 135 160 180 = 475s
2 Valentin SAVOV	BUL 180 150 140 = 470s

3 Gennady POLTAVETS	RUS 180 97 180 = 457s
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#### **S6A-Streamer Duration World Cup (31 starters)**

1 Zoran KATANIC	SRB 180 111 166 = 457s
2 Marian KRAUSE	ROM 92 180 180 = 452s
3 Nikolae RADU	ROM 67 135 180 = 382s

#### **S9A-Gyrocopter Duration World Cup (30 starters)**

1 Gennady POLTAVETS	RUS 180 180 180 = 540+228s
2 Valentin SAVOV	BUL 180 180 180 = 540+146s
3 Dorin TODOROV	POL 180 157 180 = 515s

#### **S7-Scale World Cup (7 starters)**

1 Zivan JOSIPOVIC	SRB <i>Saturn 1B</i> 780+91 = 871pt
2 Gika CONS'ESCU	ROM <i>Ariane 3</i> 743+101 = 844pt
3 Gabi CONS'ESCU	ROM <i>Ariane 44LP</i> 449+67 = 655pt

#### **S8E/P-RC Rocket Glider World Cup (4 starters)**

1 Victor PRICOP	ROM	1000 1000 1000+ 961 = 3961pt
2 Vladimir CIPCIC	SRB	971 1000 962+1000 = 3933pt
3 Angel TODOROV	ROM	955 965 989+ 978 = 3887pt

The FAI Jury comprised Ion Guzu (ROM), Rumiana Lekova (BUL) & Nicolae Maxim (ROM). CD was Lucian Sercaianu (ROM) who did just brilliantly, as did Ionuf Brianza as RSO. S7-Scale was competently judged by Dan Popa, Florica Sercaianu & Dragos Otelia (all ROM). This one was a real corker!! Well Done!

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### **Cup of Krakow 2012 ~ Krakow-POL : 2-3 June '12...Massive!**

**SO MANY** World Cups are in the mixer, vying to be the biggest and best! Poland has fantastic traditions and this year's event at the *Sports Airfield Aero Klub Krakow* was a beauty. Organisers, *MTSR Sowiniec Krakow* deserve great credit for laying on yet another 'leviathon'. Let's have some podiums:

**S4A-Boost Glider World Cup (38 starters)**

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1 Konrad WIERBICKI	POL 151 180 180 = 511s
2 Konrad ZYGMUNT	POL 124 145 180 = 449s
3 Jaromir CHALUPA	CZE 157 132 135 = 424s

### **S6A-Streamer Duration World Cup (56 starters)**

1 Szymon BYRTEK	POL 180 64 175 = 419s
2 Wladislav STAROBAT	POL 100 135 180 = 415s
3 Sebastian SZULC	POL 103 111 180 = 394s

### **S9A-Gyrocopter Duration World Cup (44 starters)**

1 Sebastian SZULC	POL 180 154 157 = 491s
2 Anton BIERNACKI	POL 169 163 149 = 481s
3 Mateusz DYBA	POL 85 171 180 = 436s

### **S7-Scale World Cup (11 starters)**

1 Michal BORROWSKI	POL Meteor-1 565+61 = 626pt
2 Grzegorz GORYCZKA	POL Meteor-1 551+63 = 614pt
3 Mateusz KORMANSI	POL Meteor-1 561+30 = 591pt

### **S8D-R Rocket Glider Juniors (11 starters)**

1 Boris CESNEK	SVK 360 307 360 = 1027s
2 Szymon BYRTEK	POL 340 360 325 = 1025s
3 Maciej PODOLSKI	POL 212 360 360 = 931s

### **S8E/P-RC Rocket Glider World Cup (16 starters)**

1 Peter MATUSKA SVK	998 1000 1000+ 966 = 3964pt
2 Eduard WOWRY POL	1000 925 923+1000 = 3848pt
3 Wojciech BORROWSKI POL	958 928 929+ 778 = 3593pt

**The FAI Jury comprised Jan 'Mr Zero' Maixner (SVK), Lubomir Jurek (CZE) & Jerzy Kolodziej (POL) and CD Tadeusz Kaprzycki (ROM)...Magic! The sweet & succulent Ewa Dudziak-Przybytek was RSO and got all the calls right. The S7-Scale hall was managed by Andrzej Sawicky, Antoni Opoczka & Michal Filas (all POL). Some nice models...being saved for the World Champs?!? But this event was magical and *Well Done* to all concerned.**

**Polar Cup 2012 ~ Murmansk-  
RUS : 31 May – 3 June '12**

by Srdjan Pelagic

**CONGRATULATIONS** to Valentina Burgiy and her associates for the successful organisation of this event in the Arctic Circle and for distributing documentation, in good time and correctly prepared. Valentina was the *Event Director* [also called, Contest Director – Ed] for the Polar Cup. Here is just one more *Lady* in a vital and responsible position in our activity.

*Well Done* to all winners and participants for their sports successes. Great participation, we had teams from Kazakhstan, Ukraine, Russia, Uzbekistan and *Moldova*. I will take the opportunity to welcome Moldova's *Ion Matveichuc*, who became the first entrant from his country at a World Cup. We hope there will be many more competitors from Moldova in forthcoming events.

### **S4A-Boost Glider World Cup (17 starters)**

1 Oleg VORONOV	UKK 180 180 180 = 540s
2 Nikolay TSYGANOV	RUS 180 55 180 = 415s
3 Anatoly ZEMLYANUKIN	RUS 95 128 164 = 387s

### **S6A-Streamer Duration World Cup (33 starters)**

1 Igor VOLKANOV	RUS 150 161 153 = 464s
2 Oleg VORONOV	UKR 176 91 114 = 381s
3 Dmitri ZOLIN	RUS 180 96 98 = 374s

### **S7-Scale World Cup (6 starters)**

1 Anastasia IBRAGIMOVA UZB	<i>Nike Cajun</i> 423 + 109 = 532pt
2 Alexandr LASHKO UKR	<i>Taurus Tomahawk</i> 411+104 = 515pt
3 Olexandr ZAGORODNY UKR	<i>Black Brant</i> 452 + CE = 452pt

### **S8E/P-RC Rocket Glider World Cup (10 starters)**

1 Anatoly ZEMLYANUKIN RUS	984 1000 1000 + 993 = 3977pt
2 Grigory SERGIENKO RUS	884 969 1000 +1000 = 3853pt
3 Sergei BOLSHAKOV RUS	1000 1000 746 + 775 = 3521pt

**Cracker! Well Done, Murmansk Region Sports Federation for setting up a marvellous World Cup**

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on the Arctic Circle. Key players included, CD Valentina Bugriy, Sports Director, Andrey Bausev and RSO Oleg Gubrik. The FAI Jury of Igor Volkanov (UKR), Vladimir Minakov, Alexei Koriapin & Oleg Krasnov (all RUS) had little to rule on. Lovely weather, never got dark, just a bit cold in the mornings...probably those icebergs!

### Stip Cup 2012 ~ *Stip-MKD* : 9-10 June '12...*Magic!*

MACEDONIA is becoming one the best venues for Space Modelling competition in Europe. Stip is a magical venue because of its predictable climate and consistent wind direction. The recent World Cup was a cracker, attracting teams from Bulgaria, Russia, Russia, Serbia and the hosts. Your editor was invited to Stip for this event – *Thank You* to the organisers, but work and domestic issues proved just too much. Let's have some podiums:

#### S4A-Boost Glider *World Cup* (20 starters)

1 Zoka KATANIC	SRB 165 176 155 = 496s
2 Zika JOSIPOVIC	SRB 172 169 159 = 492s
3 Plamen JORDANOV	BUL 73 180 170 = 423s

#### S6A-Streamer Duration *World Cup* (34 starters)

1 Zoran ATANASOSKI	MKD 88 144 180 = 412s
2 Zoka KATANIC	SRB 112 106 156 = 374s
3 Vlada CIPCIC	SRB 86 151 122 = 359s

#### S9A-Gyrocopter Duration *World Cup* (20 starters)

1 Nikolce JANSKI	MKD 180 173 123 = 476s
2 Boris LEKOV	BUL 180 180 112 = 472s
3 Mihailo PETROVIC	SRB 140 136 180 = 456s

#### S7-Scale *World Cup* (10 starters)

1 Zivan JOSIPOVIC	SRB <i>Saturn 1B</i> 725+110 = 835pt
2 Miro STANCEVIC	SRB <i>Saturn 1B</i> 640+170 = 810pt
3 Vlada CIPCIC	SRB <i>Ariane 1</i> 618 + 80 = 698pt

#### S8E/P-RC Rocket Glider *World Cup* (7 starters)

1 Angel CONEV	BUL
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2 Vladimir CIPCIC	SRB	989 944 776 + 972 = 3681pt
3 Nikolai PEYCHEV	BUL	1000 795 1000 + 784 = 3579pt
		726 1000 991 + 522 = 3239pt

The FAI Jury comprised Srdjan Pelagic (SRB), Anton Karakolev & Todor Manev (both MKD). CD was Stanisa Petrovic and RSO the legendary Georgi Geogievski (both MKD), both of whom played it superbly. S7-Scale judges were Nikola Cvjeticanin, Miodrag Cipic (both SRB) and Stanisa Petkovic. Just super across the board.

### 12<sup>th</sup> Sirmium Cup ~ *Sremska Mitrovica-SRB* : 16-17 June '12...*Seven up and SUPER!*

*AEROKLUB Sremska Mitrovica* and *Vazduhoplovni savez Srbije* combined to put together a little beauty at Veliki Radinci. *Seven* countries – Serbia, Croatia, Slovenia, Russia, Romania, Italy and Bulgaria - came on line to produce a super event and CD Branislav Krcedinac is to be congratulated for his efforts. Enough...podiums:

#### S4A-Boost Glider *World Cup* (15 starters)

1 Radojica KATANIC	SRB 180 180 180 = 540s
2 Plamen JORDANOV	BUL 102 140 180 = 422s
3 Florica SERCAIANU	ROM 120 120 180 = 420s

#### S6A-Streamer Duration *World Cup* (21 starters)

1 Zoran KATANIC	SRB 107 180 180 = 467s
2 Gennady POLTAVETS	RUS 180 97 31 = 308s
3 Luka VOLAROVIC	SRB 150 80 66 = 302s

#### S9A-Gyrocopter Duration *World Cup* (17 starters)

1 Andrej NITU	ROM 174 180 180 = 534s
2 Milan PETKOVIC	SRB 150 145 159 = 454s
3 Gennady POLTAVETS	RUS 147 107 180 = 434s

#### S7-Scale *World Cup* (8 starters)

1 Vladimir CIPCIC	SRB <i>Ariane 1</i> 610+ 80 = 690pt
2 Zivan JOSIPOVIC	SRB <i>Bumper WAC</i> 555+ 96 = 650pt

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3 Nikola BOROVAC SRB *T-Tomahawk* 520 +115 = 635pt  
**S8E/P-RC Rocket Glider World Cup (3 starters)**

1 Angel TODOROV BUL  
1000 1000 1000 + 946 = 3948pt  
2 Vladimir CIPCIC SRB  
772 597 805 + 1000 = 3174pt  
3 Zoran KATANIC SRB  
362 570 318 + 458 = 1708pt

Srdjan Pelagic, Dragan Jevtic (both SRB) and Lucian Sercaianu (ROM) presided over one of the better World Cup events of 2012. CD Branislav Krcecinac was overjoyed with the two days and ably backed by RSO Slobodan 'Max' Maksic and assistant Branislav Krcecinac. The S7-Scale hall was managed by Nikola Cvjeticanin, ably assisted by Miodrag Cipic (both SRB) & Angel Todorov (BUL). Super, this one was a classic example of how to set up, run and report a World Cup event.

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**Great Lakes Cup ~ Oswego,**  
*Illinois-USA : 23-24 June '12.*  
*Good one..*

**WELL DONE** Pat Butler, for yet another super Great Lakes. Entries from India, Canada, Bulgaria and USA came together to produce a super compact World Cup event. Enough...podiums:

**S4A-Boost Glider World Cup (16 starters)**  
1 George GASSAWAY USA 91 180 180 = 452s  
2 Keith VINYARD USA 106 180 59 = 345s  
3 Chris FLANIGAN USA 67 171 78 = 316s

**S6A-Streamer Duration World Cup (12 starters)**  
1 Steve KRISTAL USA 57 72 56 = 185s  
2 Emma KRISTAL USA 69 63 45 = 177s  
3 Peter COOK CAN 46 42 88 = 176s

**S9A-Gyrocopter Duration World Cup (11 starters)**  
1 Keith VINYARD USA 123 175 180 = 478s  
2 George GASSAWAY USA 65 164 45 = 274s  
3 Rod SCHAFER USA 109 143 0 = 252s

**S8E/P-RC Rocket Glider World Cup (12 starters)**

1 Keith VINYARD USA  
1000 959 936 + 978 = 3873pt  
2 Ryan WOEBKENBERG USA  
842 1000 1000 + 905 = 3807pt  
3 George RIEBESHL USA  
995 1000 785 + 1000 = 3780pt

**S1A-Altitude Juniors (3 starters)**

1 Jenna BUTLER USA 271 374 = 374m  
2 Steve KRISTAL USA 369 = 369m  
3 Emma KRISTAL USA 8 361 = 361m

**S3A-Parachute (9 starters)**

1 Chris KIDWELL USA 283 154 293 = 730s  
2 Trip BARBER USA 180 77 180 = 677s  
3 Keith VINYARD USA 100 239 72 = 411s

FAI Jury comprised Trip Barber, John Langford (both USA), plus Taras Tataryn (CAN). CD Pat Butler, RSOs Jim Filler, Matt Steele and Chris Kidwell oversaw a good one, near the Canadian border.

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**Gustaitis Cup ~ Mariampole-LTU :** 29 June – 1 July '12. *A Baltic classic!*

**BALTIC** Space Modelling is always pretty special...and this one was pretty big too. A startlist from Estonia, Latvia, Lithuania, Poland, Belarus, Slovakia and Russia guaranteed a really classic World Cup. Some good Juniors' action too. Congratulations to Maksim Timofejev and his associates for a successfully conducted event and to all winners and participants for their achievements and sportsmanship. Let's have some podiums:

**S4A-Boost Glider World Cup (32 starters)**  
1 Aliaksandr LIPAI BLR 92 180 171 = 443s  
2 Kiril STROKOV RUS 132 130 180 = 442s  
3 Slavomir LASOCHA POL 105 120 180 = 405s

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### **S6A-Streamer Duration World Cup (30 starters)**

1 Maksim TIMOFEJEV LTU 180 131 94 = 405s  
2 Mykolas TREIKAUSKAS LTU 162 101 89 = 352s  
3 Slavomir LASOCHA POL 144 160 103 = 314s

### **S9A-Gyrocopter Duration World Cup (29 starters)**

1 Maksim TIMOFEJEV LTU 167 180 180 = 527s  
2 Mykolas TREIKAUSKAS LTU 180 130 180 = 490s  
3 Slavomir LASOCHA POL 144 160 156 = 460s

### **S7-Scale World Cup (16 starters)**

1 Jurgis STRAZDAS LTU *Little Joe* 640+ 70 = 710pt  
2 Kristian SALUMAE EST *Meteor-1* 564+ 70 = 634pt  
3 Egils VASARAUDZIS LAT *Meteor-3* 491 +115 = 606pt

### **S8E/P-RC Rocket Glider World Cup (14 starters)**

1 Vladimir MINKEVICH BLR  
1000 945 1000 + 1000 = 3945pt  
2 Aurimas PETKEVICIUS LTU  
852 972 983 + 848 = 3655pt  
3 Aleksandrs OJAVERS LAT  
789 1000 952 + 874 = 3615pt

The Junior classes were flown in parallel with the World Cup, with results as below:

**S4A-Boost Glider:** 1 Kiril STROKOV (RUS); 2 Aurimas PETKEVICIUS LTU; 3 Kyril ZHABRAVRES BLR

**S6A-Streamer:** 1 Myko TREIKAUSKAS LTU; 2 Kiril STROKOV (RUS); 3 Aleks LAVRUKIN RUS

**S9A-Gyrocopter:** 1 Myko TREIKAUSKAS LTU; 2 Dmitri KONCHYK BLR; 3 Damil SHABRONSKY BLR

**S8D-RC Rocket Glider:** 1 Aurimas PETKEVICIUS LTU; 2 Maris BRAKOVSKIS LAT; 3 Oskars RAUDINS LAT

Well run, this contest was seriously good and a credit to, CD Janina Karciauskiene (LTU), leaving the FAI Jury of Lubomir Jurek (SVK), Andrius Bukauskas ((LTU) and Gunas Putra (LAT), with but one protest to manage.

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## **Brilliant Balkan Boogie ~**

*Dupnitsa-BUL.. 1<sup>st</sup> BALKAN CUP*

*30<sup>th</sup> June - 1 July '12* by The Editor

SPACE MODELLING in the Balkans has long been a culture, with Bulgaria traditionally one of the strongest players. Your scribe got the call to

judge at this one early in 2012 and relished the opportunity to travel to Dupnitsa – the former Stanke Dimitrov, in Communist days – to join with old friends and adversaries from Klub IKAR. My first encounters with IKAR was at the *St Leonhard Modellraketen Festivals* in the late 1980s, in what was still West Germany. Travels were Wizz Air from Luton into Sofia – arriving in the small hours – and whisked to Hotel ‘Rila’, in Dupnitsa, by Sotir Lazarkov...as easy as it reads.

There to judge S7-Scale with Kiril Kostadinov and Marin Georgiev (both-BUL), but soon found himself made FAI Jury President! ...linked with Georgi Katsarov and Vladimir Bachev (both-BUL). Georgi Georgieski (MKD) deserves thanks for being the alternate S7-Scale Judge, to keep FAI sweet! Weather prospects wonderful, so how did it all go..

### **S4A-Boost Glider World Cup**

First up on Saturday morning, individuals from Bulgaria and Macedonia got ready to slug it out in the opening class of this novel World Cup. Major players looked like Georgi Georgieski, Stanisa Petrovic and Zoran Atanasoski (all-MKD), with Valentin Savov, Teodor Todorev and Plamen Jordanov fronting it for the hosts. A great series saw Zoran Atanasoski win by miles, leaving Plamen Jordanov and Boris Lekov scrapping for Silver and Bronze.

1 Zoran ATANASOSKI MKD 180 180 113 = 473s  
2 Plamen JORDANOV BUL 160 131 92 = 383s  
3 Boris LEKOV BUL 85 131 92 = 383s

### **S6A-Streamer Duration World Cup**

A compact set – albeit containing a number of the World’s best – went to the rampa to contest this classic. Form player undoubtedly Zoran Atanasoski (MKD), after his super victory in S4A-Boost Glider moments before. Quite the simplest class in Space Modelling, a superlight bird recovered under a pleated streamer, but quite the most fiercely contested. Contenders were sure to include Marijana Savova, Plamen Jordanov and Marija Somleva (all-BUL), chased hard by Macedonians Stanisa Petrovic and Georgi Georgieski...backed by the surprise

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package of Turks, Berk Ender Ozogren and Celil Atik. Scoring ebbed and flowed, with the temperature starting to sear...Zoran Atanasoski (MKD) relishing a second Gold, chased by Nikolay Peychev and Marija Somleva (both BUL). Well done.

1 Zoran ATANASOSKI	MKD	112	125	125	= 362s
2 Nikolay PEYCHEV	BUL	67	180	90	= 337s
3 Marija SOMLEVA	BUL	59	69	173	= 301s

### S9A-Gyrocopter Duration World Cup

This one just a bit tame by comparison, featuring but seven starters. Hard luck stories abounded, but no one could argue with Boris Levov's (BUL) sledgehammer performance. Compatriots, Marijana Savova and Plamen Jordanov could only stop and stare!

1 Boris LEKOV	BUL	180	148	180	= 508s
2 Marijana SAVOVA	BUL	0	148	180	= 328s
3 Plamen JORDANOV	BUL	94	100	105	= 299s

### S7-Scale World Cup

Different...nobody could remember a World Cup S7-Scale hall without an *Ariane*! A positive was that this event featured Juniors, flying models they'd researched and built themselves. Prototypes included, *GSLU-Mk1* – India's Satellite launcher – by Tomislav Skandaliev (BUL); *M3-MM* Satellite carrier, by father Hristofer. Dimitar Moralisky (BUL) entered a *Scud BS*, which looked sinister! ...and Teodor Todorov (BUL) featured a very attractive *Meteor-2* sounding rocket. Great to see the 'young Turk', Celil Atik, with a fairly swish *AGM-12B Bullpup* air-to-ground missile.

The Editor was Chief Judge, ably supported by locals, Marin Georgiev and Kiril Kostadinov. Static scrutiny was challenging, as none of us had judged these prototypes previously and the scoring was close. The flights were all simple single-stagers, with Teodor Todorov paying dearly for a misfire, though his subsequent boost was good enough for the Bronze step. Father and son, Hristofer & Tomislav Skandaliev boosted their *M3-MM* and *GSLU-Mk1* birds virtually identically, for the top-2 podium steps. Observation...none of us could remember an S7-

Scale event where there were no DQs in the flights! Well done, Tomislav.

1 Tomislav SKANDALIEV	BUL			
<i>GSLU-Mk 1</i>		544	+ 60	= 604pt
2 Hristofer SKANDALIEV	BUL			
<i>M3-MM</i>		536	+ 54	= 590pt
3 Teodor TODOROV	BUL			
<i>Meteor-2</i>		516	+ 55	= 571pt

### S8E/P-RC Rocket Glider Spot World Cup

Championship of Bulgaria?!? ...seemed that way, with no other nations coming to the rampa. Objective – to boost and fly for a prescribed time, followed by a spot landing on a tape. Points lost for being early or late and for missing the target. This should have been a good World Cup round, with the scoring ebbing and flowing throughout. Konstantin Ranov paid dearly for a mediocre opening shot, despite 'winning' the flyoff round. In the end, Angel Todorov, Nikolay Peychev and Kancho Kanev did enough for the podium.

1 Angel TODOROV	BUL					
		979	1000	1000	+ 783	= 3762pt
2 Nikolay PEYCHEV	BUL					
		1000	839	807	+ 789	= 3435pt
3 Kancho KANEV	BUL					
		527	729	955	+ 954	= 3165pt

### S3A-Parachute Duration

Funny, it's often only after the 'serious' World Cup business is over, do the flyers relax and really deliver! The startlist mimicked S6A-Streamer, but the scoring much higher, with the massive 300s max dominating proceedings. Once more, Hristofer and Tomislav Skandaliev, Teodor Todorov and Marijana Savova (all-BUL) found themselves in the mixer with Berk Ender Ozogren and Celil Atik (both-TUR). Very close podium...it squeaked!

1 Hristofer SKANDALIEV	BUL	280	300	191	= 771s
2 Valentin SAVOV	BUL	300	300	170	= 770s
3 Berk Ender OZOGREN	TUR	130	300	300	= 730s

**Action Replay...**Good, if a tad small. Maybe there are just too many World Cup events in nearby countries at this time of the season. Plaudits must go

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to Klub IKAR at Dupnitsa, with Konstantin Ranov, Hristo Lazarkov and Plamen Vasilev running the show. Range Safety Officer, Sotir Lazarkov got all the calls right and wins thanks for transporting your scribe to and from the event. It was great to judge S7-Scale with Marin Georgiev and Kiril Kostadinov, in a class that was really competitive. And it was *Hot*...very, very *Hot*, compared to conditions in England. Super then...

2 Simon URBAS  
3= Drago PERC  
3= Matjan ZGAJNER

SLO 300 300 117 = 717s  
SLO 0 300 300 = 600 + 360s  
SLO 0 300 300 = 600 + s

**FAI Jury made up of Andrija Ducak (SRB), Joze Cuden & Tone Sijanec (both SLO). CD was Marjan Jenko (SLO) and RS) Marjan Cuden. This was a good one.**

**Vega Cup ~ Krsko -  
Zadovinek-SLO : 6-7July '12.  
Hot one in every way!**

**GOOD WORLD CUP...a credit to Contest Director, Marjan Jenko and the Jenko Mafia! Competitors from Slovenia, Croatia, Serbia and Great Britain...our own John Jacomb braved the 35 degree temperatures. Lots and lots of good flying in this one. Podiums:**

### **S4A-Boost Glider World Cup (10 starters)**

1 Miodrag CIPCIC SRB 93 143 154 = 390s  
2 Vladimir CIPCIC SRB 143 49 180 = 372s  
3 Marjan JENKO SLO 123 110 120 = 353s

### **S6A-Streamer Duration World Cup (19starters)**

1 Miodrag CIPCIC SRB 180 104 117 = 401s  
2 Vladimir CIPCIC SRB 129 79 172 = 379s  
3 Zoran KATANIC SRB 107 0 113 = 220s

### **S9A-Gyrocopter Duration World Cup (8 starters)**

1 Marjan JENKO SLO 180 180 - = 360s  
2 Radojica KATANIC SRB 180 86 0 = 266s  
3 Zoran KATANIC SRB 107 0 113 = 220s

### **S8E/P-RC Rocket Glider World Cup (4 starters)**

1 Mitja ZGAJNER SLO  
829 1000 1000 + 1000 = 3829pt  
2 Tomaz STARIN SLO  
1000 952 763 + 1000 = 3715pt  
3 Matjan ZGAJNER SLO  
329 0 0 + 502 = 831pt

### **S3A-Parachute Duration (8 starters)**

1 Samo PERC SLO 300 300 300 = 900s

**Liepaja Cup ~ Liepaja-LAT : 7  
-8 July '12. ABC!**

**ABC = ANOTHER BALTIC CLASSIC!**  
Startlist from Estonia, Latvia, Lithuania, Slovakia and Russia set up a super World Cup. Congratulations to CD Indra 'where's my sand wedge' Bunka and the team from the Latvian Spacemodellers Sport Union and Liepaja Youth Technical Art Centre Podiums:

### **S4A-Boost Glider World Cup (21 starters)**

1 Gennady POLTAVETS RUS 180 149 180 = 509s  
2 Jurgis STRAZDAS LTU 180 148 160 = 488s  
3 Dainis IGNATOVICS LAT 128 180 116 = 426s

### **S6A-Streamer Duration World Cup (27 starters)**

1 Mykolas TREIKAUSKAS LTU 126 106 177 = 409s  
2 Jurgis STRAZDAS LTU 113 107 118 = 338s  
3 Dmitri KOROTIN RUS 86 118 110 = 314s

### **S9A-Gyrocopter Duration World Cup (26 starters)**

1 Gintaras JUCEVICIUS LTU 180 180 180 = 540s  
2 Gennady POLTAVETS RUS 180 180 146 = 506s  
3 Mykolas TREIKAUSKAS LTU 180 152 164 = 496s

### **S7-Scale World Cup (5 starters)**

1 Jurgis STRAZDAS LTU *Little Joe* 646+ 85 = 731pt  
2 Kaspars ROZE LAT *Nike Cajun* 579+ 83 = 662pt  
3 Dainis IGNATOVICS LAT *Meteor-3* 4761 + 68 = 544pt

### **S8E/P-RC Rocket Glider World Cup (14 starters)**

1 Roberts BRIVNIEKS LAT  
716 877 1000 + 926 = 3519pt  
2 Viesturs BERZINS LAT  
1000 1000 573 + 905 = 3478pt  
3 Kirill STROKOV RUS

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727 751 803 + 1000 = 3281pt

3 Matjan ZGAJNER SLO

- 445 CE + - = 445pt

Really good and a credit to all concerned. FAI Jury consisted of of Lubomir Jurek (SVK), Andrius Bukauskas ((LTU) and Arnis Baca (LAT). No protests, so easy as ABC..

Srdjan Pelagic, Andrija Ducakc (both SRB) and Lucian Sercaianu (ROM) presided over a super World Cup in conditions of high temperature and low wind. RSO Slobodan 'Max' Maksic did well throughout and S7-Scale was judged by Nikola Cvjeticanin, Miodrag Cipic (both SRB) & Lazo Djeordjievski (SRB). Good one.

### 11<sup>th</sup> Belgrade Cup ~ *Lisicji* *Jarak-SRB : 14-15 July*

**AEROKLUB Franjo Kluz** is well practiced at setting up good World Cups and this one was no exception. *Vazduhoplovni savez Srbije* chipped in generously and yet another Belgarde Cup was born. Countries competing were Serbia, Slovenia, Macedonia and Romania. Some good podiums:

#### **S4A-Boost Glider World Cup (20 starters)**

1 Tomislav ERDEG	SRB 178 180 160 = 518s
2 Vladimir CIPCIC	SRB 180 84 180 = 444s
3 Vesna KATANIC	SRB 128 134 173 = 435s

#### **S6A-Streamer Duration World Cup (45 starters)**

1 Zoran KATANIC	SRB 180 88 180 = 448s
2 Zoran ATANASOSKI	MKD 73 180 180 = 433s
3 Zivan JOSIPOVIC	SRB 180 104 127 = 411s

#### **S9A-Gyrocopter Duration World Cup (12 starters)**

1 Zoran KATANIC	SRB 126 180 180 = 486s
2 Mihailo PETROVIC	SRB 180 140 132 = 452s
3 Branislav KRCEDINAC	SRB 180 180 - = 360s

#### **S7-Scale World Cup (17 starters)**

1 Zivan JOSIPOVIC	SRB <i>Saturn 1B</i> 765+ 68 = 833pt
2 Vladimir CIPCIC	SRB <i>Ariane 1</i> 695+ 70 = 765pt
3 Luka VOLAROVIC	SRB <i>Bumper no 7</i> 620 +73 = 693pt

#### **S8E/P-RC Rocket Glider World Cup (3 starters)**

1 Vladimir CIPCIC	SRB	1000 977 1000 + 982 = 3959pt
2 Mitja ZGAJNER	SLO	655 1000 904 + 1000 = 3559pt

### - World Cup ~ latest placings... *following the 11<sup>th</sup> Belgrade Cup!!*

by Srdjan Pelagic

SEVERAL changes in the leading positions. A very pleasant surprise is Zoran Atanasoski from FYR Macedonia who sits in 1<sup>st</sup> position in S6A. Zoran rejoins Space Modelling after many years, but becomes dominant in three classes, S4A, S6A and S7...cool! Now he is a '*torch of Space Modelling*' in his country and Southern Europe. He unseated Zoran Katanic (SRB) from the leader's position in S6A and is leading 355 competitors, from 25 countries.

Another "surprise" is the well-known Vladimir Cipic (SRB), breaking through into the top-3 places in three classes...S4A, S7 and S8E/P. Prof Gennady Poltavets (RUS) holds his positions in S4A (2) and S9A (1). He is a competitor with the greatest participation in World Cup events this year - entering successfully, EIGHT events in three classes S4A, S6A and S9A...and he does everything with no assistance of other people.

Big surprise in S7, is Wojciech Krzywinski (POL), a top S7-Scale modeller, entering but one event in 2012 and has not reappeared; just like

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Bedrich Pavka (CZE). Friends, we are looking for more successful flights.

In S8E/P a new power are Angel Tsonev Todorov (BUL) and Vladimir Minkevich (BLR), with Vladimir Cipcic competing for top positions. Mitja Zgajner (SLO) who was practically with no competition since last year, is quickly trying to rejoin the leading players.

An additional comment is - we are missing many well known competitors in S7 and S8E/P, but there are seven more competitions to the end of the season and probably they will reappear. In general, 2012's events are not so well attended as last years. Let's improve it.

### **S4A-Boost Glider**

1 Zoran Katanic	SRB	326pt
2 Gennady Poltavets	RUS	310pt
3 Vladimir Cipcic	SRB	298pt
4 Zivan Josipovic	SRB	296pt
5 Slawomir Lasoscha	POL	279pt

### **S6A-Streamer Duration**

1 Zoran Atanasoski	MKD	335pt
2 Zoran Katanic	SRB	332pt
3 Aleksandr Koslov	CZE	320pt
4 Vladimir Cipcic	SRB	316pt
5 Zivan Josipovic	SRB	289pt

### **S7-Scale**

1 Kiril Stokov	RUS	156pt
2 Vasil Pavljuk	SVK	152pt
3 Danil Shabronsky	BLR	151pt
4 Andrei Surhinevich	BLR	143pt
5 Michal Borrowski	POL	110pt

### **S8E/P-RC Rocket Glider**

1 Vladimir Cipcic	SRB	314pt
2 Andrej Todorov	BUL	313pt
3 Vladimir Minkevich	BLR	290pt
4 Eryk Jaszkim	POL	274pt
5 Mitja Zgajner	SLO	271pt

### **S9A-Gyrocopter Duration**

1 Gennady Poltavets	RUS	325pt
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2 Gintorus Jucevicius	LTU	319pt
3 Mykolas Treikauskas	LTU	304pt
4 = Boris Lekov	BUL	294pt
4 = Maksin Timofejev	LTU	294pt

**Editor's note..** This is looking pretty juicy and sure to get even better once the results of the next set of World Cups comes in. Then there's the World Champs and the run-in to Ljubljana...wow!

## **Jason on Scale.. just another one from our regular columnist**

by **Jason Wentworth**

**ANOTHER** super piece and some unusual stuff featured. Even with global communications at an all-time high, we still seem to know little about Korea, be it North or South, Off we go:

South Korean-made 1/144th scale plastic model kits of the KARI - Korea Aerospace Research Institute - *Naro-1* satellite launch vehicle see:

<http://en.wikipedia.org/wiki/Naro-1>

...are available on eBay. see:

[http://www.ebay.com/itm/Asem-Hobby-Korea-Space-satellite-Rocket-NARO-Aero-Military-Plastic-Model-/180800661348?](http://www.ebay.com/itm/Asem-Hobby-Korea-Space-satellite-Rocket-NARO-Aero-Military-Plastic-Model-/180800661348?pt=LH_DefaultDomain_0&hash=item2a188f2764)

[pt=LH\\_DefaultDomain\\_0&hash=item2a188f2764](http://www.ebay.com/itm/Asem-Hobby-Korea-Space-satellite-Rocket-NARO-Aero-Military-Plastic-Model-/180800661348?pt=LH_DefaultDomain_0&hash=item2a188f2764)

...for \$15.99 each, which includes 'free' shipping to the USA - similar rates may be available to Canada and the UK. This model might make a good PMC - Plastic Model Conversion - model rocket contest entry. At 1/144th scale, it is approximately 9" (250mm) long and 0.825" (20mm) in diameter. It has two opposing fins - or fin-like appendages - perhaps for venting

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excess propellants? Add two additional clear plastic fins at 90 degrees to the existing ones to make the model aerodynamically stable.

In addition, I found scale data on several South Korean sounding rockets (as well as their *Naro-1* satellite launch vehicle). Here it is:

The rocket next to the South Korean *Naro-1* SLV in this *Naro-1* article photograph see:

<http://en.wikipedia.org/wiki/Naro-1>

...is a KSR-III see:

[www.globalsecurity.org/space/world/rok/ksr.htm](http://www.globalsecurity.org/space/world/rok/ksr.htm)

...This simple, pressure-fed LOX/kerosene rocket - which was successfully test flown in 2002 - was intended to be a common rocket module for a microsatellite launch vehicle, called *KSR-IV*, that would have resembled a miniature *Titan IIIC* see:

[www.astronautix.com/country/korsouth.htm](http://www.astronautix.com/country/korsouth.htm)

...Here is a video see:

<http://www.youtube.com/watch?v=wFuIMy9Tub>

...of the *KSR-III* being launched. Unusually for a liquid propellant rocket, it was launched from an inclined, sounding rocket-like rail launcher! Also:

Before the *KSR-III* was built and flown, South Korea's space agency, called KARI (Korea Aerospace Research Institute, see:

[www.kari.re.kr/eng/index.asp](http://www.kari.re.kr/eng/index.asp)

...developed several smaller, solid propellant sounding rockets. The single stage *KSR-I* see:

<http://www.astronautix.com/lvs/ksri.htm>

...could lift a 150 kg payload to an altitude of 75 km. *Rocketarium* see: [www.rocketarium.com](http://www.rocketarium.com)

...produces a scale model of the *KSR-420S* sounding rocket see:

<http://www.globalsecurity.org/space/world/rok/ksr.htm>

...and <http://www.rocketarium.com/ksr420s.html>

... which could carry a 30 kg payload to 75 km.

The two-stage *KSR-II*, which used two *KSR-I* rocket motors in tandem, could boost the same

150 kg payload of the *KSR-I* to 160 km see:

<http://www.astronautix.com/lvs/ksrii.htm>

...This "Space Program Republic of Korea" report see:

[http://www.aprsaf.org/data/aprsaf12\\_data/day1/13\\_kari\\_ap12.pdf](http://www.aprsaf.org/data/aprsaf12_data/day1/13_kari_ap12.pdf)

...contains more information on South Korea's space program, including their sounding rockets.

Another day, another miss.. Having missed out on getting one of SpaceX's Falcon 9/Dragon scale model rocket kits that they sold through Amazon.com see: [www.amazon.com/SpaceX-Falcon-Dragon-Flying-rocket/dp/B006GX14R8/ref=cm\\_cr\\_pr\\_product\\_top](http://www.amazon.com/SpaceX-Falcon-Dragon-Flying-rocket/dp/B006GX14R8/ref=cm_cr_pr_product_top)

...today I called SpaceX see: [www.spacex.com](http://www.spacex.com)

... to ask when the kits would be available again. The lady I spoke with told me that they have placed an order for another production run of the kits. She also added that she couldn't give me an estimate of when the kits will be available, but she said that while SpaceX will sell this new run of kits through Amazon.com - having sold my book through Amazon.com, I understand why, as Amazon.com handles all of the ordering & shipping process. SpaceX will eventually sell the Falcon 9/Dragon kits directly. When I suggested to her that the Falcon Heavy would also make a good scale model rocket kit, she confirmed that they are also thinking along those lines. Needless to say, all of this news made my day! In addition...I e-mailed a link - included below - to Gus' photograph-illustrated "Applying Sticky-Paper Body Tube Wraps" tutorial see:

<http://forums.rocketshoppe.com/showthread.php?t=10456>

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...to SpaceX. If they posted the link on their web site to help the builders of their kits, it would be great Public Relations for SpaceX, Gus, model rocketry in general, \*and\* our humble little "Ye Olde Rocket Forum."

I hope this information will be helpful.

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**Enough!!** *..is enough and into the wind up*

by the Editor

**WOW...Yet another Big Issue, but in Space Modelling, there is just so much happening. We fronted up this issue with an account of the *International Rocketry Challenge*, from the Farnborough International Airshow, on 13<sup>th</sup> July 2012. Expect a bit more – the TV crew in attendance shot some good footage and the finished article was not ready when I decided to publish. Probably next time.**

Now, the Editor must declare an interest in the final item.. Very soon, another 'historical book' on Space Modelling will become available. Full details not available yet, but the title is:

## **The interspace.. Book of Space Travels**

By Stuart Lodge

Publisher ~ *Traplet Publications*

...it is to be hoped that many of you will want to buy a copy. The Editor's latest book contains many previously unrecorded facts about Space Modelling, dating from the early 1980s. This book is more about the people who have featured in FAI Space Modelling, than just rockets. It's about travels to unusual places, memorable experiences and how Space Modelling is rapidly evolving. Trust me...much more on this in the next issue. *Oh yes, lots and lots of you feature in the pages!* Time to go...happy reading

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