Minutes
of the
Annual Meeting
of the
FAI Aerobatics Commission (CIVA)

held in Wroclaw, Poland on
08 and 09 November 2014
at the Mercury Hotel
TABLE OF CONTENTS

1. CIVA Presidents introductory remark ................................................................. 4
2. In memoriam ............................................................................................................. 4
3. Meeting Introduction ............................................................................................... 5
   3.1. Roll Call of delegations .................................................................................. 5
   3.2. Minutes of the 2013 Meeting ....................................................................... 5
   3.3. Declaration of conflicts .................................................................................. 5
4. FAI Report ................................................................................................................ 5
5. Report from the President of CIVA – LG Arvidsson .............................................. 6
6. CIVA Working Group Reports ................................................................................ 8
   6.1. FPS Working Group........................................................................................ 8
   6.2. Contest Organizing Working Group .............................................................. 8
   6.3. Strategic Working Group .............................................................................. 8
   6.4. Part 1 restructuring Working Group ............................................................... 9
   7.1. 2014 Financial Results (Madelyne DELCROIX) ......................................... 9
   7.2. 2014 CIVA Travel Allowance Programme (LG Arvidsson) ...................... 9
   7.3. 2015 Budget (LG ARVIDSSON) ................................................................ 10
8. Reports on the 2014 Championships .................................................................. 12
   8.1. Reports on the 2013 Championships – approval only .................................. 12
   8.2. Reports on the 2014 WGAC & WAGAC (Torun, Poland) .......................... 12
   8.3. Reports of the 2014 WAAC (Dubnica nad Vahom, Slovakia) ....................... 13
   8.4. Reports on the 2014 EAC (Matkupuszta, Hungary) ..................................... 14
9. CIVA Known Compulsory Programmes for 2015 .............................................. 15
   9.1. Advanced Known Programme .................................................................... 15
   9.2. Unlimited Known Programme .................................................................... 15
   9.3. 9.3 Advanced and Unlimited Glider Known Programmes ....................... 15
   9.4. Yak 52 and Intermediate Known Compulsory Programme ...................... 15
10. CIVA Sub-Committee Reports & Proposed Rules Changes ............................. 16
    10.1. Report of the CIVA Rules Sub-Committee (Michael R. HEUER) .............. 16
    10.2. Report of the CIVA Judging Sub-Committee (John GAILLARD) ......... 22
    10.3. Report of the CIVA Catalogue Sub-Committee (Alan CASSIDY) ........... 23
    10.4. Report of the CIVA Glider Aerobatics Sub-Committee (Manfred ECHTER) 23
    10.5. Safety & Expedited Proposals (SP & EP) from Championships ............... 23
    10.6. President's Proposals (LG ARVIDSSON) .............................................. 26
11. Future FAI Aerobatic Championships .............................................................. 27
    11.1. 2015 World Aerobatic Championships (report from France) .................... 27
    11.2. 2015 World Glider Aerobatic Championships (report from Czech Republic) 27
    11.3. 2015 European Advanced Aerobatic Championships (bids invited) ........ 28
    11.4. 2016 World YAK 52 / Intermediate Aerobatic Championships (bids invited) 28
11.5. 2016 World Advanced Aerobatic Championships (bids invited) ........................................... 28
11.6. 2016 World Glider Aerobatic Championships (bids invited) .................................................. 29
11.7. 2016 European Aerobatic Championship (bids invited) .......................................................... 29
11.8. Other future events (bids invited) .............................................................................................. 29
12. FAI Special Aerobatic Events (FSAE) for 2015 .............................................................................. 29
13. List of FAI International Aerobatic Judges .................................................................................... 30
14. Other Reports and Business ......................................................................................................... 30
   14.1. Leon Biancotto Diploma for 2015 .............................................................................................. 30
   14.2. FAI/Aresti Committee Report (John GAILLARD ................................................................. 31
   14.3. Contest Scoring Programme Report (Nick BUCKENHAM) ..................................................... 31
   14.4. Other Reports/Business ......................................................................................................... 31
15. CIVA Elections 2015 .................................................................................................................... 32
16. Appointment and Approval of Championships Officials ........................................................... 34
   16.1. 28th World Aerobatic Championships 2015 ........................................................................... 34
   16.2. 9th European Advanced Aerobatic Championships 2015 ..................................................... 34
   16.3. 18th World Glider Aerobatic Championships and 6th World Advanced Aerobatic
        Championships 2015 ................................................................................................................. 35
17. Date and Place of Future Meetings .............................................................................................. 35

ANNEX 1 – Report of Susanne Schödel, FAI secretary general – will be added later
ANNEX 2 – Report of Markus Haggeney, FAI sports and marketing director – will be added later
ANNEX 3 – ITC Report
ANNEX 4 – CIVA Known programmes for 2015
ANNEX 5 – Abbreviations of attendees
1. CIVA Presidents introductory remark

At the beginning of the meeting, President LG Arvidsson welcomed everyone to the meeting and introduced the FAI officials present in the meeting. He welcomed Secretary General Susanne Schödel and Sports and Marketing Director Markus Haggeney to the meeting.

The President explained the facilities, the schedule and breaks to the plenary and emphasized that the meeting should follow the schedule.

Mr. Arvidsson also explained about the electronic voting policies that Vladimir Machula would operate, the devices to be handed out to the delegates and that if anyone leaves the room, the device must be left in the possession of Hanna Räihä.

(In brackets are the abbreviations used throughout the minutes whenever referring to a specific person)

President
LG ARVIDSSON CIVA President (LG)

CIVA Bureau Members :
  John GAILLARD Vice President (JG)
  Matthieu ROULET Vice President (MR)
  Nick BUCKENHAM Vice President (NB)
  Elena KLIMOVICH Vice President (EK)
  Hanna RÄIHÄ Secretary (HR)
  Madelyne DELCROIX Secretary (MD)

FAI Head office:
  Susanne Schödel Secretary General (SS)
  Markus Haggeney Sports and Marketing Director (MH)

2. In memoriam

A moment of Silence was held during the President’s introductory remarks, to remember our colleagues and friends, who passed away this year.

This year we lost:
- Ludwig Fuss, GER
- Tamas Nadas, HUN
- Leonardo Ambrogetti, ITA
- Francesco Fornabaio, ITA
- Angel Negron, ESP
3. Meeting Introduction

3.1. Roll Call of delegations

Canada, Czech Republic, Finland, France, Germany, Hungary, Italy, Japan, Lithuania, Poland, Romania, RSA, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, USA.

4 proxies were tabled:
- Austria to Germany
- Denmark to Sweden
- Ireland to Great Britain
- Norway to Finland
- USA to Canada in case US Delegate Michael Heuer needs to leave early tomorrow. Does not count as additional vote.

Attendance was taken and it was established that there were 20 voting delegates/alternates present and eventually 4 proxies, for a total of 24 votes.

To achieve a simple majority, the vote must be at least 13
To achieve a 2/3 majority the vote must be 16.

3.2. Minutes of the 2013 Meeting

There were no objections or matters arising to the minutes of the 2013 meeting, held in Tallinn, Estonia.

The Delegates approved unanimously the Minutes of the 2013 Meeting

3.3. Declaration of conflicts

None

4. FAI Report

Susanne SCHÖDEL, FAI Secretary General, presented her report

Report will be in a later date as an ANNEX 1

Markus Haggeney, FAI Sports and Marketing Director presented his report

Report will be in a later date as an ANNEX 2
Minutes of the annual meeting of the FAI Aerobatics Commission (CIVA) 2014 - Wroclaw

### 5. Report from the President of CIVA – LG Arvidsson

- President thanked Susanne and Markus and gave few points to their speeches
  - There is a change going on from CIVA’s part, something new coming in to the sport
  - Air Sport Commission president meeting will have a lot of discussion in new possibilities
  - Everyone has been fighting with the organizers agreement over the years. It is not set yet, but as Markus Haggeney said it, let’s call it “marketing and communication plan” instead of an agreement. It shows what you can do and what you cannot do. Now there is support coming from FAI and that is important.
  - Markus showed an interesting picture with a circle around far-east, and pointed out that we have been too Euro-Centric.
  - Now we would like to go from Euro-Centric to CIVA-centric.

- **Championships 2014**
  - Sky Grand Prix Durban, RSA in March
    - 80 000 people spectators, was held at the beachfront. It was easy to get media coverage and that way also sponsors. This concept of going where people are, is working.
  - FAI World Glider Aerobatic Championships / FAI World Advanced Glider Aerobatic Championships 2014 Torun, Poland
    - Low interest, no big deals about it. Experienced organizer.
  - FAI World Advanced Aerobatic Championships 2014 Dubnica, Slovakia
    - For many years, advanced has been the big category.
    - Breitling was supporting the contest and it is good to know they are sponsoring and backing up.
    - The deal between FAI and Breitling is good but we also need to deliver.
  - FAI European Aerobatic Championships 2014 Matkópuszta, Hungary
    - The last 10 years in European aerobatics the number of competitors has been going down. This year it changed. It needs to be improved but this was a good step forward.
    - Matkopuszta was a new contest site, and we hope that we can go back there someday.
  - FAI World YAK 52 Aerobatic Championships 2014 and FAI World Intermediate Aerobatic Championships 2014, South Africa
    - This will happen in the end of November and beginning of December.
    - Test contest with two categories, YAK52 and the new Intermediate-category.
    - This will determine the future with these two contests, how it will work.

- **Bureau**
  - 2014 there are 2 things we need to boost.
  - Information flow: Civa-news-website and FAI-website, FAI being the official website. Nick Buckenham will take over civa-news and improve the website. Internal information will be put on the civa-news, e.g. the judging tests, but the FAI will still of course be the main point of information going out.
  - Document-flow and deadlines which we will improve. Hanna Räihä together with LG Arvidsson will look carefully on this in 2015.
Bureau members 2014
- President: LG Arvidsson (SWE)
- Vice Presidents: John Gaillard (RSA), Matthieu Roullet (FRA), Nick Buckenham (GBR), Elena Klimovich (RUS)
- Madelyne Delcroix and Hanna Räihä have worked as secretaries 2014
- Madelyne Delcroix has worked as treasurer 2014 and will step down from that position after this year. Jürgen Leukefeld has stepped forward and is now nominated as the new treasurer and we will vote on that later

Working groups
- FPS – Fair play system Working Group
- COWG – Contest Organizing Working Group
- SPWG – Strategic Planning Working Group
- Part 1 Restructuring Working Group
  - New in 2014 because in the rules, many things are twice or even three times. Matthieu Roullet has been working on this and will present the new, revised Rule book in the future.
- KAWG – Known Analysis Working Group

Sub-committees
- Rules Sub-Committee
- Judging Sub-Committee
- Glider Aerobatics Sub-Committee
  - Normally we have had five member subcommittees. In Glider subcommittee, this SC has adopted anyone who wants to be there. The goal is to reduce the members of GSC to five members and in long term submerge the Glider aerobatics into the RSC and JSC. The goal is also to merge parts 1 and 2 into one rulebook.
- Catalogue SC

Establishing a new subcommittee, Information and Communications Technology (ICT)
- We have several new technical issues that require looking into, for example wind sonds.
- Information and communication technology

CIVA AGREED unanimously establishing of a new subcommittee, ICT SC

Nick Buckenham (NHB) & Vladimir Machula (VM) presented the ICT work
- NHB: We have FAI website, which is the official center of FAI communications. However it is hard to add anything and control it, so a while back there was an idea with Mike Heuer to have a separate website for small things that we could add there fast. The website is www.civa-news.com. It has moved on, but not as much as we wanted.
- All the official material will be in FAI website.
- For Civa-News.com there will be information about the bureau, the work of subcommittees, voting for two way communication etc.
VM: In the last plenary meeting there was a proposal from the Czech Republic, to look into the Information and Communication Technology systems. The report of this will be published shortly either on FAI website or through the mailing lists.

- We are getting more and more dependent on electronics. With a growing complexity of any system, is also growing a need for better management.

- We are also encouraging other possible solutions and dedicate people who are willing to do something and to help and support them to bring these new systems out. There are many ways we can make things simpler, better and more cost efficient for the contest organizers.

- When sometimes in contests things don’t go too well, someone might be blaming some tool or some operations of tools. This should act as a shield and explain what have happened.

SEE ANNEX 3

6. CIVA Working Group Reports

6.1. FPS Working Group
Report from Nick Buckenham
- FPS has not changed; all the algorithms still work effectively and correctly.
- After difficult and long conversations and a lot of testing with the software, FPS still provides the most realistic way to calculate our results independently if there is one or two judges from the same country.
- FPS includes a vast amount of information.
- Our WG is happy about the software and we would like to continue as it is.


6.2. Contest Organizing Working Group
Report from Nick Buckenham
- 2014 there were few occasions when there was a problem with paperwork, and that’s why it is so important to tighten our systems in order to be sure that the paperwork on the judging line and in the scoring system is absolutely right.
- The proposals are written in the full report.

Report Agenda item 6.2 Report of the CIVA contest organization working group 2014

6.3. Strategic Working Group
Report from Nick Buckenham
- The WG has two proposals 2014, both presented in the report.
- SPG Proposal #1: Form a Working Group to consider the development and possible adoption of a single new programme format to replace the existing Known and Free programmes, to be called for example the "Free Known Programme".
- SPG Proposal #2: Create a new "Super Advanced" level between Advanced and Unlimited

Report agenda item 6.3 Report of the CIVA Strategic Planning Group 2014
6.4. **Part 1 restructuring Working Group**  
Report from Matthieu Roullet (MR)

- In the past years, there has been nothing but adding things to the rule book. It has become very hard to find the right place from the rule book and the second problem is that there are inconsistencies.  
- This WG is not about to change the rules, but to restructure and consolidate the rule book to an easier to read-form.

**Discussion:**

Hans-Peter Röhner (HPR) – Do you have a process to verify it afterwards?  
MR – first we are going to draft it and go through it with Rules Sub Committee. Remember there is no rule change in this process.

---


7.1. **2014 Financial Results (Madelyne DELCROIX)**

- The main aim was to solve the problems with TA’s.  
- The finances are in a slightly better shape now, due to the restriction to 7 CIVA supported team of judges in regards of their travel and a strict control of the airfares.  
- Report Agenda Item 7, Finances 2014

**NOTE:** YAK/INTWC still missing TA’s since contest still in the future.

**Discussion:**

MRH: How do you determine, what the amount of TA is for judges.  
MD: I will look into internet just like this year, and look for some cheaper flights with only reasonable schedule; I will not make any one to spend a night at the airport, if we can avoid it.  
MH: What will it be, 100% then or what?  
LG: We will talk about the budget later  
MD: Probably not 100%, because we have to stay in the budget. If it will be 80% of the cost, you will be paid 80% of the cost.  
HPR: This income from Breitling, is there also some sponsor money to the organizer from Breitling?  
MD: 13,000 Euros have been given to the organizer.  
HPR: Was this the first time?  
VM: No, this was third time, Finland, US and now Dubnica.

7.2. **2014 CIVA Travel Allowance Programme (LG Arvidsson)**

*These rules are for CIVA selected Contest Officials. They have been approved by the CIVA President and the Bureau. They are referred to as the "CIVA Travel Agreement" (TA)*

1. All expenses MUST be agreed before any ticket purchase  
**No prior signed agreement: no reimbursement!**

2. All claims must be submitted to the CIVA treasurer once your travel has been purchased.
A claim must include:
- The official CIVA TA expenses claim form signed and dated
- Original invoice(s)/receipts
- Bank information

3. The claim must be received by the Treasurer for review no later than at the arrival to the championship concerned. Claims received later will be dealt with when all the claims which were submitted on time are processed.

4. Your claim should preferably be sent to the treasurer by email, in ONE PDF file with all the requested documents merged. Alternatively your claim can be given BY HAND to the Treasurer at the championship venue in a sealed envelope – in this case be sure to write the name of the person claiming and the content on the outside of the envelope.

5. Invoice/Receipts:
- All claims must be supported by the original receipts in accordance with Swiss law (i.e.: with name, trips details and amount).
- E-tickets must show the traveler’s name, destination, dates travelled and amount actually paid. E-copies and digital scans

Report Agenda Item 7, Finances 2014

7.3. 2015 Budget (LG ARVIDSSON)

During the last couple of years, we have reimbursed the judges, our officials; because we think it is extremely important that they are paid by CIVA, and not through their NAC’s.

Judges have been paid more than 100% of the income we’ve had. Now the source we have is almost gone. Last couple of years we have tried to lower the costs. For the coming year, the most important thing is that we need to have a balanced budget.

2014 we had the Sky Grand Prix in Durban and now we know that there will be again a Sky Grand Prix in the spring 2015. There will be money coming in.

When CIVA submits a budget, we did it in the middle of the summer. At that time we do not know exactly how many competitions we are going to have or how many sanction fees is coming. So the budget CIVA submits is just a qualified guess.

For now we don’t have enough money to pay 100%. Until we know all the contests for next year, and what are the costs, before that we cannot say how much money we can reimburse the judges. When the judges’ selection is done, they will be informed their travel allowances.

The aim is to pay as much as possible, because we want the judges to be FAI judges, not judges paid by their NAC’s. For now we do not know exactly how much money is coming in this year, since the Sky Grand Prix is still yet to come, we cannot say exactly how much the judges will be paid.

Report Agenda Item 7, Finances 2014
Discussion:

- NHB: I would like to raise a conversation about the sanction fees; we talked a bit of that yesterday in the bureau meeting and the stability that have had for the last few years. And of course it’s a source of income for us.
- LG: For many years the sanction fee, paid by the organizer, was 150 €. We raised it last year from 150 to 160€, but the cost of the travel reimbursement is even higher so this is a big problem. In bids for contests, one of the main things is the entry fee. The problem is also, that if we raise sanction fee, the entry fee is going to go up and countries will not be happy.
- NHB: The reason in raising this subject is simply trying to make sure, that delegates and pilots and everyone understand the significance of how the sanction fee works and what it does to us. The sanction fee is not something that the bureau does; it is the tax we all have to pay in order for the championships to run. If we don’t do this, we don’t have championships. It is as simple as that. We can’t raise the sanction fees for championships that have already been planned, those budgets are already fixed and expect that the sanction fee is 160€. Sadly everything gets more expensive and we need to think that as a group. So evidently we are going to raise the sanction fees and it is in everybody’s interest that we do something we can all live with. It is one of the key aspects and we can’t lose it.
- LG: Thank you Nick. I know when we speak about the entry fee, when there are bids, there is a lot of talking, but now we have raised this specific part of sanction fees, that IS a part of the entry fee, it looks like it is quite quiet. Can I interpret it that you give the bureau free hands on this?
- ME: Take it!
- Bernard Drummer (BD): Is it clear on which events Breitling sponsors next year?
- LG: Next year Breitling will sponsor WAC in France with about 15,000 Swiss Francs and that goes to the organizer.
- MR: Confirming that Breitling sponsorship is in the WAC budget.
- LG: If no more comments, the proposal is that the bureau will decide about the sanction fees.

CIVA AGREED

Discussion:

- CF: How does Breitling sponsorship show to the pilots?
- LG: Breitling sponsorship shows by lowering the entry fee from what it would be without the sponsorship.
- MRH: When is the Breitling sponsorship known for FAI, when it is available?
- SS: We have just been informed about WAC and for the future, we do not know if this is going to happen in 2016 and just hope it will continue. We will improve the communication there. We need to wait for the General Conference where it is included in the financials.
- MRH: Will the final budget be on the CIVA website?
- MD: Yes.
- AF: Is there a policy or guidelines in FAI what sponsorship the pilots can have?
- SS: Breitling is the main sponsor of FAI, so it affects all FAI contests in JEWELLERY and WATCHES. This applies to Organizers. Other sponsors are approved (except alcohol, betting, or any other offensive sponsors etc). Personal sponsors are OK with few limitations.
- PaK: If the organizer is not supported by Breitling, it cannot have any other sponsors?
- MH: FAI representatives asked the organizers to contact Susanne or Markus in the FAI office about these as early as they can to make it possible.
8. Reports on the 2014 Championships

8.1. Reports on the 2013 Championships – approval only

a) FAI World Glider Aerobatic Championships & FAI World Advanced Glider Aerobatic Championships 2013 Oripää - Contest Director (Jyri MATTILA)
Bureau accepts the revised report and asks plenary to make the final decision.

No objections, Report accepted by CIVA

b) FAI World Aerobatic Championships 2013 Texas – Report of the Championship (Mike HEUER)
Bureau accepts the revised report and asks plenary to make the final decision.

No objections, Report accepted by CIVA

8.2. Reports on the 2014 FAI World Glider Aerobatic Championships & FAI World Advanced Glider Aerobatic Championships (Torun, Poland)

a) President of the International Jury (Madelyne DELCROIX)
MD: Nothing to add to the report.

No objections, Report accepted by CIVA

b) Contest Director (Pavol KAVKA)
PK: Nothing to add to the report

Note:
VM: I would like to have a note to the minutes, that CZE does not agree with the report and that we believe that there is not a full story in the report on what happened in Poland.

Vote: In favor: 17 Against: 1 Abstain: 6

Report accepted by CIVA

c) Chief Judge (Philippe Küchler)
PIK: Just make sure you have a correct version of the report. The correct one has a picture of the winners on the front page.

No objections, Report accepted by CIVA
8.3. Reports of the 2014 FAI World Advanced Aerobatic Championships (Dubnica nad Vahom, Slovakia)

a) President of the International Jury (Michael R. HEUER)

MRH: Nothing to add to the report.

Discussion:

- MR: I assume it is a typo, but in the report it says on page 2 “I could have asked for more capable and experienced…”
- MRH: YES, that’s a typo!
- PIK: I was part of this jury. In judging part, page 4, there is something missing. It is about the disqualification of a judge and for me, what is missing, is that the Jury recommends that this judge should be removed from the judging list.
- MRH: I can’t remember that decision. Mady was there too, maybe she can confirm this.
- MD: PIK has better memory than I have…
- LG: I was there too, and I remember that it was a recommendation. The Chief Judge was also there…
- JG: I have heard that said, that this judge should be removed, but I am not the jury.
- MRH: If that was a decision, I am happy to add that to the report, but I didn’t record that to my own notes, but there were so many things on the last day so you must forgive me.
- LG: Then we will do the amendment to the report, so that there will also be the recommendation based to the rules.
- NB: On page 3, there is a note about the highly regrettable situation where the judges had the wrong paperwork for the American pilot. The Jury president made a note that “Despite the forms being incorrect, 4 of the 7 judges were able to score the sequence, though at a heavy disadvantage to Mr. Gifford, ….”. So with respect, the Jury cannot evaluate if it was a heavy disadvantage or not to Mr. Gifford. It should not be there, we must be neutral.
- MRH: What did we actually decide about the amendment?
- LG: The amendment should add that the jury decided to recommend the bureau and CIVA to remove this judge from the list of international judges.
- EK: I would like to remark some timelines, that the judges should be getting their judging analysis after every sequence. …
- MRH: Now that the amendment is done to the report, it still is a report. I assume this will be discussed on the item of List of International Judges.
- LG: According to the rules it is a decision of bureau. If there is a recommendation in a report, it goes to the bureau to decide.
- MRH: In the rules it says that CIVA will decide about the disqualification of a judge.
- LG: We have a recommendation from the jury, to remove a judge.
- HPR: What does it mean in the long term? Is it permanent or is it possible to return later?
- LG: It is a decision for the judging subcommittee if this judge will return as a judge in the future.
- JL: We should decide what the time period is, for how long this judge needs to be out from the List of the International Judges
- LG: The recommendation is not saying for how long, it should be in the recommendation
• PIK: After 3 years we could add her back to the list.
• EK: We need to ask the jury to confirm the recommendation of how long the judge will be removed from the list.
• LG: The bureau together with Mike and the Jury will discuss and come back to this later
• MRH: There have been several attacks on me because of this, so we need to be careful how we handle this.
• LG: On the principles of FAI is a clear statement about true sportsmanship. This is a clear violation on that, what you just brought up
• SS: This report is on the website, I would be very careful on how to handle this.
• LG: Jury and bureau will discuss about this.

Note: The jury of WAAC2014 and the bureau had a meeting. The Jury does not request a change in the report of Mike Heuer. The proposal is that we accept the report. After that, the jury has decided to make a statement. And about this statement we will have a second vote in the plenary.

Accepting Mike Heuers' report from Dubnica?

No objections, Report accepted by CIVA

MRH: The international jury of WAAC 2014 recommends to CIVA that this judge, Lyudmyla Zelenina, will be removed from the list of international judges for the period of 2 years based on the events at WAAC in Dubnica, Slovakia.

Vote: Against: 0 Abstentions:6 In Favor: 18

Accepted by CIVA

b) Contest Director (Vladimir MACHULA)
VM: Nothing to add.

No objections, Report accepted by CIVA

c) Chief Judge (John GAILLARD)
JG: nothing to add.

No objections, Report accepted by CIVA

8.4. Reports on the 2014 FAI European Aerobatic Championships (Matkopuszta, Hungary)

a) President of the International Jury (LG ARVIDSSON)
LG: I’d like to say, that I am very happy that we have more pilots finally than previous years!

No objections, Report accepted by CIVA

b) Contest Director (Pavol KAVKA)

No objections, Report accepted by CIVA
c) Chief Judge (Nick BUCKENHAM)

**No objections, Report accepted by CIVA**

At this point, Vladimir Machula prepared the voting devices and explained how to operate the voting.

<table>
<thead>
<tr>
<th>9. CIVA Known Compulsory Programmes for 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vladimir Machula tested the voting devices and explained how to vote to make sure everything works as it should be.</td>
</tr>
</tbody>
</table>

### 9.1. Advanced Known Programme

<table>
<thead>
<tr>
<th>Proposal</th>
<th>1st Vote</th>
<th>2nd Vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

**Proposal A from the RUSSIA adopted**

### 9.2. Unlimited Known Programme

<table>
<thead>
<tr>
<th>Proposal</th>
<th>1st Vote</th>
<th>2nd Vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>H</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Proposal D from FRANCE adopted by simple majority.**

### 9.3 Advanced and Unlimited Glider Known Programmes

As recommended by the Glider Sub-Committee, that they have already decided.

**Advanced - Proposal B**

**Unlimited - Only one proposal has been made, A**

**CIVA AGREED to the proposals from the Glider Sub-Committee**

### 9.4. Yak 52 and Intermediate Known Compulsory Programme

<table>
<thead>
<tr>
<th>Proposal:</th>
<th>1st vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6</td>
</tr>
<tr>
<td>B</td>
<td>17</td>
</tr>
</tbody>
</table>

**Proposal B from LITHUANIA adopted**

See ANNEX 4
10.CIVA Sub-Committee Reports & Proposed Rules Changes

10.1. Report of the CIVA Rules Sub-Committee (Michael R. HEUER)

Michael R. Heuer gave the floor to Matthieu Roullet

Normal Proposals (NPs): These are proposals submitted each year by Delegates in accordance with our normal rules process and deadlines. They are to be considered by Sub-Committees and recommendations made to plenary. NPs are also proposals submitted after Championships that the President has decided should be placed in the normal rules cycle and considered by Sub-Committees

NP #2015-3 / 15 / 16

Source: FRA#1, RUS#4 and RUS#5 of original Proposal document.
Subject: Wind limits

Proposal:
In case the main axis component of the wind exceeds 12 m/s (or is close to the 12 m/s limit so that normal flight operations are expected to be significantly disturbed, at the discretion of the International Jury), the International Jury may decide to extend the main axis component limit to 14 m/s (with the cross axis component limit unchanged) with the following conditions:

- Boundary judging is suspended;
- A 20-minute notice is given when changing from the “12 m/s mode” to the “14 m/s mode” and vice versa (in particular, when an excess wind is measured while a flight is performed under the “12 m/s mode”, the pilot is free to land, before being required to fly under the “14 m/s mode” no less than 20 minutes later

Rationale from the Powerpoint:

Process to deal with excessive wind in a reasonable manner

- IF Main axis wind > 12m/s AND Risk of invalid contest :
  THEN Int’l Jury may extend Main axis wind limit to 14 m/s with:
    - Boundary judging cancelled for the entire Programme
    - 20-minute notice when switching modes (12 m/s vs 14 m/s) both ways
    - Reflight allowed when excess wind measured (marks given before interruption retained in Unknowns)

Discussion:

- EK: If the pilot is flying and the same time the wind measurement is going, and the wind is out of the limits, somebody calls the pilot to land?
- JG: If the wind gets out of the limits during the flight – and that would need to be communicated with the chief judge, who would then need to call the airplane or pilot down, and I think that is highly unlikely scenario. I would say that if the pilot breaks, then this is very possible scenario, but I can’t see the possibility of CJ calling and breaking a sequence. If in the re-flight, a pilot flies a HZ that overwrites the score.
- MRH: Jury will of course record the data from wind measurements, and what we have done in the past, if we have found the wind out of the limits when the pilot has been in the air then he gets to re-fly. We record the times of wind
measurements and start times and make the decision based on that. Of course that does not apply to unknowns.

- MR: New proposal is: to remove this third point here (Reflight allowed when excess wind measured) and leave the rest. Any objections?

**No Objections, CIVA AGREED**

**NP #2015-11**

**Source:** NOR#2 of original Proposal document.

**Subject:** Unknown figure

**Proposal:**

Establish a working group to expand the list of figures for programs 3 and 4. Norway was planning to submit a proposal with added figures, but decided it was too ambitious for us alone. There are many suitable unused figures among the following that may be considered:

- 7.4.8.x through 7.5.8.x
- 8.5.9.x through 8.5.12.x and 8.5.17.x through 8.5.20.x
- 8.6.9.x through 8.10.2.x

**Rationale from PowerPoint:**

Working group to expand the list of figures for Unknowns

- 7.4.8.x through 7.5.8.x
- 8.5.9.x through 8.5.12.x and 8.5.17.x through 8.5.20.x
- 8.6.9.x through 8.10.2.x ...

![Diagram of figures]

**No Objections, CIVA AGREED**

**Nominating the working group:**

Thore Thoreson, chairman. Members: Alan Cassidy, Brian Howard, Anatoly Belov, Castor Fantoba.

- This working group will submit a proposal for the next plenary meeting.
NP #2015-12

Source: RUS#1 of original Proposal document.
Subject: Drawing of lots

Proposal:
Make Drawing of Lots manual for all programmes. To save time it can be done during one briefing.

Discussion:
- VM: I would like to change this proposal to: It can be done manually or electronically in the briefing in front of everyone. This also takes in consideration the time limits in contest
- EK: I agree with Elena, the problem is that the pilots do not know how it is done and that would be visible.
- MR: We need to vote on this in two parts.

1) Make Drawing of Lots manual for all programmes.

No Objections, CIVA AGREED

2) To save time it can be done during one briefing.

Vote: In favor: 2 Against: 17 Abstentions: 2

CIVA REJECTED

NP #2015-17

Source: RUS#6 of original Proposal document.
Subject: Order of Flight

Proposal:
To give ten top ranked pilots (flown programmes combined results, no gender distinction) opportunity not to fly among first 10 in the next programme.

Drawing of lots procedure
- remove first 10 numbers from the pool and let current ten top ranked pilots draw the lots
- add first 10 numbers to the pool, mix thoroughly and let the rest of pilots draw the lots;
- Adjust the order of flights to separate pilots flying the same airplane.

Vote: In favor: 5 Against: 17 Abstentions: 0

CIVA REJECTED
NP #2015-13

Source: RUS#2 of original Proposal document.
Subject: Wording Change – Positioning Text

Proposal:
Change “ideal” to “optimum” in placement annotation.

5.1.4.4. Depending on the aircraft’s height and on the nature of the figure being flown, there is an optimum range from the judges for the placement of each figure. At this range, the geometrical errors in the figure, and the precise nature of the figure, are both clear and easy to assess.

And then optimum is changed to ideal which is not technically correct:

5.1.4.7. A column headed “Pos” on the Form A marks sheet shall be used to record by exception the positions of figures that are not ideally placed, as they are flown.

Placement: annotation:
Somewhat: left of the ideal position: “L”
Right of the ideal position: “R”
Too near to the judge: “N”
Too far from the judge: “F”
Considerably: left of the ideal position: “LL”
Right of the ideal position: “RR”
Too near to the judge: “NN”
Too far from the judge: “FF”

An optimum placement of each figure depends, besides others, on the wind. The ideal position is something unreachable most of the time.

Discussion:
A lot of talking about meanings of the words: Ideal and Optimal. According to dictionary they mean exactly the same.

Vote: In favor: 4 Against: 12 Abstentions: 6
CIVA REJECTED

NP #2015-14

Source: RUS#3 of original Proposal document.
Subject: Boundary Judges

Proposal:
Remove boundary judges from the World and Continental championships.

Consequently remove penalties for « box outs »

Discussion:
• ME: Glider sub-committee voted on this proposal in GASC and we were unanimous. Should this be accepted, the glider community will not follow this
since we use completely different method on box outs and that for this would not apply to glider aerobatics.

- EK: one of the main reasons is because it’s in power it is just yes or no. Not how long the pilot is out.
- PIK: We should consider changing the method in Power, to something more like in glider.

Vote: In favor: 5 Against: 18 Abstentions: 0

CIVA REJECTED

NP #2015-18

Source: USA#1 of original Proposal document.
Subject: Unknown Roll Limits on Family 5.3.1 & 5.3.2

Proposed Change:

Depending on which of the interpretations presented above is agreed upon by the RSC/JSC, two options to edit 9.8.1.3 in order to remove the current ambiguity are provided below. It is proposed that only the chosen option go forward to plenary.

Option #1

9.8.1.3 Unlimited: The combined total for all aileron roll elements on either or both the 45° and vertical up lines in Families 5.3.1 and 5.3.2 must not exceed 450° of rotation and/or 4 stops.

<table>
<thead>
<tr>
<th>Line Direction</th>
<th>Total Rotation</th>
<th>Stops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Up</td>
<td>450°</td>
<td>4</td>
</tr>
<tr>
<td>45° Up</td>
<td>540°</td>
<td>4</td>
</tr>
<tr>
<td>Vertical Down</td>
<td>360°</td>
<td>3</td>
</tr>
</tbody>
</table>

No Objections, CIVA AGREED
Minutes of the annual meeting of the FAI Aerobatics Commission (CIVA) 2014 - Wroclaw

NP #2015-20

Source: USA#3 of original Proposal document.
Subject: Permitted Yak 52/Intermediate Unknown Figures

Proposed Change:

The following figures must be removed from the list of legal Yak 52/Intermediate Unknown figures because they exceed the maximum K requirement of both Programmes 3 and 4:

Paragraph 9.12
7.8.4.1 (minimum K possible = 27)

Paragraph 9.13
7.8.8.1 (minimum K possible = 31)
7.8.13.1 (minimum K possible = 35)
7.8.15.3 (minimum K possible = 31)
7.8.16.1 (minimum K possible = 43)
7.8.16.4 (minimum K possible = 36)

Vote: In favor: 18 Against: 1 Abstentions: 4

CIVA AGREED

NP #2015-21

Source: USA#4 of original Proposal document.
Subject: Deadline for Judge & Assistant Study Course

Proposed Change for Both Parts 1 and 2:

- Reflect current practice on “Study Course” and set a realistic deadline for making the ‘Judge Questionnaire’ available on-line
- Specify the ‘Judge Questionnaire’ includes both power and glider items for all judges / assistants

2.1.3.2.b) Before the championship is held, all judges and assistants must also have completed a study course as well as a judging test on ‘Judge Questionnaire’ covering judging criteria and the current rules and regulations for both power and glider competition. The study course and the judging test ‘Judge Questionnaire’ will be composed and administered by CIVA. They can either be completed in advance of the championship or on the contest site. The Questionnaire will be available online no later than four months 30 days prior to the beginning of the championship.

No Objections, CIVA AGREED
NP 2015-23

Source: USA#6 of original Proposal document.
Subject: Selection of Judges

Proposal:

- Limit the number of judges per NAC to 1 in case the number of judges in the panel is less than the maximum

2.1.2.1 (...). A maximum of two judges per NAC may be appointed when *when a full panel is supported by CIVA and the organizer (10 for Unlimited and Advanced; 7 for Yak-52/Intermediate; 10 for Glider Championships). If only the minimum is supported, then a maximum of one judge per NAC may be appointed (...).

No Objections, CIVA AGREED

NOTE:

- VM: I did not notice that the proposals NP 2015-2 and NP 2015-4 were dealt with.
- MRH: We will prepare these proposals for tomorrow morning.

10.2. Report of the CIVA Judging Sub-Committee (John GAILLARD)

John Gaillard stated that everyone should have the report and he would only like to raise one point from the last paragraph of his report:

“Other NACs we know have good programmes and produce active judges, (these would include the UK, but for some reason we see little activity internationally other than from Nick Buckenham) others include Germany, South Africa & Finland, much beyond this is not that apparent. The CIVA plenary should perhaps give the JSC some guidance on this issue, especially as everything comes at a cost.”

For the last two or three years, certain number of glider judges have become unavailable. This year it was not a problem, since we reduced the number of judges to 7. In power it is not a problem, but in glider we need new judges. And like you, Mr. President, raised a subject of training new judges. Some aero clubs are productive and some are restricted.

So the question is, if we should start training new judges more efficiently? Do we allow status quo, or do we get more involved in getting new judges.

Discussion:

- ME: Since the minimum size of the judging panel for gliders is reduced to 7, it is almost impossible for a judge, who is not on Johns’ list, to make it to Championships. So new judges hardly try to get there on their own cost.
- JG: I think judging sub-committee would welcome new judges. But there are no new judges applying or even when you send the message to delegates, there is no response.
- NHB: Some of you may know that I have carried a good number of judging seminars in the last 2-3 years.
- ME: Next year I try to nominate 1-2 new glider judges to international level, who have not been active in international level so there is no RI in your records.
EK: We spoke in last bureau meeting that we need to publish the procedure for judges’ selection so everybody knows how it’s done.
JG: It is explained in my report
LG: We will have a firm proposal on this matter next year in plenary.

10.3. Report of the CIVA Catalogue Sub-Committee (Alan CASSIDY)

Nothing to report this year

10.4. Report of the CIVA Glider Aerobatics Sub-Committee (Manfred ECHTER)

Manfred Echter presented the report:

- It is all in the report except
  - the proposal no 2, the Czech proposal to remove the free. There must have been a misunderstanding. Between the minute taking Mady and me, the SC agreed to support the SPWG proposal 1 to develop the Free Known program, it should say Free Known working group. We do not support something that does not exist yet.
  - There is a proposal from the SPWG, to form a working group to develop a Free Known program and we do support that proposal.
- Otherwise nothing to add.
- Mainly the report deals with the changes the rules in Part 4 WAG, since in 2009 we were not satisfied what came out in the glider competition there. So we formulated new set of rules for gliders for WAG.
- We also would like to get access to the software of the Polish HMD. It’s in number 1.
- There was a CZ proposal to radically change the procedure for operating HMDs and determining penalties and this proposal was voted down in GASC but we want to have an access to this software and that I think is a task for the newly formed ITC WG.

10.5. Safety & Expedited Proposals (SP & EP) from Championships (Delegates & Contest Officials)

None this year
ADDITION TO PROGRAM:

LG invited Markus Haggeney to talk about FAI World Air Games 2015

- It is a 12 day event, starting on Tuesday and ending on Sunday.
- A day of independence and holidays, so people can join.
- They promised to deliver all disciplines
- Even they are providing and organizing the event, we have a saying in all of this and that’s why we have a meeting in 2 weeks time.
- Disciplines are
  - glider aerobatics
  - aero modeling – aero musicals
  - air navigation
  - gliding
  - hang gliding aerobatics
  - helicopters
  - micro lights
  - parachuting
  - para gliding
  - landing precision
  - para motors
- Demo sport: Human powered
- Aviation doctors symposium
- Young artist contest
- All airsports have a liaison person (for now, LG, then Hanspeter and Pik)
- The Venue for aerobatics is Jumeirah Palm.

Conversation:

AF: What about the sponsorships, will there be information for participants
MH: There will be an information package for participants that also include information about sponsorships etc.

LG: the meeting will be in the end of November. The idea is to get both classical and freestyle programs there with limited number of pilots. Scored by judges with instant scoring system. There is still a lot of questions about if there is power or glider and how many judges and about the budget etc. We have for now no information yet, and Hanspeter Rohner and Philippe Küchler will go there for a meeting.

The big question is about the selection of the pilots. These are the questions and there are many more, so we need to wait information until the meeting there will be.

MRH: How are the pilots selected – this is important. It needs to be fairly

LG: We need to get more info from Markus, but we also have a ranking list and we have many different countries.

MH: The general rules apply for World Air Games. You as a commission decide. The aim is to get as many countries as possible. And one seat for host country.

LG: we want to get as many countries as possible but also the best possible pilots.

Meeting Adjourned Sat. Nov.8 @ 17:00hrs. Sat. Nov. 9 @ 09:15hrs.
DAY 2

Before continuing in accordance with the agenda, the President returned to Item 10.

NP 2014-2

Source: CZE#2 of original Proposal document
Subject: Removal of Programme 2 (Free Programme)

Proposal presented by Matthieu Roullet:

Remove Programme 2 (Free programme) from Continental and World Championships for power as well as glider. Increase number of Unknown (respectively Free Unknown) programmes by one.

Consequences:

1) We have to draw the lots for the unknown figures before the first program. We need to delete the current concept about training any figures.
2) If this goes like this, we need to make sure, that everyone gets a training flight in the box before the first known or the opening of the contest
3) Has to do with the 60% cut. If there is no 60% cut in both known and free, this will not be valid anymore, and we have to rely to other regulations that CJ can disqualify a pilot from the contest.

Discussion:

- Jürgen Leukefeld (JL)
  - The free programme is the core of our sport.
  - Two programmes that are trained by the pilots for long time. If the second is removed, there might be safety issues.
  - Contest tasks, submitting figures needs to be submitted the day before the unknowns etc.
  - We might lose time in the beginning of contest
- Manfred Echter (ME): Why the proposal from SPWG, about the Free Known and forming a WG for that has been set aside.
- LG: It will be in discussion later today.
- EK: Would you regard the SPWG to postpone this proposal and form a working group to prepare it.
- VM: Didn’t know that SPWG will propose also, there is no problem if there is a working group to deal with this but not WG after WG after WG.
- MR: SPWG proposal
- CF: IF SPWG proposal is “go” we simply vote no for this one, and the SPWG will deal with the rest.
- HPR: If we do this partially, we are in the road to nowhere.
- EK: We should combine these proposals and to combine these two programmes and create the new free-known. We should then create a Working group to create this proposal for next year.
VM: I really think that we should do something with this since the situation with all programmes and then not having enough time to fly all, I think it is very important to try to change this. I want to appeal to you not to create another three working groups and then let us wait again 3-5 years. Then this is acceptable.

NB: Little clarity on basics of this into context. There are now two comfortable and familiar programmes for pilots. We need more challenge and clarity for trying to find the World Champion. Skill to design is important. We need to also have a complete set of rules for the new Free Known.

**Voting for proposal 2: removal of free programme.**

In favor: 0 Against: 22 Abstention: 2

**CIVA REJECTS**

**Nominating working group**


The Working Group will come with a proposal in 2015 and it will go through RSC.

**10.6. President's Proposals (LG ARVIDSSON)**

President's proposals will be NP for 2015

SPWG 2nd proposal about the SUPER ADV to be referred the WG who deals with the 1st

**No objection CIVA agrees**

Asking plenary to give the authority to the Bureau to decide about the different points dealing with the WAG

REMARK: if the people have questions, forward them to HPR & PIK

**No objection CIVA agrees**
11. Future FAI Aerobatic Championships

11.1. 2015 FAI World Aerobatic Championships (report from France)

Pierre Varloteaux presented the report from WAC 2015 in France

Location: Chateauroux  
Dates:  
Training: 16.-18.8.  
Contest: 19.-29.8.  
Entry Fees:  
Competitors: 1800€  
Other team members: 1500€  
+ 200€ for single room  
Contest Director: Guy Auger  
Supporting judges: 7 judging teams  
ACMS Tablets to be used (already in use 2 years during FRA nationals).

Discussion about the entry fee, 1800€. 2013 voted to be maximum and have a discount on early registration, not the other way around. It should be the price up till 6 weeks before the contest.

Limited to 7 judges: Date of arrival of the judges to be ready on time, from 20th. Judging SC will decide whether judges need to be there the day before and who will pay the extra night if there is one needed.

The French delegate will forward the concerns of CIVA to the organizers.

**CIVA AGREED**

11.2. 2015 FAI World Glider Aerobatic Championships (report from Czech Republic)

Vladimir Machula gave a report from Zbraslavice, Czech Republic.

Location: Zbraslavice, Czech Republic  
Dates:  
Training: 28.7.-4.8.  
Contest 5.-14.8.  
Entry Fees:  
Competitors: MAX 700€  
Other team members: 300€  
Towing 65/50€  
Contest Director: Vladimir Machula  
Supporting judges: 7 judges + CJ 3 member team  
Website: www.wgac2015.cz  
- Hangar for 25 gliders  
- Accommodation; Several possibilities  
- Organizer invited pilots to join Danubia Cup for training purposes from 8 to 11 of July. www.danubiacup.com

**CIVA AGREED**
11.3. 2015 FAI European Advanced Aerobatic Championships (bids invited)

Bid from Poland withdrawn.

Romanian delegate Christian IORGOV presented the bid from Romania.

<table>
<thead>
<tr>
<th>Location:</th>
<th>Deva, Romania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dates:</td>
<td>Training: 15.7.-21.7.</td>
</tr>
<tr>
<td></td>
<td>Contest: 22.7.-2.8.</td>
</tr>
<tr>
<td>Entry Fees:</td>
<td>Pilots: 1650€</td>
</tr>
<tr>
<td></td>
<td>Others: 1400€</td>
</tr>
<tr>
<td>Supporting Judges:</td>
<td>minimum of 7</td>
</tr>
<tr>
<td>Contest Director:</td>
<td>Pavol Kavka</td>
</tr>
</tbody>
</table>

Vote: Yes: 20    Abstain: 3    No: 1

CIVA AGREED

11.4. 2016 FAI World YAK 52 / Intermediate Aerobatic Championships (bids invited)

No bids

11.5. 2016 FAI World Advanced Aerobatic Championships (bids invited)

MRH: USA withdrew its bid, because of new information they have just received. USA also asked the bureau to consider their bid, that they would file later, but also stated, that if there is a bid from Poland, recommend to consider now that bid.

Bid from Poland was presented by Jerzy Makula and Stanislaw Szczepanowski

<table>
<thead>
<tr>
<th>Location:</th>
<th>Radom - Sadków, Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry Fees:</td>
<td>Pilots: 1650€</td>
</tr>
<tr>
<td></td>
<td>others; 1400€</td>
</tr>
<tr>
<td>Payments:</td>
<td>6 weeks prior</td>
</tr>
<tr>
<td>Supporting Judges:</td>
<td>10 organiser supported</td>
</tr>
<tr>
<td>Contest Director:</td>
<td>TBA</td>
</tr>
</tbody>
</table>

Dates to be confirmed in plenary 2015.

Vote: YES: 21    NO: 1    Abstain: 2

CIVA AGREED
11.6. 2016 FAI World Glider Aerobatic Championships and 2016 FAI World Advanced Glider Aerobatic Championships (bids invited)

1st bid, presented by Tamas Abranyi

Location: Matkopuszta, HUN
Entry fees:
- Pilots: 700€
- Other team members: 300€
- Family members: 50€
Payments: Entry fee will be the same 6 weeks prior.
Supporting Judges: 7+3
Contest Director: Tamas Abranyi
Towing: 65€/50€ (800m)
Subjected to Fuel price

2nd bid, presented by Vladimir Machula

Location: Moravska Trebova, CZ
Entry fees:
- Pilots: 650€
- Other team members: 300€
Payments: 6 weeks prior
Judges: Minimum of 10 + 3
Contest Director: Vladimir Machula
Towing: 60€/50€, subjected to fuel price

VOTE: HUN: 13 CZE: 9

**Hungary selected**

11.7. 2016 FAI European Aerobatic Championship (bids invited)

No bid

11.8. Other future events (bids invited)

No bid

12. FAI Special Aerobatic Events (FSAE) for 2015

In GC contacts taken but no real proposals
John Gaillard told that there have been some conversations and as soon as he gets more information, he will forward the info to delegates and bureau.
13. List of FAI International Aerobatic Judges

<table>
<thead>
<tr>
<th>Country</th>
<th>Additions</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAN</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>CZE</td>
<td>Add: Vladimir Machula, Zuzana Danihelova</td>
<td></td>
</tr>
<tr>
<td>FIN</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>FRA</td>
<td>Add: Pierre VARLOTEAUX*</td>
<td></td>
</tr>
<tr>
<td>GER</td>
<td>Add: Michael GARBERS</td>
<td></td>
</tr>
<tr>
<td>HUN</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>ITA</td>
<td>Add: Eugenia VALLE*</td>
<td></td>
</tr>
<tr>
<td>JPN</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>LTU</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>POL</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>ROM</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>RSA</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>RUS</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>SLO</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>ESP</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>GBR</td>
<td>Add: Leif CULPIN</td>
<td>Delete: Ben ELLIS, Steve GREEN</td>
</tr>
<tr>
<td>USA</td>
<td>Add: Paul THOMSON, Peggy RIEDINGER</td>
<td></td>
</tr>
</tbody>
</table>

14. Other Reports and Business

14.1. Leon Biancotto Diploma for 2015

Proxies were removed during this vote according to the statutes. Leon Biancotto Diploma is given out once a year, and there is only one recipient at once. Last year it was given out to Jiri Duras from Czech Republic.

First vote is if plenary will give out the Leon Biancotto-diploma 2015?
Yes: 17  Abstain: 1  No: 2

CIVA AGREED
Plenary meeting has received one nomination to award Leon Biancotto-diploma. At this point CIVA President LG ARVIDSSON asked Delegate of UK, Mr. Nick BUCKENHAM to leave the room.

Second vote is to award Nicholas Buckenham with LB diploma?
Yes: 15 Abstain: 1 No: 3

CIVA AGREED

Nick Buckenham was invited back to the plenary meeting room and informed that he will be awarded and that the Diploma will be presented in General Conference in Rotterdam 2015

14.2. FAI/Aresti Committee Report (John GAILLARD)

No report 2014

14.3. Contest Scoring Programme Report (Nick BUCKENHAM)

No report 2014

14.4. Other Reports/Business

a) The UK offered a CIVA “Championship Organizer of the Year” Trophy

Nick Buckenham presented an offer a new “Championship Organizer of the Year” Trophy. Donated by the Royal Aero Club.

To be judged via an online survey of all competitors and CIVA officials during and after each championship, to determine how well the organiser has done the job.

- Pre and post event communication, and website
- Entry fees and overall “value for money”
- Accommodation and transport
- Quality and availability of on-site food
- Contest briefing and information facilities
- Flight line administration and airfield management
- Team tents and on-site comfort
- Staff helpfulness and problem solving
- Excellence of the opening and closing ceremonies

Will bear the name of Claude Graham-White

b) Markus Haggeney - Organizer Agreement:

On its actual format it is not encouraging for organizers point of view.
This was presented in General Conference.
If the "product" is well defined and if the "price" is perceived value- for-money, the "invoice" (OA) is only a formality.
A good bidding process should lead to the OA
Name has to be changed for the actual name has bad reputation.
Organizers’ seminars (mandatory for the Breitling selected event)
Airspor portal: airsports.aero
FAI already own several names among them aerobatics.aero

15. CIVA Elections 2015

Officers of CIVA

Bureau:
President:
Lars Göran Arvidsson (SWE) Elected 2013 until 2015

Vice Presidents: votes:
John Gaillard (RSA) 13 until 2016
Nick Buckenham (GBR) 12 until 2016
Philippe Küchler (SUI) 10 not elected
Vladimir Machula (CZE) 9 not elected
Matthieu Roulet (FRA) - elected 2013 until 2015
Elena Klimovich (RUS) - elected 2013 until 2015

Treasurer:
Jürgen Leukefeld (GER) by acclamation until 2015

Secretaries:
Hanna Räihä (FIN) by acclamation until 2015
Madelyne Delcroix (FRA) DECLINED

Rules Sub-Committee

Chairman:
Matthieu Roulet by acclamation
Mike Heuer DECLINED

Members: votes:
Philippe Küchler (SUI) 17 elected
Anatoly Belov (RUS) 17 elected
Alan Cassidy (GBR) 17 elected
Nick Buckenham (GBR) 12 elected
Michael Heuer (USA) 11 - 2nd 13 elected
Vladimir Machula 11 - 2nd 5 not elected
Jurgen Leukefeld 11 - 2nd 3 not elected
Thore Thoresen 8 - 2nd 3 not elected
Debby Rhin-Harvey DECLINED
Elena Klimovich DECLINED
Matthieu Roulet DECLINED (elected as president)
Judging Sub-Committee:

Chairman: Philippe Küchler
votes: 14 elected
John Gaillard
votes: 10 not elected

Members:
John Gaillard (RSA)  16 elected
Mikhail Mamistov (RUS)  14 elected
Vladimir Machula (CZE)  12 elected
Brian Howard (USA)  12 elected
Pierre Variotitiaux (FRA)  11 - 2nd 11 elected
Nick Buckenham (GBR)  11 - 2nd 10 Not elected
Matti Mecklin (FIN)  10 - 2nd 2 Not elected

Glider Aerobatic Sub-Committee

Chairman: Manfred Echter (GER)
votes: 13 elected
Jurek Machula (POL)  9 Not elected

Members:
Madelyne Delcroix (FRA)  13 elected
Pekka Havbrandt (SWE)  12 elected
Philippe Küchler (SUI)  12 elected
Jurek Makula (POL)  9 elected
Jyrki Viitasaari (FIN)  7 - 2nd 6 elected
Ferenc Toth (HUN)  7 - 2nd 2 Not elected
Premsyl Vavra (CZE)  6 - 2nd 5 Not elected
Georgy Kamisnky (RUS)  5 - 2nd 3 Not elected
Sasha Marvin (ITA)  5 - 2nd 1 Not elected
Myako Kanao (JPN)  5 - 2nd 3 Not elected
Lis Arneberg (DEN)  3 - 2nd 0 Not elected
Chris Cain (GBR)  3 - 2nd 0 Not elected
Karl Berger (AUT)  3 - 2nd 3 Not elected
Jason Stevens (USA)  1 - 2nd 0 Not elected
Klain Gilhouse  0 - 2nd 0 Not elected
Erik Houtman  0 - 2nd 0 Not elected
Manfred Echter  DECLINED (elected as chairman)

ICT Sub-Committee

Chairman
Vladimir Machula by acclamation

Members:
Nick Buckenham by acclamation
Peter Rounce by acclamation
Ringo Massa by acclamation
Bernhard Drummer by acclamation
Nils Jönsson by acclamation
Catalogue Sub-Committee

Chairman:
Alan Cassidy by acclamation

Members:
Anatoly Belov by acclamation
Pierre Varloteaux by acclamation
Madelyne Delcroix by acclamation
Brian Howard by acclamation
Manfred Echter by acclamation

### 16. Appointment and Approval of Championships Officials

#### 16.1. 28th FAI World Aerobatic Championships 2015

President of the International Jury:
Nick Buckenham (GBR) by acclamation
LG Arvidsson (SWE) DECLINED

Members of the International Jury:
Jürgen Leukefeld (GER) 15
Philippe Küchler (SUI) 11

Reserves:
1st Vladimir Machula (CZE) 8
2nd Pierre Varloteaux (FRA) 5
3rd Marta Nowicka (POL) 3

Chief Judge:
John Gaillard (RSA) by acclamation

#### 16.2. 9th FAI European Advanced Aerobatic Championships 2015

President of the International Jury:
LG Arvidsson (SWE) by acclamation

Members of the International Jury:
Hanna Räihä (FIN) 12
Tamas Abranyi (HUN) 11

Reserves:
1st Pierre Varloteaux (FRA) 8
2nd Jürgen Leukefeld (GER) 6
3rd Madelyne Delcroix (FRA) 6
4th Marta Nowicka (POL) 1
5th Philippe Küchler (SUI) 0
Chief Judge:

Nick Buckenham (GBR)  13
Guy Auger (FRA)  8

16.3. 18th FAI World Glider Aerobatic Championships and 6th FAI World Advanced Aerobatic Championships 2015

President of the International Jury:
LG Arvidsson (SWE)  by acclamation

Members of the International Jury:
Madelyne Delcroix (FRA)  15
Kari Kemppi (FIN)  13

Reserves:
1st Marta Nowicka (POL)  9
2nd Karl Berger (AUT)  4

Chief Judge:
Philippe Küchler (SUI)  by acclamation

17. Date and Place of Future Meetings

Place: Budapest, Hungary
Date: 23.-25. October 2015

CIVA AGREED to place and date of next plenary

NOTE! After the plenary meeting in Wroclaw, the date and place of the next meeting was changed due multiple events in Lausanne the same time. There was a bid and a vote in Plenary to held the 2015 plenary in Budapest but then it was agreed to held the meeting in Lausanne. Because of this clash of several events on 7.-8.11.2015 in Lausanne, bureau agreed with FAI head office that the CIVA plenary meeting 2015 will be held in BUDAPEST, on 23.-25. October

Submitted for approval,
Hanna Räihä
Secretary of CIVA
Madelyne Delcroix
Secretary of CIVA
APPENDIX 1 - The report from the Head Office by Secretary General Susanne Schödel
1. Focus of the Head Office

FAI Head Office – Organisation Chart

Secretary General
Susanne Schödel

Finance & Legal
Accounting & Audit
Insurance

Office Management
FAI Office & HR
Logistics

Communication
Media Relations
PR / Webmaster
Social Network
Sports Hub
Drawing / Merchandising

Members Services
Members relations
Tech Comm / Expert Groups
General Conference
Anti-doping
Awards

Ségolène Savillan
Members and Services Manager
Anto-Doping Manager

Communication Manager
Félixina Carrera

Sports & Marketing
Support & coordination with ASCOs and Event Organisers
ASC Meetings – Competitions - Resources
Sponsors & Partners – Event & Business Development

Markus Haggerty
Sports and Marketing Director

Christina Ricken
Competition Manager/Record Officer
CA, Skeds, Results,
Licences, Records,
Competition Calendar

Anne-Kathrin Hausser
Assistant Sports Manager
Coordination with ASCOs
and Event Organisers
Logistics, Projects

IT
IT Infrastructure & Scovics
DB Maintenance
Project Development
Records

Vesa-Matti Leinikki
IT Manager
Focus of the Head Office - Sports related

- "Secretariat purposes" (Statutes 8.2.1.) - controlling FAI business plan (8.1.4.), annual report on air sports development (8.2.1.), FAI Award and Diploma support (Statutes Ch. 9 and 10)
- Help with Commission procedures (By-Laws Ch. 3)
- Maintaining archives of FAI, homologating all air and space records, maintaining FAI accounts, collect all payments (also sanction fees), maintain electronic communication with constituent elements of FAI and air sports community at large (i.e. IT support) (By-Laws Ch. 4)
- Publishing all information regarding FAI’s activities and meetings, list of current records, Commission reports, results of Championships, medals and diplomas, lists of Commission delegates, FAI calendar (By-Laws Ch. 6)
- Help with FAI Awards for individual disciplines (By-Laws Ch. 7)
- Help with FAI Badges (By-Laws Ch. 8)
Medals processed through HO

**EVENTS MEDAL S SETS and Co (without WAG and RBAR and no spare part)**

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2014</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAI</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>GAC</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>EGC</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>DAM</td>
<td>41</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>IP</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>OVA</td>
<td>10</td>
<td>1</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>DVL</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>OMA</td>
<td>16</td>
<td>1</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>DSC</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>DCA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**TOTAL**

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>64mm</td>
<td>177</td>
<td>281</td>
</tr>
<tr>
<td>50mm</td>
<td>180</td>
<td>317</td>
</tr>
</tbody>
</table>

**Total pieces medals**

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAI</td>
<td>1374</td>
<td></td>
</tr>
<tr>
<td>GAC</td>
<td>1491</td>
<td></td>
</tr>
<tr>
<td>EGC</td>
<td>1101</td>
<td></td>
</tr>
<tr>
<td>DAM</td>
<td>1093</td>
<td></td>
</tr>
<tr>
<td>IP</td>
<td>1341</td>
<td></td>
</tr>
<tr>
<td>OVA</td>
<td>711</td>
<td></td>
</tr>
<tr>
<td>DVL</td>
<td>918</td>
<td></td>
</tr>
<tr>
<td>OMA</td>
<td>540</td>
<td></td>
</tr>
<tr>
<td>DSC</td>
<td>1008</td>
<td></td>
</tr>
<tr>
<td>DCA</td>
<td>579</td>
<td></td>
</tr>
<tr>
<td>DCA</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>DCA</td>
<td>471</td>
<td></td>
</tr>
<tr>
<td>DCA</td>
<td>576</td>
<td></td>
</tr>
<tr>
<td>DCA</td>
<td>204</td>
<td></td>
</tr>
<tr>
<td>DCA</td>
<td>174</td>
<td></td>
</tr>
</tbody>
</table>

**Set médailles WAG**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WAG</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>WAG</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

CIVA 2014 Plenary Meeting
# Badges/certificates going through HO

<table>
<thead>
<tr>
<th></th>
<th>CIMA</th>
<th>CIAM</th>
<th>IPC</th>
<th>CIVL</th>
<th>CIG</th>
<th>CIA</th>
<th>IGC</th>
</tr>
</thead>
<tbody>
<tr>
<td>color/certificates &amp; Badges</td>
<td>Specification / Stickers</td>
<td>Workgroup medals/pins</td>
<td>Cards</td>
<td>IPM cards</td>
<td>patches</td>
<td>CIA/Flyer / Stickers / patches</td>
<td>patches</td>
</tr>
<tr>
<td>2014</td>
<td>- / 10820</td>
<td>26 / 78</td>
<td>255 / 836</td>
<td>1 / 50 / 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>- / 9270</td>
<td>23 / 69</td>
<td>607 / 1925</td>
<td>2485</td>
<td>2 / 100 / 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>25 / 55</td>
<td>26 / 72</td>
<td>583 / 1097</td>
<td>2080</td>
<td>3 / 150 / 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0</td>
<td>2940 / 5220</td>
<td>22 / 66</td>
<td>205 / 463</td>
<td>8230</td>
<td>2 / 100 / 20</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>55 / 55</td>
<td>2115 / 3980</td>
<td>22 / 69</td>
<td>395 / 739</td>
<td>4230</td>
<td>11 / 5100 / 21</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>110 / 20</td>
<td>2470 / 4960</td>
<td>22 / 68</td>
<td>92 / 340</td>
<td>4972</td>
<td>51 / 3 / 150 / 40</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>2300 / 4650</td>
<td>22 / 70</td>
<td>390 / 1472</td>
<td>5495</td>
<td>270 / 8287 / 330</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>6320 / 16550</td>
<td>40 / 192</td>
<td>1960</td>
<td>2 / 7 / 250 / 61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>595 / 6374</td>
<td>50 / 185</td>
<td>10003</td>
<td>- / 3 / 40 / 20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>2600 / 5026</td>
<td>229 / 602</td>
<td>5635</td>
<td>- / - / -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>0 / 540</td>
<td>2230 / 2985</td>
<td>50 / 1489</td>
<td>3500</td>
<td>- / - / -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>1450 / 2990</td>
<td>1465 / 3872</td>
<td>2990</td>
<td>- / - / -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>1760 / 4512</td>
<td>414 / 967</td>
<td>2500</td>
<td>- / - / -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>1500 / 3000</td>
<td>- / - / -</td>
<td>- / - / -</td>
<td>- / - / -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>- / - / -</td>
<td>- / - / -</td>
<td>- / - / -</td>
<td>- / - / -</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Air Sport Development

1st Category Events in 2013 (without WG or CISM)
- *50* Events 1st Category (World: 21 / Continental: 20 / Others: 8) were held in *19* different countries.
- Regions: in Europe *(13)*, North America *(1)*, South America *(1)*, Asia *(2)*, Africa *(1)* and Oceania *(1)*.
- *69* FAI member countries participated in FAI first category Events, with a total of *3043* competitors (World: 1584 / Continental: 1252 / Others: 207).
- Results received in the Head Office at the shortest after 0 days, and at the longest after *56* days!

International Records
- In 2013, 232 International Records have been ratified, 87 % of them being World Records.

Organizer Agreement

Strategy: More Visibility

High profile event of FAI

Sponsorship

Spectator interest

Media coverage

Figure 4: virtuous circle in event marketing (Davila, 2011)
3. Membership Development

Membership
- Active Members: 87
- Associate Members: 15
- Temporary Members: 8
- International Affiliate Members: 4
**TOTAL:** 114

- Air Sports and its self-organisation are developing and changing in some countries. This has effects on the existing structures, with the distribution of Sporting Powers sometimes being questioned.
- Air Sport Organisations outside Europe are growing.
- FAI Membership will expand.

4. International Relations
In another key milestone in the process of building Olympic Agenda 2020, a strategic roadmap for the future of the Olympic Movement, IOC President Thomas Bach today released the membership of the 14 Working Groups which will help frame some of the key recommendations. Each group will be made up of key stakeholders of the Olympic Movement, including IOC members, athletes and representatives of the International Federations and National Olympic Committees. As part of the ongoing open and inclusive process, a number of experts have also been included from civil society, including representatives of leading international organisations, NGOs and business organisations. The Working Groups will look at proposals made by the Olympic Movement, the world of sport and even by individual members of the public. Under discussion will be topics ranging from Ethics to Good Governance and Autonomy and the planned Olympic TV Channel.
Minutes of the annual meeting of the FAI Aerobatics Commission (CIVA) 2014 - Wroclaw

Report of the FAI Secretary General

SportAccord

New Cooperation with Eurovision

Visibility of Air Sports
5. General Conference

- Sporting Code General Section
  - 2015
  - 2016 – major rewrite!
- Anti-Doping

Strategy papers and documents

1. SWOT Analysis 2009
5. FAI Management Structure (2011)
7. FAI Strategic Plan Review (2012)
8. « Meet the Challenges » (2013)
10. …
APPENDIX 2 will be added later
REPORT ON CIVA ICT SYSTEMS

Vladimir Machula

1 Introduction

The purpose of this document is to identify and describe different aspects of software, hardware and technical processes used within all CIVA operations. This covers different systems and applications during Championships organization, Judges education and examination, CIVA meetings and work of Subcommission/Working Groups. Software and hardware together with communication interfaces can be simply referred as ICT (Information and Communication Technology) systems.

Second part of the document explains ultimate question “why is a systematic approach necessary” and “why the hell do we need it”.

Third part gives basic insight into ICT system design models, software management, provisioning and lifecycle.

Fourth part tries to give possible solutions.

2 Essentials of ICT Systems

2.1 ICT complexity

Electronic computers and communication technologies are making our life easier and more effective. ICT is bringing the opportunities to do much more in no time. However, computers are sometimes capable of doing more harm than profit. ICT systems itself are nothing. They need users, operators and service consumers. They also need to be programmed and configured. As with many things, computers will provide benefits if used properly in suitable application.

Computer science is a complicated and very complex business. It is quite a long way to become system architect and many people simply do not have enough time/capacity/will to do it. People usually turn to delusions when working with something they do not understand. In the end they under- or overestimating capabilities of such system. Modern audiovisual life lived through fancy movies, TV and videos show super abilities of computer systems and are many times creating false expectations. Let’s face it. Industrial ICT systems can’t be controlled and managed by non-educated users. Management of those systems needs to be entrusted to well-educated specialist.

Management and interaction with ICT systems in operation is just a one phase of system life cycle. Life cycle and their phases will be described later, but it’s obvious that every system needs to be designed and created. The most crucial part of the whole lifecycle is a system design. Without clear and proper description of system behaviors, interfaces, management, verification and validation, it is impossible to create anything else than a small hobby non-critical system. Ignoring of this fact leads to faults with different scales of severity. Even if we talk about faults with impact on health, economic or social environment, we would like to avoid them generally. Entropy rises exponentially with system complexity or converted to simplified statement of third thermodynamics law “It is impossible for any process, no matter
how idealized, to reduce the entropy of a system to its absolute-zero value in a finite number of operations”. In other words, a simple system is easy to maintain, verify, validate and modify. If more functions and modifications are added entropy is rising exponentially. Needs for exponential rise of resources spent on system design, documentation, verification and validation to achieve low error rate, sustainable test coverage and appropriate user experience are arising from these assumptions.

2.2 Modern Era Dark Side
Design and system/software management errors have led during history to many breakdowns, but there are two really remarkable ones.

First one is a story of a brand new Ariane 5 space vehicle designed to deliver 3 tons of payload into Earth’s orbit. It took 10 years and 6 billion EUR to produce this vehicle. All it took to make huge and expensive fireworks forty seconds after lift-off, was a small software bug trying to fit 64-bit number to 16-bit memory space. One bug, one disaster [1].

Second one is a story of failure which cost life. On Feb 25, 1991, during the Gulf War (Dahran, Saudi Arabia), an US Patriot missile firing post failed to track and intercept incoming Scud missile. The Scud hit US Army barracks, killing 28 and injuring approx. 100 soldiers. It turned out that the cause was an inaccurate calculation of the time since boot due to computer arithmetic errors. The small chopping error when multiplied over time led to significant error. The Patriot battery had been up around 100 hours, and system prediction of next Scud position has been missed by few meters [2].

2.3 ICT in Today World of Aerobatics
Given examples are quite extreme, but both show how a lack of precise system design and software management can be painful. Aerobatics is in fact a multimillion business. Every single competitor spends hundreds of thousands of EUR for training and participation at FAI aerobatics events. With around 200 competitors participating at Championships every year, those expenses cannot be ignored.

ICT tools like ACRO, OLAN, VISIO ARESTI DRAWING, OPENAERO and HMD solutions were used as supporting tools to make Championships organization easier. However, they are turning from tool to necessity. No one can imagine aerobatic championships without ACRO producing start lists, results and judging analysis. Going back to non-computer era is not even possible due to FAI Section 6 requirements. There is also no one producing sequence drawings by hand. We came to an age where more systems will make aerobatics championships more cost effective and easier to organize. Those systems will all be somehow involved in overall results of championships. We will benefit from their use, but they can ruin a whole event or leave that bitter taste with all participants. None of that is desired by anyone.

2.4 ICT Failures in Modern Aerobatics History
Since ICT applications are not used for long time, there have not luckily been many failures causing remarkable problems during FAI/CIVA championships or they have been solved and covered by the organizer and thus not known publically. However there are few minor issues (in matter of caused damage) causing delays and overnight work of very dedicated superfixers (mostly producers of those ICT tools). In past four years, following issues have been observed:

• (ACRO) Errors in starting order creation or even a fall of the whole application and then time consuming need for bug fix and reconfiguration.
• (ALL DRAWING APPS) Sequence checking errors within drawing tools.
• (ACRO) Unhandled user input causing application crash and contest database inconsistency.
• (PHMD) Errors in calibration, mechanical issues and communication failures.
• (WINDSOND) Loss of wind sonds due to misconfiguration and communication problems.
• (SMS INFO SYSTEMS) Problems with delivery to specific mobile operators, unavailability of the service and expensive operations of the SMS information system.
• (RADIO COMM) Problems with connection quality, not suitable equipment, interference with other public users and cost of the service.

Mentioned failures and drawbacks needs to be understood as an example of what has already happened and haven’t caused greater problems. Producers of mentioned tools should still be emphasized as those who spent months with putting their valuable knowledge and expensive time into well-being of the whole aerobatic community without expectations of any royalty.

3 Aerobatics ICT System Management

3.1 Overview
Every ICT system should have some kind of management of its lifecycle. Lifecycle is a set of processes which assure the quality level of the final product, drives its development and allow scalability. There is a plenty of different Management systems, but combination of ISO 12207 and ECSS seems to be most usable. First of all they are completely publically available. ECSS is very robust set of standards since it is created for space industry, however it can be easily tailored to the needs of Aerobatics ICT Systems management.

3.2 Limitations
This standardization prescribes minimal needs for system design, requirements specification, documentation, validation, verification and operation. This Standard does not detail system architecture, used technologies and methods or procedures required to meet the requirements and outcomes of a product.

3.3 System Life Cycle
The life of a system or a software product can be modelled by a life cycle model consisting of stages. Models may be used to represent the entire life from concept to disposal or to represent the portion of the life corresponding to the current project. The life cycle model is comprised of a sequence of stages that may overlap and/or iterate, as appropriate for the project’s scope, magnitude, complexity, changing needs and opportunities. Each stage is described with a statement of purpose and outcomes. It should be usually composed by following processes:

- Phase 0 – Idea/initial definition of system features or needs identification.
  - Identifying needs.
  - Proposing system concepts.

- Feasibility
  - Detailed needs identification/verification.
  - Solutions proposal including identification of criticalities and risks.

- Preliminary definition
  - Preliminary system requirements definition / specification in a formalized way.
  - Planning and demonstration of a development schedule, budget, target cost and organizational requirements.

- Detailed definition
  - Detailed system requirements definition, verification & validation plan, development of schedule definition, software requirements definition, set of use cases to describe system behavior, etc.
• Qualification and production
  o System development.
  o Validation – Component and system testing according to the planned test coverage. Making sure that product meets system requirements specification.
  o Verification – Acceptance and Quality reviews. Making sure that the system, documentation, functionality and validation meet the overall requirements/product specification.

• Operations / utilization
  o System deployment and configuration.
  o Product usage.
  o System user support and product anomaly investigation and resolution.

• Disposal
  o Archiving of collected data.
  o Transition to next-gen systems.
  o Saying goodbye.

3.4 System Design and Documentation
System design documentation is the most important part of the whole product. It usually consists of documents produced in the following order:

1. Preliminary System Requirements Definitions.
2. Budget/Schedule/Validation definitions and plans.
3. Set of System Requirements Definitions.
5. Models / use cases (for system as well as for models/software functions etc.).
6. Test plans and test outputs.
7. User documentation.

3.5 Verification & Validation
Every system needs to go through testing process. With more detailed documentation and with more complex test plan, product outcome and user experience rises significantly.

Validation stands for processes to confirm that the requirements baseline functions and performances are correctly and completely implemented in the final product.

For a new development flow or verification flow, validation procedures may involve modeling either flow and using simulations to predict faults or gaps that might lead to invalid or incomplete verification or development of a product, service, or system (or portion thereof, or set thereof). A set of validation requirements (as defined by the user), specifications, and regulations may then be used as a basis for qualifying a development flow or verification flow for a product, service, or system.

Verification is a set of processes to confirm that adequate specifications and inputs exist for any activity, and that the outputs of the activities are correct and consistent with the specifications and input.
Verification can be in development, scale-up, or production. This is often an internal (developer) process.

Verification is usually done by programmed automatic sets of component and system tests. If a product contains some kind of user interaction, than user interface tests are also crucial. Verification plan should have defined minimal test coverage ratio estimated by system criticality and risk management.
It is sometimes said that validation can be expressed by "Are you building the right thing?" and verification by "Are you building it right?".

3.6 Reviews
Review is a process or meeting during which a product is examined by a project personnel, managers, users, customers, or other interested parties for comment or approval. In this context, the term product means any technical document or partial document, produced as a deliverable of a product development activity. In case of Aerobatics, a product is reviewed by review/project board established by proposed Technical Support Subcommission of CIVA.

A number of reviews should be conducted during the process of product development, they are should be in following order:

1. SRR – system requirements review
2. PDR – preliminary design review
3. DDR – detailed design review
4. TRR – test readiness review
5. CDR – critical design review
6. QR – qualification review
7. AR – acceptance review

Some of the listed reviews can be skipped or merged except SRR and AR. Those two must receive maximum attention since their output is an insurance of overall product quality.

4 Conclusion and Proposal
During the past few years we have been facing failures which have been solved in last minute and therefore it didn’t luckily ruined running Championships. With higher penetration of such technologies, this danger is more and more imminent.

CIVA also need to take care of long term sustainability of such systems. If there is a perfectly working system for crucial tasks carried out during championships, made by enthusiastic programmer, without a single piece of technical documentation, who can guarantee that this system will be updated and functional in few years? To reduce these drawbacks it is necessary to implement ICT project management and reliable technical documentation according to modern standards.

CIVA need to take care of creditability aspect of such systems as well. It can be very easy to compromise the output of such application, especially in case of intended manipulation. Used systems need to have a way to verify its outputs in form of hash codes, verified logs, etc.

This report proposes to establish **ICT Sub-Commission** with following aims and tasks:

- Validate, verify and certify ICT systems and applications for the use within CIVA operations.
- Support systems and applications developers to tailor and implement development management.
- Manage life cycle model of such systems and applications
- Find new opportunities for implementation of modern ICT solutions.
- Support championships organizers during the use of mentioned systems.
- Supervise the use of mentioned systems during FAI/CIVA championships.
5 Referenced documents

http://www.esrin.esa.it/htdocs/tidc/Press/Press96/ariane5rep.html

http://fas.org/spp/starwars/gao/im92026.htm


[4] ECSS  
http://www.ecss.nl
APPENDIX 4  Compulsory programmes 2015

Power Unlimited
Power Advanced
Minutes of the annual meeting of the FAI Aerobatics Commission (CIVA) 2014 - Wroclaw

Glider Unlimited
Glider Advanced
Minutes of the annual meeting of the FAI Aerobatics Commission (CIVA) 2014 - Wroclaw

YAK52 / Intermediate

![Diagram of YAK52 Intermediate flight plan]

2015

FORM B

Pilot ID #

Yak52/Intermediate Known

Flight #

wind/vent

Fig 1 7.4.1.1 9.9.1.4 10 11 12
Fig 2 12.7.1 9.4.4.3 13 5 18
Fig 3 7.2.2.1 9.1.3.2 4 4 19
Fig 4 7.2.3.3 9.3.2.6 6 11 17
Fig 5 8.4.1.1 9.1.1.1 6 6 19
Fig 6 5.2.1.1 9.8.1.1 17 3 20
Fig 7 8.6.1.3 9.1.3.4 11 8 19
Fig 8 7.3.2.1 9.9.2.2 14 13 38
Fig 9 2.1.2.1 9.9.2.4 11 11 11

Total K = 185
## Abbreviations of attendees

<table>
<thead>
<tr>
<th>abb</th>
<th>name</th>
<th>country</th>
<th>task</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>Anatoly Belov</td>
<td>Russia</td>
<td>Observer</td>
</tr>
<tr>
<td>AC</td>
<td>Alan Cassidy</td>
<td>United Kingdom</td>
<td>Observer</td>
</tr>
<tr>
<td>AF</td>
<td>Alex Fantoba</td>
<td>Spain</td>
<td>Observer</td>
</tr>
<tr>
<td>BD</td>
<td>Bernhard Drummer</td>
<td>Germany</td>
<td>Delegate</td>
</tr>
<tr>
<td>BE</td>
<td>Beatrice Echter</td>
<td>Switzerland</td>
<td>Observer</td>
</tr>
<tr>
<td>CF</td>
<td>Castor Fantoba</td>
<td>Spain</td>
<td>Delegate</td>
</tr>
<tr>
<td>CJH</td>
<td>Carole J Holyk</td>
<td>Canada</td>
<td>Delegate</td>
</tr>
<tr>
<td>EK</td>
<td>Elena Klimovitch</td>
<td>Russia</td>
<td>Delegate</td>
</tr>
<tr>
<td>EM</td>
<td>Eltonas Meleckis</td>
<td>Lithuania</td>
<td>Delegate</td>
</tr>
<tr>
<td>FL</td>
<td>Ferencz Laszlo</td>
<td>Romania</td>
<td>Delegate</td>
</tr>
<tr>
<td>HPR</td>
<td>Hanspeter Rohner</td>
<td>Switzerland</td>
<td>Delegate</td>
</tr>
<tr>
<td>JeM</td>
<td>Jerzy Makula</td>
<td>Poland</td>
<td>Delegate</td>
</tr>
<tr>
<td>JG</td>
<td>John Louis Gaillard</td>
<td>South Africa</td>
<td>Delegate</td>
</tr>
<tr>
<td>JL</td>
<td>Jürgen Leukefeld</td>
<td>Germany</td>
<td>Observer</td>
</tr>
<tr>
<td>JyM</td>
<td>Jyri Mattila</td>
<td>Finland</td>
<td>Delegate</td>
</tr>
<tr>
<td>KB</td>
<td>Karl Berger</td>
<td>Austria</td>
<td>Observer</td>
</tr>
<tr>
<td>KK</td>
<td>Kari Kemppi</td>
<td>Finland</td>
<td>Observer</td>
</tr>
<tr>
<td>LG</td>
<td>Lars-Göran Arvidsson</td>
<td>Sweden</td>
<td>Delegate</td>
</tr>
<tr>
<td>ME</td>
<td>Manfred Echter</td>
<td>Germany</td>
<td>Alternate</td>
</tr>
<tr>
<td>MH</td>
<td>Markus Haggeney</td>
<td>FAI</td>
<td>FAI Sports and Marketing director</td>
</tr>
<tr>
<td>MK</td>
<td>Miyako Kanao</td>
<td>Japan</td>
<td>Alternate</td>
</tr>
<tr>
<td>MR</td>
<td>Matthieu Roulet</td>
<td>France</td>
<td>Delegate</td>
</tr>
<tr>
<td>MRH</td>
<td>Michael R Heuer</td>
<td>USA</td>
<td>Delegate</td>
</tr>
<tr>
<td>NHB</td>
<td>Nicholas Harold Buckenham</td>
<td>United Kingdom</td>
<td>Delegate</td>
</tr>
<tr>
<td>PaK</td>
<td>Pavol Kavka</td>
<td>Slovakia</td>
<td>Delegate</td>
</tr>
<tr>
<td>PF</td>
<td>Pietro Filippini</td>
<td>Italy</td>
<td>Alternate</td>
</tr>
<tr>
<td>PH</td>
<td>Pekka Havbrandt</td>
<td>Sweden</td>
<td>Alternate</td>
</tr>
<tr>
<td>PIK</td>
<td>Philippe Küchler</td>
<td>Switzerland</td>
<td>Alternate</td>
</tr>
<tr>
<td>PV</td>
<td>Pierre Varloteaux</td>
<td>France</td>
<td>Alternate</td>
</tr>
<tr>
<td>SS</td>
<td>Susanne Schödel</td>
<td>FAI</td>
<td>FAI Secretary General</td>
</tr>
<tr>
<td>StS</td>
<td>Stanislaw Szczepanovski</td>
<td>Poland</td>
<td>Observer</td>
</tr>
<tr>
<td>TA</td>
<td>Tamas Abranyi</td>
<td>Hungary</td>
<td>Delegate</td>
</tr>
<tr>
<td>VM</td>
<td>Vladimir Machula</td>
<td>Czech Rep</td>
<td>Delegate</td>
</tr>
<tr>
<td>VP</td>
<td>Volodymyr Prysazhnuyuk</td>
<td>Ukraine</td>
<td>Delegate</td>
</tr>
<tr>
<td>VS</td>
<td>Victor Smolin</td>
<td>Russia</td>
<td>Alternate</td>
</tr>
<tr>
<td>XX</td>
<td>XXXXXXXXXX</td>
<td>Japan</td>
<td>Observer</td>
</tr>
</tbody>
</table>