AGENDA ITEM 13.4

AEROBATIC CONTEST MANAGING SYSTEM

Michel Dupont

Based on the decisions reached at the CIVA meeting in November 2003, the ACMS software version 2004 has been improved regarding the treatment of hard zeros and the calculation of the JPI.

Here are the main steps:

end of October 2003: Bob Chomono passed on to me the proposals which must be examined at the CIVA plenary meeting, and more particularly the JPI proposal.
mid-November: Received a summary of the plenary meeting conclusions indicating the acceptance of the JPI system proposed by Steve Green and Alan Cassidy.
beginning of December: asked to get some more information about certain aspects of the method of the JPI calculation, because some of them remained obscure.
mid-January 2004: beginning of the first step to improve the software. Both the treatment of the hard zeros and the replacement of the JPF by the JPI call into question the heart/nucleus of the software. So, the modifications to make to the software in order for it to realize these new functionalities are significant.
beginning of February: Alan Cassidy sent me the last data I was missing. The original proposal of the JPI is modified by the team doing the work. It is also necessary to modify the design of the score sheets. This also involves some modifications in the way to read the optical reader.
mid-February: the optical reader is received. The programming works based on the file passed by Alan.
end of February: I asked Steve Green to get some help about the formulas of both Low Scoring Index and High Scoring Index calculations.
beginning of March: The publication of the new CIVA rules (factual or perception hard zeros) calls into question a part of the 2 months of work already done.
Passed on to Mike Heuer a proposal about the design of the new score sheets, as well as a revised file concerning the operational procedures for the job of the Chief Judge. The purpose of these procedures is to simplify the work of the scoring assistant, and to take into consideration the hard zeros.
mid-March: I received John Gaillard's comments about these procedures. Alan Cassidy passed on to me the complementary data that I had requested from Steve Green.
end of March: Mike gave me his agreement for the new score sheets.
mid-May: I received John Gaillard's final agreement about the new proposed working procedures.
June: Addition of functions allowing access to the diagrams of the Judge's analysis for grades, and to the pilots' flight order onto the intranet. This month has been also devoted to the update of documentation, the generation of the software version, and the supervision of its correct operation.

from July 5 to July 21: test of the new software version on the occasion of the Cup of France. Some adjustments are necessary. The new score sheets are submitted to the Judges. The subject of the hard zeros caused many discussions.

The main difficulties encountered:

EGAC: Moravska Trebova (Czech Republic)

The optical reader does not read the sheets correctly. The tests carried out based on my request on the phone are correct. In the test, we used the same reader as the one used for the development of the software. There is no explanation for the encountered problem. However, a modification of the software is necessary because the final result of the JPI is false.

EAC: Kaunas (Lithuania)

All the requested material in the handbook is present.
The optical reader is not equipped with its wire to be connected to the computer. The power supply of the optical reader cuts off intermittently. One full day will be necessary to solve this problem – necessity to make a wire and to repair the power pack. The model of the optical reader is not the same as the one used for the development of the software. In fact, it reads only 16 tracks instead of the 17 tracks as planned. This software is designed to read only 16 tracks, which requires us to introduce the Hard Zero Index manually. So, we request to bring back the reader used in EGAC with us.

The 3 positions of the judges are tested. All of them are in WiFi connection with the central server. Everything works fine at the first test. We use all the software functions, even the automatic extraction of the data to feed the official website.
About fifteen stations are at the participant's disposal. This creates a technical problem for the software used, because it allows only 10 simultaneous connections. The software is the victim of its own success.

AWAC: Ljungbyhed (Sweden)

Although I was present for 3 days, the computer equipment was at my disposal very late. The connection to the local area network is made only the day before the arrival of all the participants. The assembled material will be available only after the opening ceremony.
The "server 2003" software, established on the server, does not correspond to the one required in the handbook. After 5 days, another server is at my disposal with XP professional which is compatible with ACMS, but it is a Swedish

version. Only two computers, also in the Swedish language, are available for all the participants.
Toward the end, the number of stations available for the participants is 5, one of which does not work. The briefing room is equipped with Wi Fi.
Since there is no Wi Fi connection with the Chief Judge's workstation, the optical reader is located in the computer room. The score sheets are collected each hour, or sometimes only after a half-day.
It has not been possible to make the intranet function.
The graphs of the judge's analysis are sometimes badly reproduced.

The difficulties encountered this year can be avoided by controlling the appropriate material necessary for the correct running of the championship and by taking into account the time needed to modify the software as decided in the CIVA plenary meeting.