Wednesday 9 July 2003

Today was dedicated to finals of the RoboCup. Jelle had beaten the <u>Brainstormers</u> 4 to 1, and had classified himself for the Final of the Soccer Simulation against the former World Champion TsinghuAeolus. Strangely enough Jelle was not nervous, because the Brainstromers had scored many goals in their match against TsinghuAeolus, and Jelle knew where the weakness in their defence was.

There was a lot of audience, most of them in favour of Jelle. They saw a very nice game, because TsinghuAeolus and UvA Trilearn are the most offensive teams of the competition. Unfortunately, the keeper of TsinghuAeolus was much better than the one of UvA Trilearn, and at half-time it was 0-2. The UvA Trilearn had more ball-possession, and played the ball around the goal of TsinghuAeolus, looking for an opening. At the end of the game, this strategy worked, because the Chinese defence became tired. The UvA attack knew what to do with this opportunity, and won finally with 4-3.

After the Soccer Finals we watched at the finals of the Robot Rescue League. The RoBrno team was dominant from the beginning, but many teams competed for the second <u>place</u>. After the final, the whole league came together for a family-portrait.



The Robot Rescue League was one of the last competitions to finish, and we had to hurry to the final ceremony. The first three of every competition received a trophy, with a special remark for Jelle because he won, notwithstanding he made last year his source public available.



After the finals, we finally had our flight opportunity, and we were able to test our zeppelins in the other arena's. We found out that the red and orange arena were in principle more easy for us to navigate than the yellow arena. This is in contrast to the other robots, which had many difficulties to cross the rubbish on the floor.



Even the crossing of the tunnel that is the only entrance to the red arena, and can be seen on the foreground of the picture above, was not really a problem. The video-quality was bad during the passage (see the first movie), but we could easily push forward, and on the end of the movie we are above the tubes that can be seen in the lower-left corner.

• <u>flight in red arena 1</u> (mpg 13,5 Mb)

In the free space the video-signal was better, and we could navigate through the whole arena. Once we were caught in the tubes hanging from the ceiling, but to my surprise we could easily push through.

• <u>flight in red arena 2</u> (mpg 40,5 Mb)

In that sense the flight through the orange arena was more difficult, because we had to stay low for the sticky tape (caught once), and their was an aluminium stairs that disturbed our video signal quite severely.

• <u>flight in orange arena</u> (mpg 8,8 Mb)

So, this was the end of the RoboCup competition. We learned a lot. For instance:

- With a zeppelin in a Rescue environment, you often have to crawl. The zeppelin had no problems to this, but small guiding wheels should help to do this more smoothly.
- Video transmission has to be reliable. A second robot as relay-base was successfully used by many other teams.
- With only camera below the zeppelin, the operator has no idea what is happening when a net, sticky tape or tube has caught the robot. A camera on a moving platform a few meters behind the first one could help to estimate the situation. This is probably a better approach than adding extra sensors at the zeppelin, because a zeppelin is large and has many sides.

• Rechargeable batteries are lighter than non-chargeable batteries :-) See you in <u>Lisbon</u>.