

By Jean-Yves

## Meeting with Eljoh and Jorn

End of May 2008, while I was in Amsterdam I drove up to Leeuwarden (north of the Netherlands) to meet Eljoh and Jorn, two students about 20 years old.



Our first contact was at the end of 2007. At that time Eljoh and Jorn had just -and they were right to be proud of- beat the record of Loïc and I: the one of the biggest pop-pop engine of the world (to our knowledge).



Our engine had a few liter drum and a tube of diameter 40mm. The one of Eljoh and Jorn had a 100 liter drum and a tube of diameter approx 55mm.

Of all the students with whom I exchanged emails, they are the most enthusiastic, and they have to. In the framework of their studies they must compete in a 250km race on a boat powered by solar energy and carrying 2 persons. All the other competitors use photovoltaic panels and a propulsion by electric motor and propeller, and sharp hulls, polished as mirrors. Eljoh and Jorn have selected a pop-pop engine heated by solar panels. Now they are aware that they have not a possibility to win with their pop-pop engine, but they have used a good scientific approach. In the laboratory they show me a pop-pop engine totally transparent using a 22mm tube provided with many pressure and temperature sensors. Unluckily this engine didn't work and they miss time to improve it.

Therefore, they now focus on the solar pop-pop engine. A simple solar panel previously used to warm fresh water (recovered panel) has been connected to a tube and it ran at the first attempt.



It remains to connect both panels together (twice 4m<sup>2</sup>) and to fit all this on a recovered hull. One of the panels is to be repaired (leaking), both panels have to be insulated... and the boat is in a doubtful buoyancy status. They are in a hurry to finish the prototype because the competition will take place on June 17. They have no more illusions about the performances. The goal is now to run the engine for at least a few minutes in front of spectators. I wish them good luck.



In the front, the recovered hull and behind Eljoh (on the left) and Jorn both solar panels.

P.S.: A few weeks after our meeting Eljoh and Jorn gave me 2 good news. The main one is that both of them graduated as engineer. The second one is that their boat propelled by its solar pop-pop succeeded to run a circle. I could check that on a video.



Solar heating is free, but it let a very limited space for the crew.