



Ocean Odyssey over the Oceans

Run a FLL Robot round in the U.S. from Norway, via Internet - is that possible?

Yes.

With the help of Linda Hamilton, RTI LEGO City, Marshall University, WV, USA, and WV local FLL team members, we were able to run a FLL Robot round at the LEGO City, via Internet.

February 18, 2006, Nardo 4H FLL team, Trondheim, Norway hosted a one day Robot Camp for local FLL Teams (mini teams, two/three participants per team), see story at www.ifye.org/4hweb/nardo4H. At the end of the day we connected, via Internet, to LEGO City in the US. The Norwegian FLL teams succeeded in performing almost all challenges on the Ocean Odyssey field setup. Well, we had to have some assistance here and there, especially on the "Deploy the submarine" and "Raise the flags" challenges. On the "Get the treasure" we got the cage with the treasure back to base - full points. Katrine, from "Sirenene" FLL team, had to realize that the cage with the treasure were still on the other side of the Atlantic oceans. - "To bad" she said. One of the FLL Coaches commented that maybe it is possible to get it over here with the use of Nanotechnology - probably we will have the answer within a year or so!!!

The technical setup and RoboLab programs were display on a poster:
<http://www.marshall.edu/LEGO/1/FLL2005RR/99-EndeligPoster003.jpg>

This made it easier for the FLL team members to understand the technical side of the "Over the Oceans connection".

Internet, WEB Cameras, Red Rover Red Rover Software (ver. 4.5, GUI and WEB User Interface), IR Tower, RoboLab ver. 2.5.4 and RoboLab "Vision Center" and of course the "Ocean Odyssey" field setup and a MindStorms RCX Robot - is what you need. If you want to perform online programming you also need RoboLab Internet Server running.

We controlled the FLL Robot with Red Rover Earth Site Control Center. Actually, this piece of software is what you need to make an Internet connection possible.

In this case we had setup two WEB cameras. This gave a nice overview of what was happening here and over there at LEGO City. We also used Red Rover WEB User Interface for exchange of messages as a kind of a chat channel.

Is this what we can call a "Virtual FLL Tournament"? The members of the different FLL teams were excited to be able to control a FLL Robot just by clicking the mouse and using the keyboard for programming and sending messages. As the leader for the event I told them that they probably were the first bunch of FLL teams performing a "FLL Tournament" via the Internet between two continents.

Tomas Gunnarsson, Nardo 4H Lego League Team Coach

See LEGO links of Linda Hamilton:

<http://www.marshall.edu/LEGO/1/FLL2005RR/18Feb06Norway.html>

Instructions for operating the SENSORCITY with RED ROVER with Earth site software are on <http://www.marshall.edu/LEGO/CITY>.

Teleoperate on the web at: <http://LEGO.marshall.edu>

See live camera view of the LEGO CITY on: <http://legocamera.marshall.edu/>