ZAGREB
MAY 2025

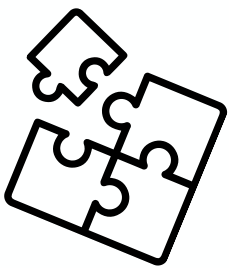
About the organizers

The International Waterbike Regatta 2025 in Zagreb is proudly organized by HUSB – the Croatian Association of Naval Architecture Students. Founded in 1996, HUSB is a non-profit organization that brings together students passionate about shipbuilding and maritime technology.

Organizing this event has been a great learning experience for us. With a bit of guidance from our professors and teaching assistants, we've taken on the challenge of planning every detail — growing not only as future engineers, but also as a team and as friends.

Special thanks go to our dedicated organizing team, led by president Dora Mihalić and technical lead Leo Tomić, with strong support from our vice presidents Florian Štefić, Lucija Serdar, Barbara Parunov, Matija Anić, and Filip Svetić.

We're proud to welcome you to Zagreb and hope this Regatta brings you inspiration, new connections, and great memories — just as it has for us.



FSB Waterbike Team

Let’s get to know each other a bit!

President Dora Mihalić – the one you can always count on. Reliable, organized, and the heart of the team.

Secretary Leo Tomić – quick and sharp, both on the hockey rink and when dealing with numbers.

Vice President Florian Štefić – there’s no question Flo can’t answer and no problem he can’t solve.

Vice President Lucija Serdar – our social butterfly, always bringing good vibes to every meeting and afterparty.

Vice President Barbara Parunov – the Instagram queen and the one who (lovingly) worries about everything.

Vice President Matija Anić – the workshop wizard, always building, fixing, or improving something.

Filip Svetić – the newest addition to the crew, a young workshop wizard in the making.

DISCIPLINES

Sprint race by AITAC

FSB race by ISKRA SHIPYARD

Long Distance race

Slalom race

Acceleration

Bollard Pull

Secret Mission

Germany-Waterbike Team Universtat Rostock

The Waterbike Team at the University of Rostock was founded in the late 1980s and raced with their first boat, "Anna," until the team disbanded in the late 1990s. Revived in 2004, the team initially reused "Anna," then built "Renate" in 2006, followed by "AnnaX" in 2007 after three years of planning. In 2012, they introduced "Rollo" with an innovative propulsion system, but it never met performance expectations. In late 2023, the team began developing a new boat, "Frida," using Rollo's hulls but replacing the horizontal whale fin with a vertical foil for propulsion.

Waterbike “Renate”

Waterbike main data:
L = 3.2 m B = 0.9 m
T = 0.4 m m = 120 kg
Vmax = 6 kn
Propulsion type: propeller
Design development and assembly date: 2006

Waterbike “Frida”

Waterbike main data:
L = 6 m B = 2.5 m
T = 1 m m = 130 kg
Vmax = 2 kn
Propulsion type: vertical flapping foils
Design development and assembly date: hulls 2011, structure 2023

Waterbike “AnnaX”

Waterbike main data:

L = 6 m B = 2 m

T = 0.4 m m = 70 kg

Vmax = 12 kn

Propulsion type: propeller

Design development and assembly date: 2007

Germany -Team 481 Münster

At first, Prinzessin Johanna was a project of two friends finishing school. Then in 2022 Team 481 Münster was founded to participate in the XLI. IWR in Bremen.
After a break last year we are happy to be back at the event in the croatian capital with the largest team we ever had!

Waterbike “Prinzessin Johanna”

Our Princess was planned and build in Spring 2019 to conquer the european inland waterways. Since then, numerous improvements and changes in component design have been made. She has profen herself to be a pretty reliable and stylish tool for vacations on the water and is also competible at the regatta field.

Waterbike main data:

L = 5 m B = 5 m

T = 0,75 m m = 280 kg

Vmax = 5 kn

Propulsion type: twisted toothed belt on prop

Design development and assembly date: 2019

Germany- Team “Racing Leer”

Hey Everyone,

Four motivated students from a small town called Leer in the northwest Corner of Germany decided last year to create an own team and assemble somehow quick and sturdy a boat to compete in the IWR 2024. First race we were disqualified due to technical difficulties, but along the great competition we adjusted and improved to even get 5th place in the last discipline. We managed to recruit new waterbike Junior Racers and will attack 2025 with new improvements on the boat and pumped legs. Let's have good summer start and an incredible time :)

Waterbike “Eyeball”

Waterbike main data:

L = 6 m B = 1,1 m T = 0,5 m m = // kg

Vmax = // kn

Propulsion type: Pod-Propeller

Design development and assembly date: Finished IWR 2024 and ongoing

Germany - Team Tretboot AG TUHH & their waterbikes

Waterbike “Clementine”

Waterbike main data:

L = 6,00 m B = 3,00 m

T = 0,60 m m = unknown kg

Vmax = 10 kn

Propulsion type: paddelwheel

Design development and assembly date: 1989

Waterbike “Imperator”

Waterbike main data:

L = 5,95 m B = 1 m

T = 0,45 m m = 65 kg

Vmax = 12 kn

Propulsion type: propeller

Design development and assembly date: 2006

Waterbike “Paul von Lämmersieth”

Waterbike main data:
L = 5,90m B = 0,70 m
T = 0,35 m m = 85kg
Vmax = 12 kn
Propulsion type: propeller
Design development and assembly date: 2000/2009

Waterbike “Turbulenz”

Waterbike main data:
L = 5,95 m B = 1,00 m
T = unknown m m = 50kg
Vmax = not yet known kn
Propulsion type: counteracting, variable pitch propeller
Design development and assembly date: 2024

Waterbike “Reynold”

Waterbike main data:
L = 5,95 m B = 0,70 m
T = unkown m = 40 kg
Vmax = 12 kn
Propulsion type: propeller
Design development and assembly date: 2014/2018

Germany-Team Tretboot AG Flensburg

We are the waterbike AG from Flensburg and we can destroy boats!

Waterbike “5vor12”

L = 5,60 m B = 2,50 m

T = 0,2 m m = 80 kg

Vmax = 9 kn

Propulsion type: paddle wheel

Design development and assembly date: 2000

Waterbike “Tigerduck”

L = 2,5 m B = 2,0 m

T = 0,5- 0,8 m m = 80 kg

Vmax = 27 kn

Propulsion type: fluke

Design development and assembly date: 1993

Waterbike “Henning”

L = 6,0 m B = 1,3 m

T = 0,5 m m = 57 kg

Vmax = 9,1 kn

Propulsion type: fixed- pitch propeller

Design development and assembly date: April 2023

Germany-Team Duisburg

The rather small but dedicated Waterbike Team from Duisburg is a highlight of every IWR. With great care and continuous refinement, we've worked hard to keep our fleet in top shape. It's the steady stream of small improvements that has helped us gain ground year after year. Last IWR, we made a strong comeback and earned our spot back on the podium. But we're far from done ..

Whether at the Bollardpull or the counter, we are always the measure of things. We are a team of overconfident engineers, professional improvisers and... let's say, enthusiastic drinkers!

Waterbike "Close to Perfection"

L: 5.55m B: 2.80m

T: 0.5m m: 59kg

v: 10.7kn

Propulsion: two propellers

Year: 1997

Germany-Waterbike Straak zu Bremen

Since there hasn’t been a beer reefer in the pitlane at last year's IWR 2024 in Flensburg, Bremen has been able to win pole positions at the competitions. The tradition of drinking one beer per measured meter came to a hold. For 42 years now, those hop juice killing machines spawn randomly somewhere in Europe every year to test their limits on the waterbike. 80% of them usually got distracted by the beer reef on the way to the pitlane. Don't be afraid to say ‘hi’ to them during the competition or ask for a 10mm socket or a monkey wrench. They are friendly and don't bite, if you follow their flunkyball rules.

Waterbike “Reignbow“

Waterbike main data:
L = 5,90 m B = 2,50 m
T = 0,74 to 0,4m m = 58 kg
Vmax = 15,2 kn
Propulsion type: propeller
Design development and assembly date:
First concept idea in 2017
First run on the IWR 2023,

Is it a bird? A plane? Nah—just two hammered students on a hydrofoil waterbike! For the first time in 30 years, a configuration inspired by the legendary Af Chapman II and Nij Atao returns to the competition. Developed through countless bar-table brainstorms, the bike features a sophisticated control system with feelers steering two independent flaps—powered by two experienced (or at least very determined) pilots.
Will it skim the water like a true hydrofoil, or prove why theory and reality don’t always align? We’ll find out in Zagreb—see you at the finish line… or the recovery boat!

Waterbike “Erlkönig”

Erlkönig is the waterbike that comes closest to a tank. The boat itself hasn’t had any damage to report. Except a little dent at the front, since the boat wasn't designed to take hits from a Champaign bottle at the baptism.

Waterbike main data:

L = 5,90 m B = 0,50 m

T = 0,7 m m = 120 kg

Vmax = 12 kn

Propulsion type: Propeller

Design development and assembly date: 2015

Waterbike “Dragonfly”

Dragonfly, Bremens oldest build still in stock been a fun idea to create thrust with an air propeller. First introduced in 1998 it came with a mono blade and a counterweight on the other side. This turned out to be quite hard to control since the blade turned at +200rpm. Later it was changed to a three bladed pitch propeller system.

Waterbike main data:

L = 5,90 m B = 2,3 m

T = 0,2 m m = 90 kg

Vmax = here, there and gone (only during storm season)

Propulsion type: Air Pitch propeller

Design development and assembly date: 1998

Waterbike “Aluminia”

A very reliable catamaran that has provided many years of dependable service. After getting a bit long in the tooth, the old lady has been given a little love this year. We've given her a new paint job, a new nozzle, new propellers and new rudders. This means she can shine in new splendor again this year.

Waterbike main data:

L = 5,98 m B = 2,45 m

T = 0,45 m m = 70 kg

Vmax = 8 kn

Propulsion type: Propeller

Design development and assembly date: 2008

Germany-Team Förderacer – FH Kiel

Here we are back again with Förderacer 1 and Ikarus. Engineering students stillpretending to be athletes. We've made a fewupgrades and got olympia level parts now, but let's be honest: we have spent more time perfecting our beer logistics than ourtraining plan. See you on, and in, the water! Team Förderacer – FH Kiel

Waterbike "Förderacer 1.0"

L: 6.0 m B: 2.0 m

T: 0,8 m m: 80kg

Top Speed: 10 kn

Year of construction: 2011

Propulsion: Propeller

Waterbike “Ikarus”

L: 5.0 m B: 2.0 m
T: 1mm: 50kg
Top Speed: 11 kn
Year of construction: 2017
Propulsion: Propeller

Netherlands - DWT - Delft Waterbike Technology

Waterbike“Flying Colors”

L = 5.995 m B = 0.47 m

T = 0.91m m = cca 10 kg

Vmax = very fast

Propulsion type: prop

Design development and assembly date:

1987 - 2025

Waterbike “Macbath”

L = 5.20 m B = 0.87 m

T = 0.70 m m = very heavy

Propulsion type: prop

Poland-KSTO KORAB - Koło Studentów Techniki Okrętowej Korab

Waterbike “Rektor”

Waterbike “Dżordż”

Waterbike “CBG”

Serbia-Confluence Belgrade

Old guys fresh blood and a couple of females.
We are here to dominate.
Good luck, you will need it.

Waterbike "Kriva Drina"

Croatia-RiTeh Waterbike Team

Waterbike “Šijun”

Croatia-FSB Waterbike team

We are a small association of students studying naval architecture and sharing the same interests. We work together to design, create, produce and learn. We are proud of what we achieved in the past 2 years because it was a hard time to keep all the members together. Looking forward to seeing you all.

Waterbike “TwinGO”

L = 5.20 m B = 2 m

T = 0.15 m m = 40 kg

Vmax = 7.5 kn

z-drive propeller

2021. – Design development and assembly

2022.,2023.- Optimization regarding vibration and rigidity. Aft wave and water splashing reduction using CFD. Designing and making new propellers.

Austria-TGM Racing Team

Waterbike “Bloody Mary”

Catamaran with two independent, counterrotating propellers. The hulls were desigend 2018 for the IWR in Zagreb where the maiden voyage took place. The hulls were later also used for another configuration of the boat using a steel frame tandem bike construction. In this configuration the boat was named Steely Mary.

Waterbike main data:

L = 6 m B = 2 m

T = 0,4 m m = approx. 30 kg

Vmax = 5 kn

Propulsion type: Two Propeller, counter rotating

Design development and assembly date: 2017 with some adaptions

Waterbike “Botanic”

Monohull with a hull made of glas fibre composite. The propeller is located in the middle of the hull.
The drive train consists of two angular gear boxes.

Waterbike main data:

L = 5,9 m B = 0,6 m

T = 1 m m = 30 kg

Vmax = 6 kn

Propulsion type: Propeller

Design development and assembly date: 2018

Waterbike “O-nass-is”

Waterbike with wooden hull and a propulsion system using a twisted chain to connect the pedals with the drive shaft.

Waterbike main data:

L = 5,9m B = 0,8 m

T = 1,1 m m = 60 kg

Vmax = 6 kn

Propulsion type: Propeller

Design development and assembly date: 2014, modification 2021, 2022, 2023

Austria-HTL Rennweg - HTLW3R Waterbike Racing Team

Waterbike “Tegetthoff”

Waterbike main data:

L = 6 m B = 0,7 m

T = 0,35 m m = 35kg

Vmax = 10 kn

Propulsion type: Prop

Design development and assembly date:2018

Sponsors

We are grateful to all our sponsors for their generous support!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Thank you for being part of IWR!

We hope this experience will stay in your memory for a long time.

Your presence made it special, and we are truly grateful.

A big thank you to everyone who helped make this event possible – from organizers and volunteers to our generous sponsors.

See you next time!

#IWR2025

Yours,

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