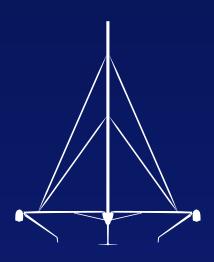
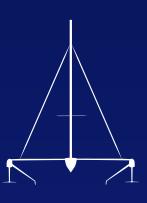
THE HIGH SPEED

FIDVEITTURE

THAT SPEEDS UP INNOVATION





L'HYDROJPTERE <mark>2.0</mark>

A CUTTING EDGE TEAM



Gabriel Terrasse CEO, Team Leader



Eric Rambaud Technical Director



Tina Roberts (US)
Partner, CEO WELSH Group



Loïc Mazas
Steering of R&D projects



Antonin Verdon Communication Manager



James Espey (US)
US Boat Captain



Alain Porte
Aeronautical design



Damien Grolleau

Innovation strategy consulting and implementation of R&D projects



Sandira Calviac Strategy and business development



Loïc Derez Naval Architect



Françoise Heilmann Aerospace Engineer



Aurélien Merzeau IT Manager

2 ICONIC R&D PLATFORMS



Current world's fastest open sea sailing yacht

Length: 18.28 m (60') Beam: 24 m (78.7')

Official top speed: **55.5** knots (+102 km/h)

Launching: 6 to 9 months to go

Length: 12.5 m (40') Beam: 10.40 m (34')

Sails at x2.7 wind speed

Launching: September 2023

DUR ACTIVITIES



> Internal collaborative R&D projects

> Communication & incentives







R&D HOSTING SERVICES

- > L'HYDROPTERE 2.0 proposes a business hosting R&D projects/experiments aboard its 2 hydrofoil boats.
- L'Hydroptère and L'Hydroptère.ch operate at very high speed (leading to extreme loads) in a challenging environment (salted water, waves, wind, humidity).
- This makes our sailing yachts **ideal experimental testbeds for innovations** from a wide range of sectors (maritime, aeronautics, industry).
- Here are some examples of experiments/systems to onboard our boats:
 - Experimental models to test for aerodynamics in water at high Reynolds numbers.
 - Mechanical systems (instrumented and connected foil or appendage for monitoring; ball joints, seals or bearings for fatigue resistance under extreme stress conditions).
 - **Electronic** systems (sensors, monitoring devices) for testing ageing in hostile environment.
 - Coatings, paints, covering, etc. for accelerated ageing tests.

An experiment taken from the **proof-of-concept stage (TRL 3)**, can have accelerated development onboard one of our boats to reach **higher TRL level (TRL 7-8)**.



INTERNAL R&D ROADMAP: DUAL APPLICATIONS

Cavitation Related topics 2023

2024

2025

2026

2027

2028

Partners



R&D



Water bombers optimization

Water bomber scooping device **ZE-WIG**

Foiling Seaplanes















Nextgen Foils

An innovative foil concept efficient from 10 to 80 knots (master cavitation inception & adaptive foil shape with morphing, kinematics)



Fast patrol vessels (interceptors): higher performances, decreased URN and acoustic signature

Wing-In Ground Effect Aircrafts optimization

1/ Supplier of Foils for landing/taking-off on moderate seas

2/ Manufacturer of **0-emission WIG** with Foils

Mlitary freight & patrol & drones: low-signature flight, low operating costs, high performances, zero emission



1/ Optimize amphibious aircrafts scooping system (60 y.o.)

2/ Device (pole) to scoop without landing compliant to non-amphibious waterbomber aircrafts (A400M, C130...)



Improved firefighting efficiency & reduced energy consumption; Improved safety (crew and aircraft)

Seaplanes operating range improvement

Seaplanes foils supplier EASA FAA certified for landing/taking-off on moderate seas

Civil and Military seaplanes & drones

COMMUNICATION









COMMUNICATION

L'HYDROPTERE 2.0

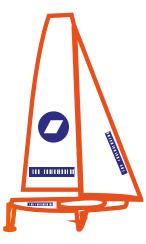
GET YOUR COLORS ON BOARD AND BENEFIT A GLOBAL VISIBILITY

Display your colors:

- On our boats (sails, hulls...)
- With our team (clothes, vehicles, lifestyle...)

Communication opportunities:

- Our TV, magazine, news papers appearances
- Our social media
- During our R&D navigations
- Prestigious events participation
- Exhibitions during popular events
- Embark employees, customers, prospects, VIP
- With optimizations: Racing (ex. Fastnet) & records attempts (ex. Mediterranean crossing...)







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CONTRCT L'HYDROPTERE 2.0

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