RAFALE
TEAM ETS MONTRÉAL

2023-2024

RAFALE ETS
ECOLE DE TECHNOLOGIE SUPERIEURE
MONTREAL

Prepared by Louise Le Gall (community/logistics manager), Karl-Philippe Bluteau (Captain) and Christophe-André Gassmann (Treasurer) and Thibaut Bailet

INTRODUCTION

A BRIEF HISTORY

Rafale ÉTS is a naval design student club at École de Technologie Superieure.

Formerly known as Rafale Class C, the team launched no less than two prototypes of C class catamarans between 2013 and 2018 during events such as the 27th Little cup in Geneva (2015) and the Miami Foiling Week (2018).

In 2019, with the announcement of the end of the class, the club had to reinvent itself and change direction for a new design and a new competition: a foiling monohull of the Moth type for the Foiling SuMoth Challenge.

Eco-responsible, innovative and efficient, it's aim is now the Foiling SuMoth Challenge happening yearly in Lake Garda during the Foiling Week, a must for all things foiling.

OPERATION

Rafale ÉTS is open to any students from ETS wishing to discover the world of sailing, regardless of their engineering speciality, skill level or knowledge of sailing.

The commitment is voluntary, members can chose how much time they put in and in which area they want to focus that time and all that while respecting the club's values, Our main goal is to learn and grow together.

COMMITMENT

Rafale ÉTS wants to create a synergy between naval related and non-related sectors with its partnerships. As such, the club want to promote sustainable development in the naval industry with its activities and participations to events and galas such as the Montreal International Boat Show and the ADRIQ gala.

MEET THE 2023-2024 TEAM

ADMINISTRATION (5)

QUENTIN LEGRAND
CAPITAIN

KARL-PHILIPPE BLUTEAU
CO-CAPTAIN & COMMUNICATION AND LOGISTICS MGR.

AILISH TROUGHTON
TREASURER & DESIGN

ANTOINE MARCHAND
ELEC MGR.

CEDRIC BOUCHARD
PRODUCTION MGR.

MEMBERS (14)

JUSTIN MIMEAULT
DESIGN - FAB.

BENJAMIN VOLLE
DESIGN - FAB.

ALBAN BAZIREAU
LCA MGR.

JEAN-CÉDRIC FAUCHER
LCA MGR.

BASILE MOESCHLER
DESIGN - FAB.

NICOLAS DUFLOS
DESIGN - FAB.

XAVIER AUGEREAU
DESIGN - FAB. & LOGISTICS

AMORY JANIN
DESIGN - FAB.

IONA WYPER
SKIPPER

STEPH BIENVENUE
DESIGN - FAB.

BAPTISTE BLANCHE
COMMUNICATION

THIBAULT BAILET
COMMUNICATION - LOGISTICS

TOM BEAUMONT
ELEC & FAB

GABRIEL MARCOUX-BOUCHARD
DESIGN - FAB.

(PRE)DEGREE, MASTER

MECHANICS, IT, ELECTRONICS, INNOVATION, ENVIRONMENT

SHARING | **DARING TO INNOVATE** | **COMMITMENT** | **CURIOSITY** | **ENTHUSIASM**

MULTINATIONAL

OUR VALUES !

OUR PURPOSE

Promote Canadian sailing according to the tree pillars of sustainable development

OUR VISION

Become a hub for people dreaming about the adventure of moth building on the American continent

OUR MISSION

Design, manufacture and sail a sailboat according to sustainable development criteria.

PROJECT TIMELINE

3 BIG PROJECT PHASES HAVE BEEN IDENTIFIED TO GUIDE THE TEAM IN IT'S PROCESSES

TASKS	START DATE	END DATE
PHASE 01 DESIGN - ANALYSES - MATERIALS - PREMANUFACTURING	APRIL 2023	DECEMBER 2023
PHASE 02 MANUFACTURING - TESTS	SEPTEMBER 2023	MAY 2024
PHASE 03 COMPETITION - DESIGN OF NEW PROJECTS	JUNE 2024	AUGUST 2024

EXPERIENCES

CATAMARANS CLASSE C 2011-2018

27e Little Cup, Genève (CH)
Sept.2015

Miami Foiling Week (US)
Fev.2018

Montreal Open C-Class (CA)
Sept.2018

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Sailors of the year - QSF "Spirit prize" Hydros foundation

***End of the Little Cup**

MOTH-CLASS BOAT SINCE 2022

2024

Garda Lake Foiling Week (IT)
SuMoth Challenge
June.2022

Garda Lake Foiling Week (IT)
SuMoth Challenge
June.2023

Garda Lake Foiling Week (IT)
SuMoth Challenge
June.2024

GENERAL

REFIT DESIGN

PERFORMANCE

3

1

2

COMING SOON

COMPETITIONS

FOILING SUMOTH CHALLENGE SINCE 2022

"The Foiling SuMoth Challenge is a student competition inspired by the need for more durable and efficient sailboats as well as the related manufacturing process. Its goal is to promote sustainable practices by challenging universities and higher education students through a friendly technical and sportive competion"

COMPETITION RULES

Juste like RAFALE, the SuMoth Challenge has sustainable developpement focused guidelines:

- **Environment :** Teams have to design and manufacture while using low carbon footprint methods and materials.
- **Social :** Teams have to analyse the social impacts of the process for the whole life cycle of the used materials.
- **Economic :** Teams use a standardized money: "SM$" (SuMoth dollars). This limits teams on spendings and allows for a fair contest by pricing more ecological materials lower.

+ security & accessibility during the Foiling week

TECHNICAL DETAILS

3.355X2.25X6M

Max: 20kn
Foil: 7kn

Full boat: 50Kg
50<🧍<85kg

8.25M2

Fibers: **Flax, Basalt**, Carbon
Resins: Elium/Epoxy
Core: Recycled PET

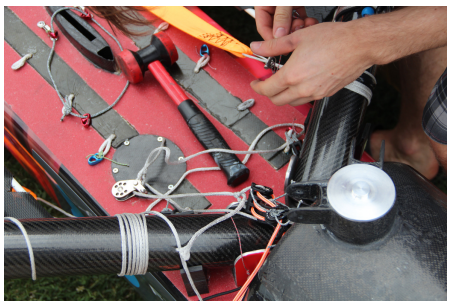
7.8T CO2
=4000KM BY CAR

3R
Reduce
Reuse
Recycle

Techniques:
Infusion/Wet Lay up
Glue/3D Printing

Design : 2 years
Manufacture : 1 year

ASK FOR MORE DETAILS



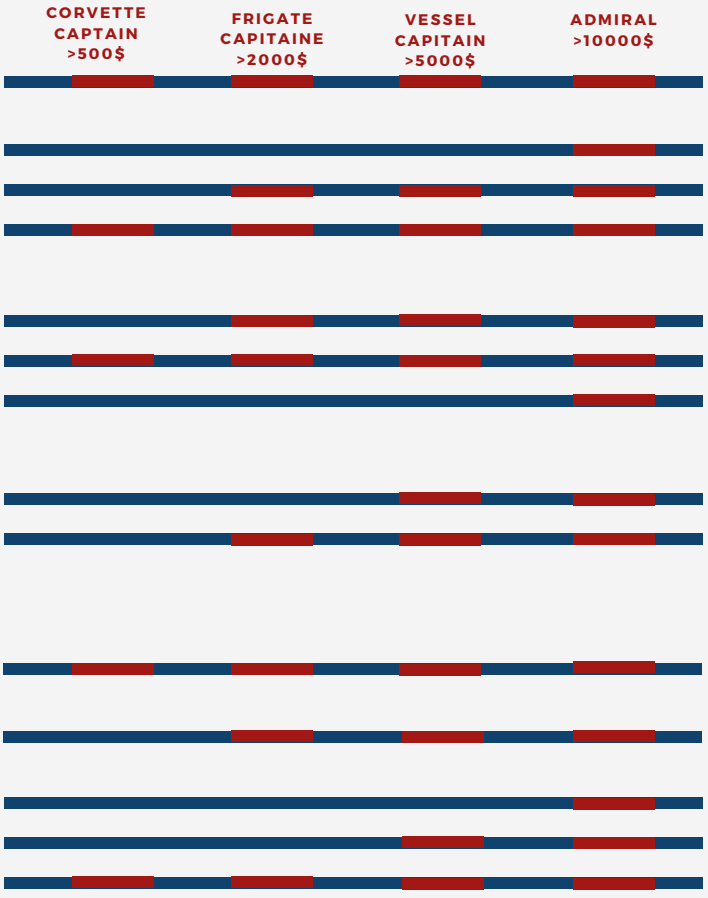
YOUR SKILLS, OUR PASSION

Any type and quantity of assistance is important to help Rafale grow and learn.

Our partnership plan is for any person, organisation, enterprise or club that wants to help us realize our project.

- Technical, technological and material means
- Materials for manufacturing
- Technical expertise, advices and trainings
- Money

VISIBILITY PLAN FOR OUR PARTNERS



ONLINE VISIBILITY

Special thanks on the club's social networks (Facebook/Instagram AND/OR LinkedIn)

Identification and tags in every posts

Scrolling logo on the website home page
Scrolling logo on the website's sponsors pages

PROMOTIONAL MATERIAL

Logo on the clothes worn on site in Italy

Logo on our banner in Italy

Apparition of your company's products or promotional items in our photos and events

PROTOTYPE

Logo on the sail

Logo on the hull

*Dimensions depends on available space and partnership value

EVENTS/COMMUNICATION

Thanks and logos on our official documents (dimension depends on parternship value)

Thanks during the club's in person and online events.

Online discussion with your employees

Visits of our club's workshops (on demand)

The club's email newsletter (3 per year)

CUSTOM REWARDS AND VISIBILITY CAN BE MADE

- Each financial partnership could be subject to a tax credit.
- Material gifts or reductions can be valorised on a case by case basis to be equivalent to the financial partnership
- Financial partnerships of 2000$ and more can be eligible for ETS' partners privileges as well as ours.

THEY ARE ALREADY SUPPORTING US

ÉTS Engineering for Industry
ÉCOLE DE TECHNOLOGIE SUPÉRIEURE
Université du Québec
AEETS

FOILING WEEK
FOILING SUMOTH
2023 EDITION

SCOTT BADER

TEXONIC

ARKEMA

CDCQ
Centre de développement des composites du Québec

RAFALE
DARE.SHARE.IMPACT

Québec YACHTING

L'ESCALE nautique

Gurit

QUÉBEC NAUTISME

RSTLYC YCRSTL

RAFALE
TEAM ETS MONTRÉAL

CONTACT

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1219, RUE WILLIAM,MONTRÉAL (QC),
H3C 1R1 CANADA

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WEBSITE : RAFALE-ETS.COM

FACEBOOK : RAFALE.ETS
INSTAGRAM : RAFALE.ETS
LINKEDIN : RAFALE ÉTS