Carlos Freire Trigo

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Business—technology leader and engineer, cross-functional and strategic, connecting innovation and business growth in the maritime & yachting sector. Focused on onboard E/E systems, batteries and electrification across racing, leisure, commercial, service, autonomous and high-performance applications.

BD: 18/12/1979

MOST RELEVANT EXPERIENCE

- Marine E/E Systems & Electrification Advisor. Technology, Innovation & Business Growth Strategist
 (2024-Today) carlosfreiretrigo
- Founder. Battery Consulting services.

(2024-Today) - Marine Battery Consulting, Valencia & Vigo (Spain)

• Business Technology Director (External Advisor)

(2025 – Today) - IEMA (International Electric Maritime Association)

• Battery Expert & Onboard E-Systems Engineer

(2022 – 2024) - American Magic, 37th America's Cup, Barcelona (Spain) & Pensacola (USA)

Interim COO | Maritime Business Developer Manager | BoD | Investment Partner
 (2022 – 2023) – Abervian Product Engineering, Castellón (Spain)

COO | Marine Division Manager | BoD | Investment Partner

(2019 – 2022) - Endurance Motive, Valencia (Spain)

Owner

(2019 – Today) - MyVMG Group formerly (VMG Racing Electronics S.L), Valencia (Spain)

Senior Onboard Electronics Engineer

(2009 – 2010) - BMW Oracle Racing, 33rd America's Cup, SanDiego (USA)

---AMERICA'S CUP WINNER---

• CEO & Founder

(2007 – 2018) - VMG Racing Electronics S.L

• Onboard Electronics Systems Manager

(2005 – 2008) - Desafio Español, 32nd America's Cup, Valencia (Spain)

• Electronics Technician

(2002 – 2005) - **Oceano S.L**, Vigo (Spain)

Other relevant projects and activities

- European Commission, EU Grant Projects Evaluator and Blue Invest Coach
- Learn from Bow to Stern, Co-Founder Acquired by Seably.com.
- **EasyWind & EasyCurrents, Co-Founder** (www.oceandrivers.com/easywind)
- COBS. Container Overboard System, Founder (www.cobs.es)
- American Magic, 36th America's Cup, Onboard Systems Engineer
- SailGp, Systems Engineer (www.sailqp.com)
- Battery Associates, Battery MBA Lecturer (www.battery.associates)
- Podcast Creator, "Tecnología y Emprendimiento sobre el Agua"
- EU Maritime Grants Advisory Board

ACADEMIC RELEVANT POSITIONS & CERTIFICATIONS

- **Executive MBA in Operations Management** (Chamber of Commerce Business School, Valencia)
- Bachelor's degree in Electronics Engineering (University of Zaragoza)
- Lean Manufacturing Certification (Lean Management Spain Institute)
- Procurement Certification (Spanish Association of Purchasing, Contracting and Procurement Professionals)
- Scrum Master & Kanban Certification (Scrum Manager)
- Handling a fire in a lithium-ion battery on board a ship Advanced (Ocomp)
- Lithium-Ion Battery Safety for Superyachts & Ships (ABS)
- Networking and IT Systems Course (Madrid Polytechnic University MasterD)
- WindPower Technical Course (Centro de estudios de Energías Renovables)

DETAILED WORKING EXPERIENCE

• (2024 – Today)

Marine E/E Systems & Electrification Advisor. Technology, Innovation & Business Growth Strategist Marine & Maritime Strategy, Business, Innovation, Management, Technology and engineering advisory services.

carlosfreiretrigo.com

Focus Areas:

- ✓ Engineering & Technical management.
- ✓ Business management, strategy and growth.
- ✓ Innovation projects and technology guidance.
- √ Startups and investment assessment.
- ✓ Operations excellence.

Key Achievements:

- ✓ Built a portfolio of industry leaders, from RDi centres and leading manufacturers to shipyards, shipowners, VC firms, and startups.
- Recognized as an industry authority and trusted voice, delivering advisory work, lectures, and highprofile speaking engagements.
- ✓ Served as <u>EU Innovation Fund</u> and Projects Evaluator, assessing different scale maritime electrification, autonomous vessels, and port infrastructure proposals.
- ✓ <u>BlueInvest Coach</u> for an autonomous vessel startup; improving business model, strategic plan, and investment readiness.
- ✓ Developed a comprehensive business case and strategy for the electric propulsion Division of a well-known naval retrofit and tug yard company.
- ✓ Formed and led a consortium for a Spanish grant project on battery hybridation, bringing together key industry and technology partners.
- Advisor to the International <u>Electric Maritime Association (IEMA)</u> and advisory board member and stakeholder of several maritime EU-funded projects such as SeaBat, Hypobatt, FlexShip, Aeneas etc. (ongoing).

• (2024 – Today)

Founder, Marine Battery Consulting

With an independent approach, marine battery consulting offers a range of expert advisory and consultancy services on lithium batteries and energy storage systems (BESS) for the marine and maritime industry. <u>marinebatt.com</u>

Focus Areas:

- √ Marine batteries and Maritime BESS
- ✓ Market & Business, Technical Management, Product & Engineering, Regulations & Certifications, Technical Field Services, Survey & Optimization, RDI Projects, Knowledge Sharing, Safety

- ✓ Provided strategic advisory to leading battery manufacturers, a fuel cell supplier and shipyards on battery system project, market entry, product development, and manufacturing strategy.
- ✓ First Spanish member of the Maritime Battery Forum

• (2022-2024)

Lithium Batteries Expert and Onboard Electronics Senior Engineer. 37th America's Cup, American Magic The America's Cup is the oldest international sporting trophy and remains the pinnacle of yacht foiling technology today. <u>americanmagic.americascup.com</u>

Focus Areas:

- √ Battery systems
- ✓ Electronics and electrical systems (mechatronics department).
- ✓ Lithium Batteries and energy systems.
- ✓ Interconnection systems and component sourcing.
- ✓ Systems installation, commissioning, and troubleshooting.

Kev Achievements:

- Designed and manufactured a custom lightweight LV battery that resolved critical energy and safety issues from the previous campaign, ensuring consistent performance under extreme racing power and energy requirements.
- Led and managed yacht systems integration and installation, delivering a fully operational and reliable platform, meeting highly demanding and ambitious deadlines with zero breakdowns during the racing period.
- ✓ Implemented virtual design tools and introduced process improvements and Lean methodologies during the design and pre-installation phases, enabling seamless coordination between the USA shipyard and Spain-based design team, reducing onboard system installation time and travel costs while helping meet challenging deadlines.
- Designed and defined onboard electrical and electronic systems, including wiring harnesses, optimised for weight, reliability, and maintenance.

• (2022-2023)

Interim COO & Maritime Business Development | Investment Partner, Abervian Product Engineering Product engineering & RDI company delivering hardware, firmware, and mechatronics solutions in the electrical mobility, automotive and energy segments. <u>abervian.es</u>

Focus Areas:

- ✓ Management and BoD.
- ✓ Product and project management
- ✓ Business Strategy and Operations.
- ✓ Marine, Maritime and Land based Mobility industry.
- ✓ Maritime segment Grants

- ✓ Led business strategy and optimised company operations.
- ✓ Held 10% ownership stake in the company.
- ✓ Integrated the company into three PERTE Naval and other national grants, securing over €1.5M funding.
- ✓ Introduced the company to the maritime industry, opening new market opportunities.
- ✓ Simplified daily operations and processes, improving efficiency and scalability.
- ✓ Drove company growth, delivering 80% of total company revenue.

• (2021-2021)

Systems Engineer, SailGp

50ft Wing Foiling Catamaran, Grand Prix Circuit. sailgp.com

Focus Areas:

- ✓ Daily systems and electronics check and maintenance.
- ✓ Diagnostics and fault resolution.
- ✓ Sensor's calibration and remote troubleshooting.
- ✓ Race day technical support.

Key Achievements:

- ✓ Reduced idle and non-productive time by 3 hours daily through process redesign and streamlined operations.
- ✓ Improved sensor calibration accuracy, enhancing data reliability for race performance analysis.
- ✓ Developed simplified diagnostic workflows, reducing troubleshooting time during high-pressure race events.

(2019 – 2022)

COO | Marine Division Manager | BoD and Investor Partner, Endurance Motive

Lithium battery manufacturer for the industrial, stationary, marine, and e-mobility segments.

endurancemotive.com

Role: Chief Operating Officer (COO)

Focus Areas:

- Development of company departments, production plant, and processes forming the foundation of a fast-growing operations organisation.
- ✓ Daily tracking of operational metrics to align teams with growth objectives.
- ✓ Sourcing strategy design and execution, including negotiation, contracting, and supplier management.
- ✓ Setting global battery strategy and implementing local execution plans.

Key Achievements:

- ✓ Key driver in the company's <u>BME Growth Stock Market</u> listing through rapid operational and organisational build-up.
- ✓ Scaled operations to support revenue growth from €100K to €4M.
- ✓ Implemented ISO 9001:2015, Lean Manufacturing, and Continuous Improvement initiatives, increasing operational efficiency and ensuring quality compliance.
- Completed factory relocation in one day with minimal downtime (1 day production, 4 hours engineering).

Role: Marine Division Manager

Focus Areas:

- ✓ Definition and execution of the Marine Division's business plan and growth strategy.
- ✓ Execute trade-off studies between marine battery technology solutions.
- ✓ Continuous market surveillance for new suppliers and emerging technologies.
- Support in compliance and certification to marine storage standards.
- ✓ Identification and prioritisation of global market requirements for marine applications.
- ✓ HV and LV batteries product range definition and product development review.

- ✓ Established the Marine Division in the maritime battery market.
- ✓ Introduced LV battery products for marine applications.
- ✓ Led the development of a commercial-sector HV battery project and its related grant submission.
- ✓ Secured a hybrid barge project by developing a bespoke LV battery solution tailored for inland water tourism vessels.

(2021 – 2023)

Founder, COBS (Container Overboard System)

COBS alerts, identify, track & trace lost containers and keep them afloat to be rescued. cobs.es

Key Achievements:

- ✓ Ports 4.0 Idea Stage Grant
- ✓ Climate Launchpad Winner Spain
- ✓ Climate Launchpad Winner Europe "The Next Big Thing" category

(2020 – 2021)

Co-Founder, LearnBS (Learn from Bow to Stern)

e-learning marketplace for yachting lovers, professional seamen, skippers, race crews and more.

Key Achievements:

- ✓ Project idea and business strategy
- ✓ Exit: Acquired by Seably.com in 2021

(2019 – Today)

Owner, MyVMG Group

myvmg-group.com

MyVMG Group builds on the legacy of VMG Racing Electronics (2007–2019), a globally recognized leader in high-performance yachts and sail racing systems projects. Leveraging over a decade of innovation, technical excellence, and trusted client relationships, MyVMG brings together companies, projects, initiatives, and ventures led and shared under the VMG structure.

Focus Areas

✓ Marine E/E onboard systems, navigation, maritime batteries, clean powertrain, foiling, and other advanced technologies.

Key Achievements:

- ✓ Invested in multiple high-impact startups (including Demium, Endurance, NeoCheck, Arkadia Space, Titanium Technologies, Abervian, CoCircular, Proteus Innovation, among others).
- ✓ Launched and participated in own- and third-party ventures (such as LearnBS, COBS, Easy Wind, Easy Currents, Endurance, Abervian, and ESea Propulsion).

(2007 – 2018)

CEO & Founder, VMG Racing Electronics S.L

Marine advanced electronics and electrical systems, communications, engineering, and integration company for racing and high-performance yachts.

Focus Areas:

- ✓ Leadership, strategic direction, and overall company management.
- ✓ Systems design and engineering for high-performance and racing yachts.
- ✓ Components sourcing and technical management for advanced marine systems.
- ✓ Onboard systems engineering, material supply, installation, and regatta support for top-tier sailing circuits (Extreme Sailing Series, TP52, Mini Maxi, Soto 40, GP42, Nautor Swan, etc.).

- ✓ Achieved profitability from year one, reinvesting earnings to fund expansion.
- ✓ 33rd America's Winner within BMW Oracle Racing team (2009-2010)
- ✓ Positioned VMG among the top five companies worldwide in its niche.
- ✓ Supplied and supported systems for 95% of the TP52 fleet over a decade, starting from a single boat.
- ✓ Defined the full onboard systems concept for the Nautor Swan 125.
- ✓ Created the first dedicated regatta support service for the 52Superseries.
- ✓ Applied lean process engineering, reducing onboard installation times by over 50%.

- ✓ Developed proprietary products, including EasyWind, EasyCurrents, Inclinometer and a HatchSeal air sealing system.
- ✓ Shifted the primary business model from 60% labour-based revenue to materials sales, scalable retrofit projects, and selected flagship special projects.

(2005 – 2008)

Electronics and Electrical onboard systems manager, Desafío Español 2007 (32nd America's Cup)

Focus Areas:

- ✓ Daily maintenance, installation, troubleshooting, and repair of onboard electronics and electrical systems.
- ✓ Sourcing and procurement of interconnection components.
- ✓ Management of new boat installation projects.
- ✓ Spare Navigator.

Key Achievements:

- ✓ 32nd America's Cup Semi-finalist.
- ✓ Gp42 Navigator.
- ✓ Tp52 project systems definition and Installation.

• (2000 – 2022)

Professional Sailing, Navigator Role

As a professional sailor, I have competed in prestigious circuits and classes such as IMS, Swan45, Soto 40, GP42, Wally, or TP52 among others. Typically serving as Navigator, I was responsible for instrument calibration, understand and provide the information of the buoys, routes, wind conditions, laylines and performance data to the strategist and tactician mainly, so they take the right decisions.

Key Achievements:

- ✓ 5x Copa del Rey Winner.
- ✓ 2nd Soto40 World Championship.
- ✓ 2x Soto40 European Championship Winner.
- ✓ 2x GP42 European Championship Winner.

KNOWLEDGE & SKILLS

Corporate

- Strategy & Operations
- Business Development
- Manufacturing
- Innovation
- Project Management
- Product Management
- Procurement
- Continuous improvement
- Negotiation
- Quality
- Funding programmes
- Processes
- Startups, Ventures
- Product Sourcing
- Market Analysis
- Digitalisation
- KPI's & OKR's

Technical

- Batteries
- Charging Systems
- Instruments & Sensors
- Interconnection components
- Power Distribution
- Digital Switching
- Electrical systems
- Clean Powertrain
- Harnessing
- Wired and wireless network
- Satellite comms & Radio
- GPS systems
- Calibration & Commissioning
- Product Sourcing

Soft Skills & Interests

- Personal development
- Dynamic
- Curious
- Strategist
- Connector
- Growth Partner
- Problem Solver
- Responsible
- Creative
- Entrepreneur Spirit
- Passionate
- Organized
- Quality Oriented
- Wellbeing
- Challenges
- Sailing & Windsurfing
- Hydro foiling
- Cycling