



FEAC
ENGINEERING | REALIZE YOUR DIGITAL TWIN

Solution
Partner

Digital Industries
Software

SIEMENS

Technology
Partner

Digital Industries
Software

Digital Twins solutions for the Defense Industry

Charilaos Kokkinos, Technical Manager, FEAC Engineering

www.feacomp.com

| 1. About FEAC:



| FEAC: Your trusted partner in defense for Digital Twins & Simulation Solutions

Ideation



Realization



Utilization



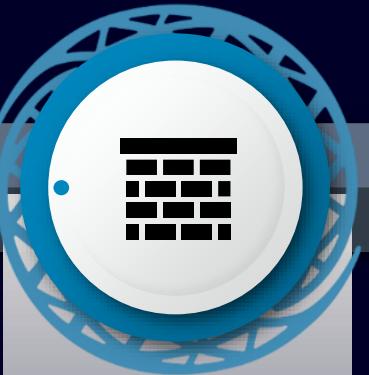
Holistic Digital Twin Approach





FEAC's TEAM

- Experienced Engineers, Physicists and developers with Ph.D. & M.Sc. Degrees
- Numerous scientific publications



PROJECTS

- More than 200 delivers projects so far
- Sectors: Marine, Aerospace/Aeronautics, Health care, Renewable Energy, Oil & Gas, Defense, Construction, Science & Particle Physics



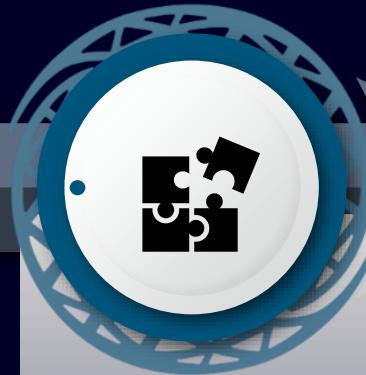
CLIENTS & PARTNERS

- Satisfied Clients & Partners from all around the world.
- FEAC is a trusted and acknowledged partner



AWARDS

- Seal Of Excellence by the European Commission
- European Defence Agency Innovation Prize
- ANSYS 2014 Hall of Fame (1st global award)



INNOVATION

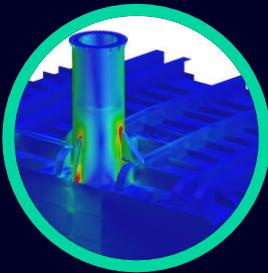
- Permanent collaboration with CERN & SIEMENS
- Participation in -Horizon Europe
-EDA (Defense)
-ESA (Space)



FEAC's Expertise

Structural

Software tool:
SIEMENS Simcenter 3D
with NX Nastran



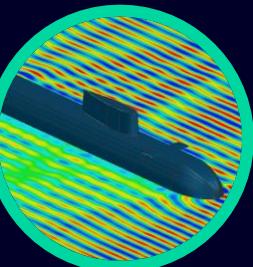
Fluids – Thermal

Software tool:
SIEMENS Star-CCM+



Acoustics

Software tool:
SIEMENS Simcenter 3D



EMI/EMC – RCS

Software tool:
SIEMENS Simcenter 3D



AI-assisted
Real time
applications

Finite Element
Analysis (FEM)

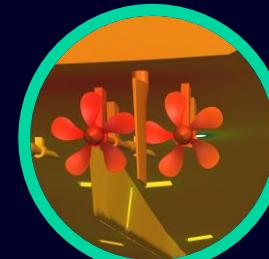
Systems
Simulation
(1D)

Boundary
Element
Analysis (BEM)

Computational
Fluid Dynamics
(CFD)

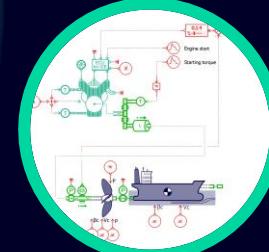
Anti- Corrosion

Software tool:
SIEMENS Simcenter3D
with PITHIA-CP



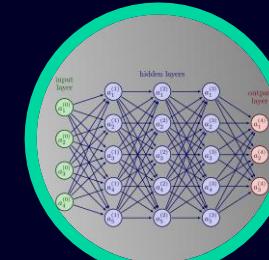
Design & Optimization

Software tool:
SIEMENS NX CAD &
SIEMENS HEEDS



Systems

Software tool:
SIEMENS Amesim



AI- Monitoring

Software tool:
SIEMENS Amesim &
FEAC tools

2. Involvement in European Defence



| EDF Heritage:

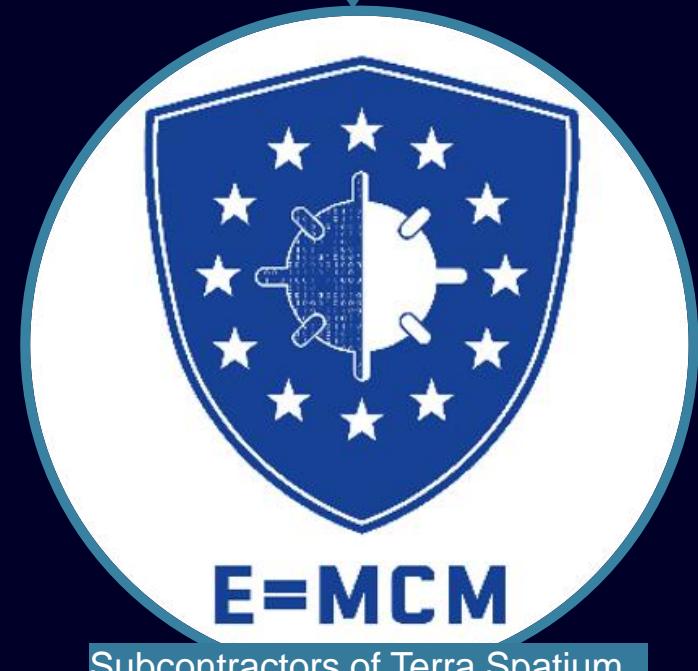
European Patrol Corvette



SEACURE



E=MCM



| EDA CatB. Heritage:

INTELLISEA

IntelliSea

| EDA Innovation Prize:



EDA Defence Innovation Prize 2024

Topic 1: “Innovative concepts, technologies and solutions for critical maritime infrastructure protection”

PITHIA

An awarded, advanced
Digital Twin technology
to enhance the protection of critical
maritime infrastructure

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Data from Digital twins &
advanced simulations
(corrosion, EM, acoustics, etc.)



Data from Sonars & Sensors



Integrating various data sources
- Unified System



Real-time results based on
simulations and data



Continuous monitoring &
predictive maintenance



Operational Intelligence &
operational readiness



Situational
Awareness



Resilience of
EU assets





PITIUMA

An awarded, advanced
Digital Twin technology
to enhance the protection of critical
maritime infrastructure

EDA Innovation Prize

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Awareness

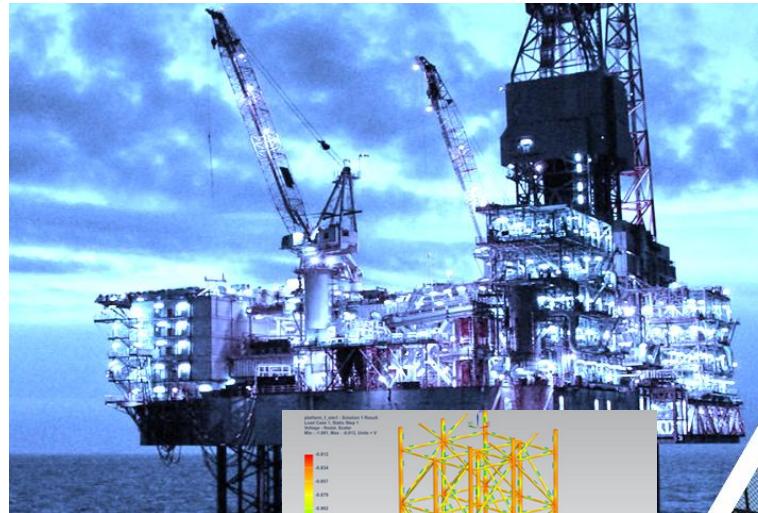


Resilience of
EU assets



PITHIA's Digital Twins Suite

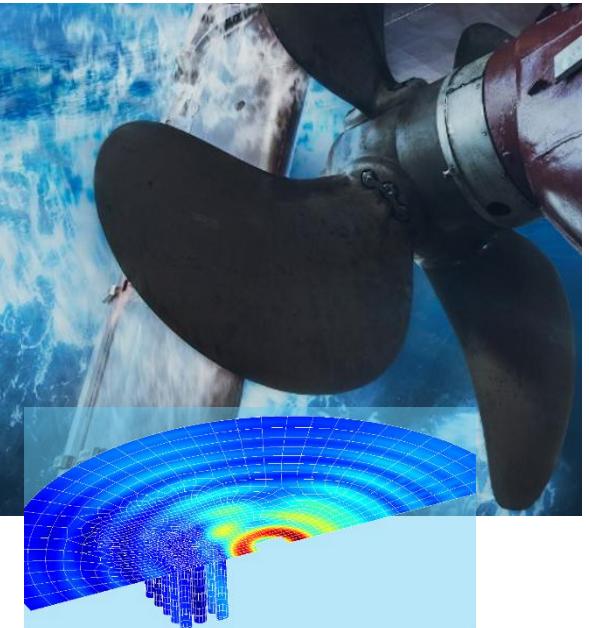
Advanced simulation software

**PITHIA-CP**

Anti-corrosion Design of Critical Infrastructures

**PITHIA-EM**

Electromagnetic Signature

**PITHIA-AC**

Underwater Noise Propagation & Signature

PITHIA's 3 moduleswww.feacomp.com

PITHIA's Digital Twins Suite

Awards & Recognitions



Technology Partner
Digital Industries Software



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Knowledge Transfer
Accelerating Innovation



| 3. EDF 2025:



FEAC in the frame of EDF 2025

FEAC, a trusted partner in winning consortia!

Calls of interest:



CATEGORIES		TOPICS	BUDGET (in million euros)
	Advanced passive and active sensors	<ul style="list-style-type: none"> Multi-band 4D Radar technologies (D) Infrared detectors (D) 	58.5
	Energy resilience and environmental transition	<ul style="list-style-type: none"> Propulsion system for next generation rotorcrafts (R) Naval hybrid propulsion and power systems (R) Aircraft propulsion and energy management systems (D) 	93
	Ground combat	<ul style="list-style-type: none"> Technologies for counter-battery capabilities (R) Future modular multifunctional land platforms and enabling technologies, including green technologies (D) Land collaborative combat including air-land (D) Drone-based affordable mass munitions (D) 	192
	Naval combat	<ul style="list-style-type: none"> Digital Ship and Naval Combat Cloud (D) 	54
	Underwater warfare	<ul style="list-style-type: none"> Stand-off anti-submarine warfare engagement (R) Advanced underwater networks (D) 	45
	Simulation and training	<ul style="list-style-type: none"> Multi-disciplinary design and analysis framework for Aerial Systems (R) Live, virtual, constructive training interoperability (R) 	43
	Disruptive technologies	<ul style="list-style-type: none"> Great-depth enabling technologies (R) Non-thematic research actions targeting disruptive technologies for defence (R) 	43

| Call to Action!

Interested in a trusted & multi-awarded partner, with specialization in Digital Twins?



Contact us!



Contact:



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