



PROJECT PERFECT STORM HSBO 2025

Ocean Craft Marine | Innovation in High-Speed Maritime Safety



MISSION PROFILE: PROJECT PERFECT STORM (PPS)





To create the Ultimate **high-speed offshore interceptor** that dramatically **reduces operator injury**, **enhances mission performance**, and **adapts to multi-role tasks**, by integrating the best-in-class technologies and human-factor science into one cohesive vessel.



REDUCE OPERATOR INJURY



- Treat the **operator as a weapon system** requiring protection
- Eliminate standing-console designs to prevent spinal injury
- Integrate intelligent data systems to monitor fatigue, acceleration, and hull impact in real time
- Provide the operator with the tools to complete the mission without compromising their future health



4 ENHANCE MISSION PERFORMANCE



Mission Profile

- 1. Maritime Interdiction/Boarding Operations
- 2. Special Operations Insertion/Extraction
- 3. Search and Rescue (SAR)
- 4. Maritime Patrol & Surveillance
- 5. Humanitarian & Disaster Response

Capabilities & Features

High-speed pursuit and interception.

Push-bow with reinforced knees and boarding rail.

Dual consoles for navigation and tactical control.

Shallow draft (28") via Porta hydraulic bracket for stealth approaches.

Modular weapon mounts and diver recovery notches-

Night ops with **Proteus 3D Nav & FLIR**.

High-speed response with reduced G-force impact.

Seakeeper Ride® for stability in heavy seas.

Skydex flooring and Ullman seats for crew and casualty safety.

400+ nautical mile range for extended missions.

Proteus 3D situational awareness system.

Real-time telemetry via CopaSAT SATCOM and Hefring Marine.

Modular deck layout for medevac, aid, or logistics.

Rugged construction for storm ops and beach landings.

Command connectivity through cloud-based systems.

5 MULTI-ROLE ADAPTABILITY FEATURES



Feature

- 1. Modular Deck Layout
- 2. Weapon & Equipment Mount Flexibility
- 3. Dual Console Architecture
- 4. Diver Recovery & Rescue Capabilities
- 5. Push-Bow & Boarding Ramp Integration
- 6. Ballistic Protection Add-ons (Iten Defense®)
- 7. Scalable Crew Configuration
- 8. Communications & Navigation Modularity

Capabilities & Benefits Reconfigurable rails and deck tracks for rapid mission setup Move, remove, or reconfigure seats, consoles, and modules Shift from **troop transport** to combat-ready in hours Add/remove crew-serve weapon mounts (Military Systems Group) Embedded but accessible long-arm storage Supports both lethal and non-lethal configurations **Split-helm layout** for concurrent operation One console for nay/systems, the other for tactical ops, boarding, or surveillance Dual diver notches and grab rails for rapid recovery Easily switch between combat and SAR configurations Reinforced pushing knees with integrated steps for: – Tactical boarding – Harbor 5 maneuvering – Disaster relief delivery Modular bolt-on/off armor panels 6 Rapid switch from patrol to combat-ready configuration Track-mounted Ullman seats for flexible crew layout Adaptable from minimum-crew fast strike to full-load SAR or extraction missions Compatible with C4ISR systems SATCOM (CopaSAT) and Proteus 3D enable plug-and-play surveillance, remote command, and live data feeds

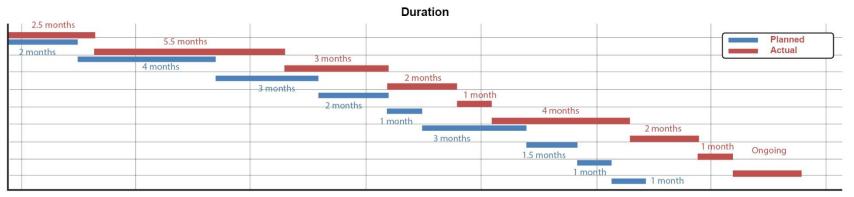


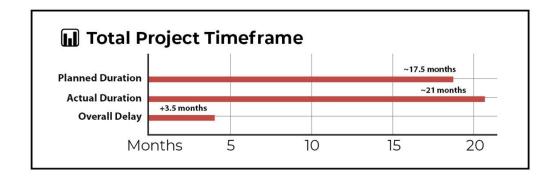
MISSION TIMELINE OVERVIEW



Project Perfect Storm was a multi-phase initiative launched by Ocean Craft Marine through AIME, bringing together over 20 partners to co-develop the world's most operator-centric offshore interceptor. Below is a detailed comparison between the planned (budgeted) timeline and the actual time it took to complete each stage.

Concept Development & Partner Alignment
Design & Engineering
Technology Integration
Hull Fabrication & Assembly
Initial Sea Trials (Phase 1)
Advanced Testing (Phases 2–4)
Data Analysis & Review
Final Tuning & Configuration
Showcase & Deployment





Although we exceeded the original timeline by about 20%, each delay resulted in a **significant gain in performance reliability**, **user safety, and mission adaptability**. These were **deliberate trade-offs** to ensure we delivered not just a boat — but a next-generation platform that redefines what's possible in high-speed maritime operations.

8 WHO WE ARE - OCEAN CRAFT MARINE



Industry leader in Rigid Hull Inflatable Boats (RHIBs)

- Trusted by navies, coast guards, and elite maritime units globally
- Full vertical integration for design, manufacturing, and testing
- Focus: Mission customization, performance, and rapid delivery





9 AIME - INNOVATION REIMAGINED



Accelerator for Innovation in the Maritime Ecosystem

- Founded to connect operators, engineers and innovators
- Enables faster innovation cycles based on real-world input
- Platform behind Project Perfect Storm





10 INTRODUCING PROJECT PERFECT STORM



- Multi-disciplinary collaboration across 20+ partners 20+Operators & 20+ Engineers
- Human factor-centric vessel design
- Addresses long-standing operator injury rates and mission fatigue
- Combines data, science, and field experience
- Power: 3 x Mercury V10 (3x400HP)
- Speed: Max 64 mph, Cruise 36 mph, Range 400+ miles
- Hull: FoamShield® aluminum with closed-cell foam
- Mission-Modular Deck with tactical systems and push bow

PROTECTING THE OPERATOR - REDUCING INJURIES AT SEA



Project Perfect Storm was engineered with one mission in mind:

Safeguard the operator without compromising performance. Every system and structural innovation was chosen to reduce fatigue, minimize impact, and extend mission endurance.

Key Injury-Reduction Technologies:





FoamShield® Closed-Cell Foam Hull

Reinforced hull dampens vibration and noise while enhancing structural rigidity—protecting crew from micro-trauma over time and making the boat unsinkable.





Porta PerformanceHull Design

Custom-designed running surface improves planning efficiency and softens wave re-entry—reducing vertical G-forces by up to 2Gs.





Ullman Dynamics® Suspension Seats

Absorb impacts up to 20+ Gs across multiple directions, maintaining a neutral spine position and dramatically reducing injury risk.

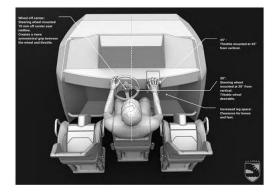




Seakeeper Ride® Attitude Control System

Actively counters pitch and roll at up to 100 adjustments per second—reducing motion and impact loads by up to 44%.





Ergonomic Console Design for Neutral Spine Alignment

Helm and throttle are positioned to match the operator's natural seated posture, reducing strain on the neck and lower back while eliminating the need to lean forward or brace during impact.





Skydex® Shock-Absorbing Flooring

Cushions deck impacts for standing crew, gunners, and operators in dynamic roles.





Hefring Marine iMAS Telemetry

Real-time G-force tracking warns operators when accelerations exceed safe thresholds, enabling proactive adjustments.





David Clark® Wireless Noise-Canceling Headsets

Reduce fatigue and cognitive strain from prolonged exposure to wind, engine, and environmental noise — while enhancing communication clarity.

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Ergonomic Dual Console Layout

Designed to fit the operator, not the other way around— eliminating the need to stand or brace under load.





Porta Hydraulic Bracket for Shallow Water Access

Enables rapid adjustment of engine height, allowing operations in as little as 28 inches of water—ideal for beaching, covert insertions, or shallow interdiction.





Proteus® 3D Navigation System (Takaro Blue)

Provides real-time 3D situational awareness with predictive overlays, obstacle alerts, and multisensor integration for enhanced decision-making.





FLIR® Thermal Imaging

Enables target detection in low visibility, night operations, or heavy weather, improving safety and threat recognition.

ENHANCINGMISSION PERFORMANCE





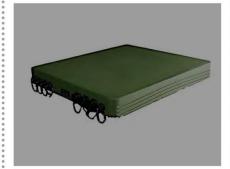


















Barnacle® Security & Telemetry System

Delivers 360° situational monitoring, geofencing, intrusion alerts, and full engine telemetry accessible via mobile device.

CopaSAT STORM V3 Ku-band SATCOM

Offers robust, mobile satellite communications for remote ops, live telemetry upload, and uninterrupted command link.

Crew-Serve Weapon Mounts & Long-Arm Storage

Configurable mounts allow tactical flexibility, while integrated weapons lockers ensure quick access and secure storage.

Iten Defense

Bulletproofing solution for personel protection.

Sharrow Marine® Propellers (X10)

Reduces cavitation and improves fuel efficiency, maneuverability, and stealth by minimizing noise and vibration during high-speed operation.

MULTI-ROLE ADAPTABILITY



Project Perfect Storm is a next-generation high-speed platform engineered for seamless mission transformation. Its design allows for rapid role-switching between combat, patrol, rescue, and humanitarian operations — all within a single hull.

S Adaptable by Design:



Mission-Modular Deck Layout

Features a deck track system that allows seats, consoles, and mission gear to be repositioned, added, or removed in minutes—creating true operational flexibility.



Combat-Ready or Rescue-Equipped

Mount crew-serve weapons and tactical gear or swap in stretchers, recovery tools, and life-saving equipment for SAR and humanitarian missions or fire supression.



Diver Recovery & Tactical Boarding

Integrated diver notches, reinforced push-bow, and step-up rails enable fast boarding, recovery, or beach access—even in heavy conditions.



Porta Hydraulic Bracket for Shallow Draft

Allows engine lift for operations in just 28 inches of water—ideal for covert insertions or near-shore extractions.



Optional Ballistic Protection (Iten Defense®)

Add-on armor modules offer scalable protection based on mission risk, without permanent weight penalties.

CONCLUSION - REDEFINING OPERATOR SURVIVABILITY



Project Perfect Storm is a breakthrough in high-speed maritime operations, engineered around one critical principle: Reducing the physical toll on the operator without sacrificing mission performance.

Mission-Proven G-Force Reduction:

- Up to 77% reduction in vertical acceleration during live sea trials
- Pitch and roll reduced by up to 44% with Seakeeper Ride® system
- Shocks measured at 20+ Gs mitigated to safe levels through Ullman seating and console ergonomics
- **Real-time G-force telemetry** (Hefring Marine iMAS) empowers the crew to avoid dangerous exposure in mission-critical scenarios

These advancements aren't theoretical—they're the result of months of **instrumented testing** across four phases and multiple sea states, using inertial measurement units and live operator data

(2) The Outcome:

- Operators stay sharper, safer, and operationally effective longer
- Risk of long-term injury and fatigue is drastically reduced
- Commanders gain a platform that performs—without wearing down their crew

KEY TAKEAWAYS PROJECT PERFECT STORM



1. The Operator Is the Mission

PPS redefines the boat around the human. Injury prevention is no longer optional—it's a mission-critical factor that affects readiness, longevity, and operational success.

2. G-Force Reduction Is Measurable—and Achievable

With real testing and smart integration, PPS achieved a minimum of 26% and up to 77% reduction in vertical impact, setting a new benchmark for operator survivability.

3. Modularity Equals Mission Readiness

From combat to rescue, the boat reconfigures quickly via its deck track system, Porta bracket, modular weapons, and storage solutions. One platform, multiple missions.

4. Data-Driven Design Drives Real Results

The integration of IMUs, telemetry, and real-time dashboards ensures that design decisions are evidence-based, not theoretical. This is not just an innovation—it's a validated transformation.

5. Collaboration Beats Competition

PPS was only possible because 20+ companies worked together, across disciplines and nationalities, to achieve a common goal: a safer, more effective high-speed interceptor.

Project Perfect Storm proves that high performance and human protection are not mutually exclusive. They are the future — together.

16 PROJECT PARTNERS











































THANKYOU

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