Riptide
Autonomous Solutions

Panel on Innovations in Traditional UUVs

Riptide

Presented by Jeffrey M. Smith

President & CEO

April 2016

Riptide Founders / Leads

Riptide Autonomous Solutions

Jeffrey M. Smith
President & CEO
BS - Mech Eng (WPI)
MS - Mech Eng (RPI)
MBA - (RPI)
20+ Years in technical management, program management, executive management, Navy Program Development, UUV Subject Matter Expert

Dr. Dani Goldberg
Software Principal
BS -Comp Sci (Brandeis)
MS - Comp Sci (USC)
PhD - Comp Sci (USC)
20+ Years in technical management and software development for autonomous systems (space and undersea), architecture development, hybrid systems

Dr. Stefano Brizzolara
Naval Architecture Principal / Founder
PhD – Numerical Hydrodynamics for Ship Design (Univ of Genoa)
~20 Years in naval architecture for advanced surface craft, architecture development, hydrodynamic design

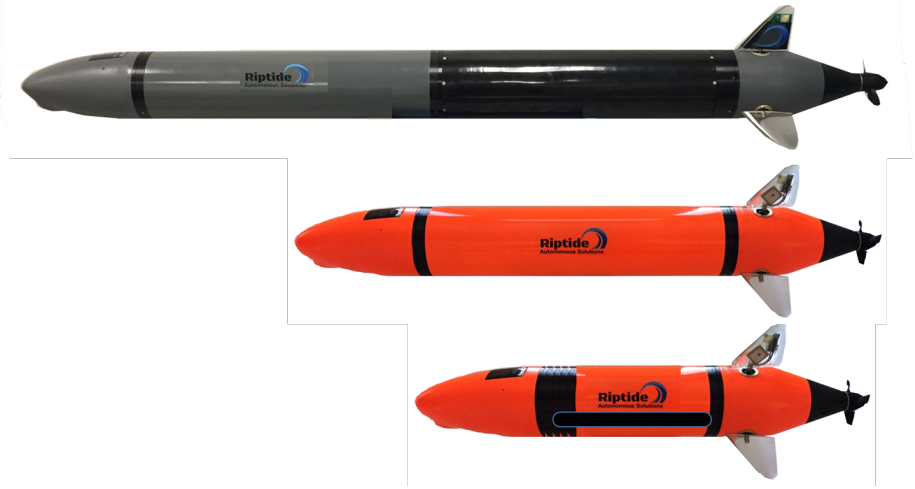
Lenny Baker
Sr. Lead Systems Engineer / EE / SW
BS - Elec Eng (WPI)
MS – Elec Eng (Umass)
10+ Years in electrical design, shipboard electronics, power and controls

Sam Godin
Lead Mechanical Engineer
BS - Mech Eng (WPI)
20+ Years in mechanical design, SolidWorks Super User

SCPO (ret) Dan Lawrence
Lead Analyst
Retired ONI ACINT Specialist, Operational Test Director, 30+ years experience in at-sea technical assessment for operational utility

Riptide Innovation

- Persistence - Efficiency coupled with energy capacity is a very big deal
  - Electrical Efficiency – Focused on low power processing
  - Hydrodynamic Efficiency – Focused on low drag
  - Capacity – Exclusively partnered with Open Water Power
    - Game Changing – Estimated 5 kWh on a micro-UUV
- Flexibility
  - Open HW and SW Interfaces
  - Extensive use of Open Source
  - High COTS Content
  - Rapid Manufacturing
  - Building a robust user community



UUV Technology Challenges

Riptide Autonomous Solutions

- Energy
  - Energy Density
  - Certification
  - Platform Storage
- Reliability
  - Mission Endurance
- Host Platform Interface
  - Launch and Recovery
- Autonomy
- Mission Planning
- Affordability