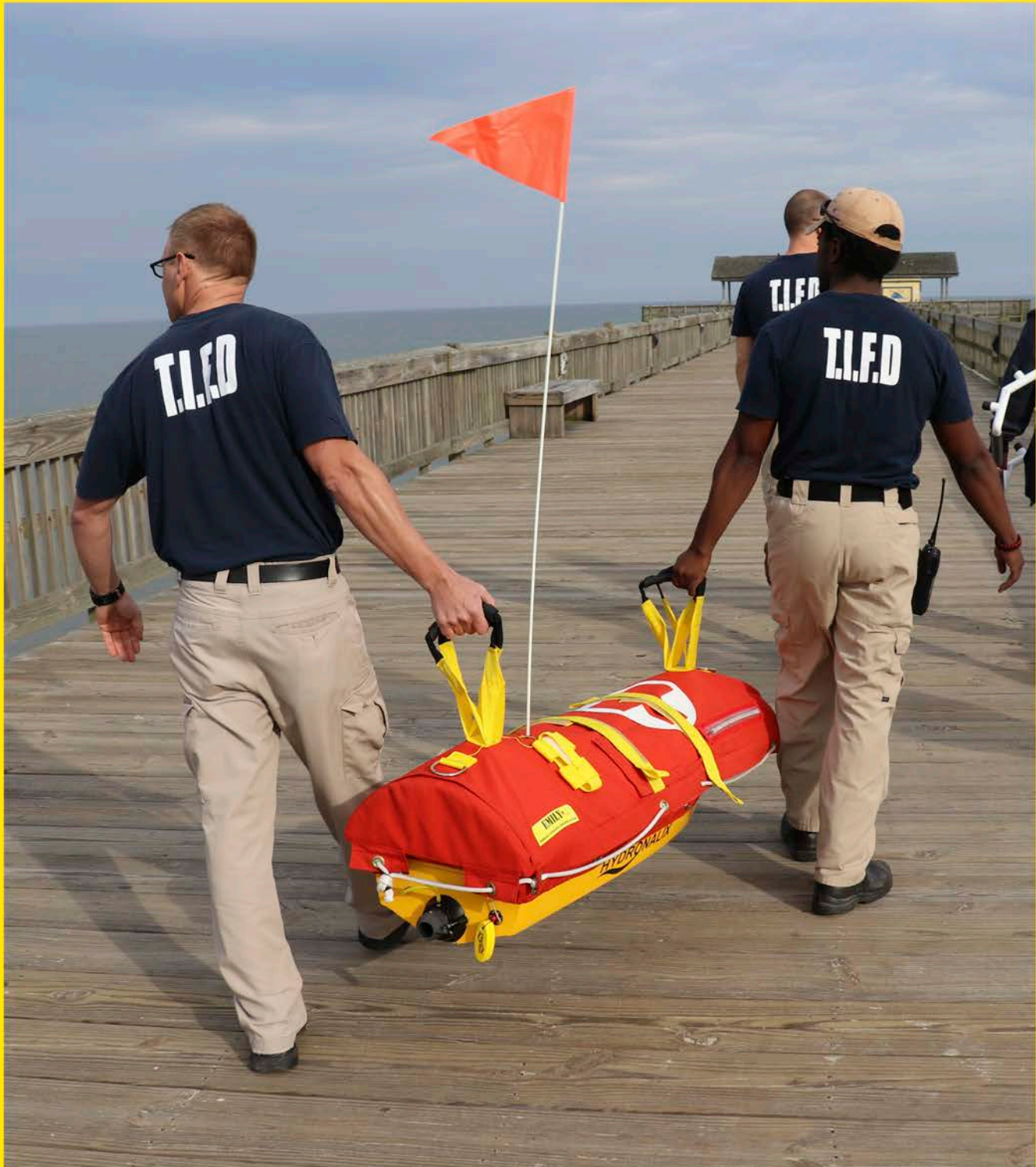


# EMILY E.R.S.

**EMERGENCY INTEGRATED LIFESAVING LANYARD**



**HYDRONALIX**

2020  
PARTS CATALOG



## **BEACH RESCUE EMILY**

Weight 26 lb

Height 14 in

Width 14 in

Length 50 in

Positive Buoyancy 150 lb

Orange Flag 4 ft

Self-righting

1.2 KW Motor

Speed 23 + mph or 20 + kts

Custom Labels

Perimeter Grab Rope 8 ft

Waterproof Internal Modular Components

Duration 12 - 14 min full power run time (equal to 70 - 100 rescues at 100 yds)

Battery Operational Range of 5 + miles at full power, 6 + miles at slower speeds

Three D-Ring Tow Line Attachments

Jet Pump Drive made of Aerospace Composites and Ceramic Bearings

Quick Change 240 WH Battery

Four Ergonomic Grab Handles

High-Grade Industrial Marine Fabric Float Cover

Fast Smart Battery Chargers

Frequency hopping 2.4 GHz Transmitter Controller with 3 watt Amplifier

Patents Include:

US #882555, Korea #10-1482486, Mexico #339942, Indonesia #W-00201304834, Hong Kong (Taiwan/China) #14108254.8, Australia #2012239947,  
European Union (30+ countries) #269436, Greece 3095439



## EMILY

HEPEMPK1000

### INCLUDES

Float Cover  
Battery Charger 2-Pack  
Battery Module  
Flag  
Boat Stand  
Lanyard 2-Pack  
Futaba Transmitter  
User Manual



HEPEMBT1000



HEPBACH2002



HEPBATT1000



HEPFLAG1000



HEPBOST1000



HEPFLAN1002



HEPTMBG2000



HEPUSMN1000

For more information go to: [www.emilyrobot.com](http://www.emilyrobot.com)



# EMILY KIT

HEPEMKT1000

## KIT INCLUDES

Float Cover  
Battery Charger 2-Pack  
Battery Module  
2 Additional Steering Arm Boot Seals  
Electrical Anti-Corrosion Solution  
3 Additional Inlet Grates  
Flags 3-Pack  
Boat Stand  
Tool Kit  
Lanyard 3-Pack  
Futaba Transmitter  
User Manual  
Canvas Airline Carry Bag  
Additional Impeller



HEPEMBT1000



HEPBACH2002



HEPBATT1000



HEPSABS1000



HEPELAC1000



HEPINGR1003



HEPFLAG1003



HEPBOST1000



HEPTLKT1000



HEPFLAN1003



HEPTMBG2000



HEPUSMN1000



HEPEMBG1000



HEPIMPE1000

Patents Include:

US #882555, Korea #10-1482486, Mexico #339942, Indonesia #W-00201304834, Hong Kong (Taiwan/China) #14108254.8, Australia #2012239947, European Union (30+ countries) #269436, Greece 3095439



### EMILY STARTER KIT

HEPEMKT2000

#### KIT INCLUDES

Float Cover  
Battery Charger 4-Pack  
Battery Module 2-Pack  
2 Additional Steering Arm Boot Seals  
Electrical Anti-Corrosion Solution  
3 Additional Inlet Grates  
Additional Impeller  
Flags 3-Pack  
Boat Stand  
Tool Kit  
Lanyard 3-Pack  
Futaba Transmitter  
User Manual  
Storage Cabinet  
Charger Cabinet



HEPEMBT1000



HEPBACH2004



HEPBATT1002



HEPSABS1000



HEPELAC1000



HEPINGR1003



HEPIMPE1000



HEPFLAG1003



HEPBOST1000



HEPTLKT1000



HEPFLAN1003



HEPTMBG2000



HEPUSMN1000



HEPSTCA1000



HEPCHCA1000

For more information go to: [www.emilyrobot.com](http://www.emilyrobot.com)



# EMILY 2-PACK & DELUXE STARTER KIT

HEPEMKT3000

## KIT INCLUDES

Float Covers  
Battery Charger 4-Pack  
Battery Module 4-Pack  
2 Additional Steering Arm Boot Seals  
Electrical Anti-Corrosion Solution  
Canvas Waterproof Spray  
6 Additional Inlet Grates  
2 Additional Impellers  
Flags 6-Pack  
2 Boat Stands  
Tool Kit  
Bilge Bulb  
Lanyard 6-Pack  
Futaba Transmitter 2-Pack  
User Manual  
Storage Cabinet  
Charger Cabinet  
2 Additional Battery Straps  
Stainless Steel Fastener Kit



HEPEMBT1000



HEPBACH2004



HEPBATT1004



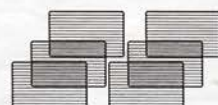
HEPSABS1000



HEPELAC1000



HEPWASP1000



HEPINGR1006



HEPIMPE1002



HEPFLAG1006



HEPBOST1002



HEPTLKT1000



HEPBBLB1000



HEPFLAN1006



HEPTMBG2002



HEPUSMN1000



HEPSTCA1000



HEPCHCA1000



HEBTST1002



HEPFAKT1000

Patents Include:

US #882555, Korea #10-1482486, Mexico #339942, Indonesia #W-00201304834, Hong Kong (Taiwan/China) #14108254.8, Australia #2012239947, European Union (30+ countries) #269436, Greece 3095439



### SWIFT WATER EMILY

HEPSWPK1000

#### INCLUDES

SWRE Float Cover  
Battery Charger 2-Pack  
Battery Module  
Flag  
Boat Stand  
Lanyard 2-Pack  
Futaba Transmitter  
User Manual  
Life Jacket  
Helmet  
Headlight



HEPSWBT1000



HEPBACH2002



HEPBATT1000



HEPFLAG1000



HEPBOST1000



HEPFLAN1002



HEPTMBG2000



HEPUSMN2000



HEPLJKT1000



HEPHLMT1000



HEPHDLT1000

For more information go to: [www.emilyrobot.com](http://www.emilyrobot.com)



# SWIFT WATER EMILY KIT

HEPSWKT1000

## KIT INCLUDES

Swift Water Cover  
 Battery Charger 2-Pack  
 Battery Module 2-Pack  
 2 Additional Steering Arm Boot Seals  
 Electric Anti-corrosion Solution  
 3 Additional Inlet Grates  
 Additional Impeller  
 Flags 3-Pack  
 Boat Stand  
 Tool Kit  
 Lanyard 2-Pack  
 Futaba Transmitter  
 User Manual  
 Life Jacket  
 Helmet  
 Headlight  
 2 VHF Radios



HEPSWBT1000



HEPBACH2002



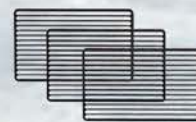
HEPBATT1002



HEPSABS1000



HEPELAC1000



HEPINGR1003



HEPIMPE1000



HEPFLAG1003



HEPBOST1000



HEPTLKT1000



HEPFLAN1002



HEPTMBG2000



HEPUSMN2000



HEPLJKT1000



HEPHLMT1000



HEPHDLT1000



HEPVHFR1002

Patents Include:

US #882555, Korea #10-1482486, Mexico #339942, Indonesia #W-00201304834, Hong Kong (Taiwan/China) #14108254.8, Australia #2012239947,  
 European Union (30+ countries) #269436, Greece 3095439



# SWIFT WATER EMILY KIT

## SWIFT WATER EMILY

Weight 31 lb

Height 14 in

Width 14 in

Length 50 in

Self-righting

2.4 KW Motor

Custom Labels

Orange Flag 4 ft

Speed 25 mph or 21 + kts

Positive Buoyancy 150 lb

Jet Pump Drive made of Aerospace Composites and Ceramic Bearings

Battery Operational Range of 3.5 + miles at full power, 6 + miles at slower speeds

Duration 5 - 6 min full power (40 - 70 rescues at 100 yds at full power)

Waterproof two-way VHF Marine Band Radios with Remote Microphone, distance is line of sight

Frequency hopping 2.4 GHz Transmitter Controller with 3 watt Amplifier

River Rescue Life Jacket Coast Guard approved

Waterproof high power LED Headlight

High-grade, Industrial Marine Fabric Float Cover

Waterproof Internal Modular Components

Quick Change 240 WH Battery

Fast Smart Battery Chargers

Three D-ring Tow Line Attachments

Four Ergonomic Grab Handles

Optional Reversing Bucket

Night Navigation LED Lights

Perimeter Grab Rope 8 ft

River Rescue Helmet

For more information go to: [www.emilyrobot.com](http://www.emilyrobot.com)

HYDRONALIX



## SONAR EMILY KIT

Transducer is permanently mounted in boat hull  
HEPSNKT1000

### KIT INCLUDES

Float Cover  
Sonar Payload Station  
Battery Charger 2-Pack  
Battery Module 2-Pack  
2 Additional Steering Arm Boot Seals  
Electrical Anti-Corrosion Solution  
Additional Inlet Grate  
Additional Impeller  
Boat Stand  
Tool Kit  
Lanyard 2-Pack  
Fly Sky Transmitter  
User Manual  
Canvas Airline Carry Bag  
Antenna Flags 2-Pack  
Reversing Bucket  
Digital GPS



HEPSNBT1000



HEPBACH2002



HEPBATT1002



HEPSABS1000



HEPELAC1000



HEPINGR1000



HEPIMPE1000



HEPBOST1000



HEPTLKT1000



HEPFLAN1002



HEPTMBG1000



HEPUSMN3000



HEPEMBG1000



HEPAFLG1002

Patents Include:

US #882555, Korea #10-1482486, Mexico #339942, Indonesia #W-00201304834, Hong Kong (Taiwan/China) #14108254.8, Australia #2012239947, European Union (30+ countries) #269436, Greece 3095439



## PAYLOAD STATION

& SAR HAWK SOFTWARE  
(Included in SONAR EMILY Kit)

### HIGH RESOLUTION SONAR

Provides high resolution bottom imagery for locating drowning victims, submerged vehicles and sunken boats.

### SIDE SCAN SONAR

#### MAX MODE:

Maximizes sonar resolution through thermoclines and other water column interference.

#### CLEAR MODE:

Allows for adjusting the bottom TVG without amplifying water column interference.

#### 3 COLOR PALETTES:

Palettes provide even more flexibility on the water to deal with overcast or full-sun conditions.

Compatible with multiple Mapping Systems

CHIRP Digital Sonar, DualBeam PlusDisplay Size - Diagonal 30.48 cm

AutoChart Live with depth, vegetation and bottom hardness mapping

Displays Multi-Sonar Imaging Screens and GPS position

MEGA Side Imaging, MEGA Down Imaging,

Humminbird Basemap Cartography (built-in)

Waterproof Payload Station, 4 watt Radio, AC or Battery

Battery and Range Indicator Light

Smart Device Compatible (phone or iPad) via Bluetooth

SAR HAWK® is professional software designed with the Search and Rescue professional in mind. It is automated and easy to use, yet provides the ability to review and process Humminbird® data at full resolution on a high-res monitor so you don't miss a thing.

0.000

26.297



HEPPLST1000





### SPEEDoo KIT

WATER SAMPLING  
HEPSDKT1000

#### KIT INCLUDES

Float Cover  
Battery Charger 2-Pack  
Battery Module  
2 Additional Steering Arm Boot Seals  
Electrical Anti-Corrosion Solution  
3 Additional Inlet Grates  
Additional Impeller  
Flags 3-Pack  
Boat Stand  
Tool Kit  
Lanyard 3-Pack  
Futaba Transmitter  
User Manual  
Canvas Airline Carry Bag  
30 Water Collection Bags of various sizes  
Spare Collection Tube



HEPSDBT1000



HEPBACH2002



HEPBATT1000



HEPSABS1000



HEPELAC1000



HEPINGR1003



HEPIMPE1000



HEPFLAG1003



HEPBOST1000



HEPTLKT1000



HEPFLAN1003



HEPTMBG2000



HEPUSMN4000



HEPEMBG1000



HEPSWCB1000



HEPSDCT1000

Patents Include:

US #882555, Korea #10-1482486, Mexico #339942, Indonesia #W-00201304834, Hong Kong (Taiwan/China) #14108254.8, Australia #2012239947, European Union (30+ countries) #269436, Greece 3095439



## MAN OVERBOARD EMILY (MOBE) KIT

HEPMBKT1000

### KIT INCLUDES

- MOBE Cover
- High Capacity Battery & Charger Kit\*
- 2 Additional Steering Arm Boot Seals
- Additional Inlet Grate
- Additional Impeller
- Flags 3-Pack
- Boat Stand
- Lanyard 2-Pack
- Futaba Transmitter
- User Manual
- Headlight
- 2000 Foot Reel
- Reflective Strips
- Navigation Lights (Port Red Light, Starboard Green Light)



HEPMBBT1000

\*Battery and Charger Kit NOT Legal for Commercial Airline Travel



HEPBCKT3000



HEPSABS1000



HEPINGR1000



HEPIMPE1000



HEPFLAG1003



HEPBOST1000



HEPFLAN1002



HEPTMBG2000



HEPUSMN5000



HEPHDLT1000



HEPREEL2000



HEPNAVL1000

For more information go to: [www.emilyrobot.com](http://www.emilyrobot.com)



# POLICE EMILY

HEPPOKT1000

## KIT INCLUDES

Police EMILY Cover  
Battery Charger 2-Pack  
Battery Module  
2 Additional Steering Boot Seals  
Electric Anti-corrosion Solution  
Additional Inlet Grate  
Additional Impeller  
Flags 3-Pack  
Boat Stand  
Tool Kit  
Lanyard 2-Pack  
Futaba Transmitter  
User Manual  
Headlight  
Programmable Navigation Lights  
2 VHF Radios with 600 Watt Speaker



HEPPOBT1000



HEPBACH2002



HEPBATT1000



HEPSABS1000



HEPELAC1000



HEPINGR1000



HEPIMPE1000



HEPFLAG1003



HEPBOST1000



HEPTLKT1000



HEPFLAN1002



HEPTMBG2000



HEPUSMN6000



HEPHDLT1000



HEPNAVL1000



HEPVHFR1002



HEPSPKR1000

Patents Include:

US #882555, Korea #10-1482486, Mexico #339942, Indonesia #W-00201304834, Hong Kong (Taiwan/China) #14108254.8, Australia #2012239947, European Union (30+ countries) #269436, Greece 3095439

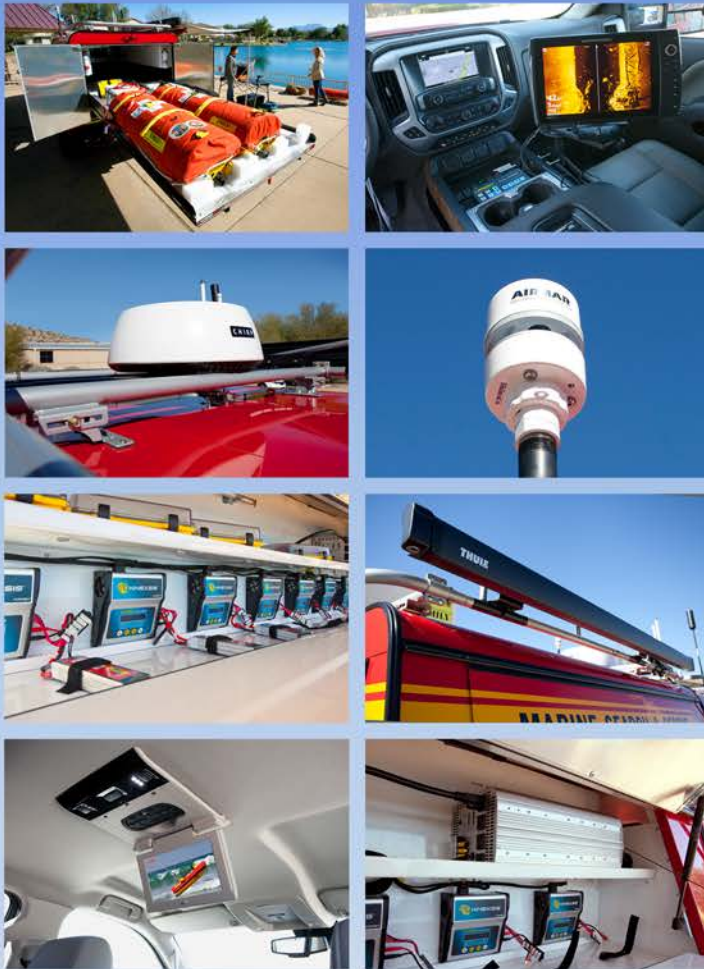


# MOBILE ROBOTIC COMMAND VEHICLE

**MRCV**  
HEPMRCV1000

**Perform Rescue and Recovery Operations  
from inside the Command Vehicle**

Custom Long-bed Shell & Cargo Glide  
Carries 3 EMILY Rescue Boats  
Beach Rescue EMILY  
Swift Water Rescue EMILY  
and a Sonar EMILY  
2 EMILY Payload Stations  
Humminbird® Sonar Display  
Humminbird® Marine Radar  
Cell Phone Signal Booster  
AIRMAR® PB200 Weather Station  
8 battery charging stations  
Hideaway Weather Awning  
Rear Seat DVD Player  
5000 Watt DC to AC Inverter  
Roof Mounted Light Bar  
ROV Optional – UAV Optional  
32" TV monitor  
Defibrillator



For more information go to: [www.emilyrobot.com](http://www.emilyrobot.com)

**HYDRONALIX**





**Carbon Fiber Drive Shaft**  
HEPCFDS1000



**Ceramic Drive Bearings (Big)**  
Front HEPCDRB1000



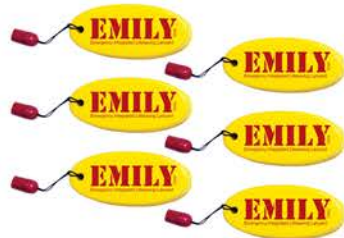
**Ceramic Drive Bearings (Small)**  
Rear HEPCDRB1100



**Cooling Hose Nozzles**  
HEPCHNZ1002



**E Float Lanyards 3-Pack**  
HEPFLAN1003



**E Float Lanyard 6-Pack**  
HEPFLAN1006



**Electric Motor**  
HEPELMO1000



**Electric Motor w/Housing**  
HEPELMH1000



**Exit Nozzle**  
HEPEXNZ1000



**Fly Sky Transmitter & Carry Case**  
HEPTMBG1000



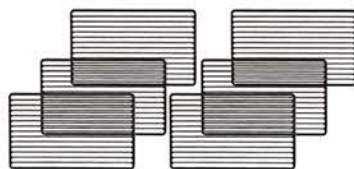
**Futaba Transmitter & Carry Case**  
HEPTMBG2000



**Impeller**  
HEPIMPE1000



**Inlet Grate 3-Pack**  
HEPINGR1003



**Inlet Grate 6-Pack**  
HEPINGR1006



**Magnetic Power Switch Box**  
HEPMPSB1000



**Motor Control Module**  
HEPMTCM1000



# DRIVE COMPONENTS



**Motor Drive Shaft Coupler**  
HEPMDSC1000



**Motor Isolation Mounts 4-Pack**  
HEPMIMT1004



**Rear Transom Cleat 2-Pack**  
HEPRTC1002



**Signal Wire**  
HEPSIGW1000



**Stainless Steel Fastener Kit**  
HEPFAKT1000



**Steering Arm Assembly**  
HEPSTAA1000



**Steering Arm Boot Seals**  
HEPSABS1000



**Steering Nozzle**  
HEPSTNZ1000



**Steering Servo**  
HEPSTSV1000



**Steering Servo Mount**  
HEPSTMT1000



**Transom Cable**  
HEPTRCB1000

For more information go to: [www.emilyrobot.com](http://www.emilyrobot.com)







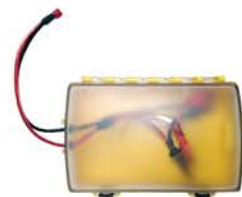
**Battery Module**  
\*Commercial Airline Compatible  
HEPBATT1000



**Battery Module 2-Pack**  
\*Commercial Airline Compatible  
HEPBATT1002



**High Capacity Battery Module & Charger Kit**  
\*NOT Legal for Commercial Airline Travel  
HEPBCKT3000



**Battery Module Case**  
HEPBTC1000



**Battery Capacity Checker**  
HEPBTCC1000



**Battery Charger 2-Pack**  
HEPBACH2002



**Battery Charger 4-Pack**  
HEPBACH2004



**Battery Strap Restraining Mounts**  
HEPBTMT1002



**Battery Straps**  
HEPBTST1002



**Bilge Bulb**  
HEPBBLB1000



**Boat Stand**  
HEPBOST1000



**Canvas Airline Carry Bag**  
HEPMBG1000



**Charger Cabinet**  
HEPCHCA1000



**Storage Cabinet**  
HEPSTCA1000



**Electrical Anti-Corrosion Solution**  
HEPCLAC1000



**Float Cover**  
HEPEMVC1000





**Flag 3-Pack**  
HEPFLAG1003



**Flag 6-Pack**  
HEPFLAG1006



**Hatch Cover 2-Pack**  
HEPHTCV1002



**Headlight**  
HEPHDLT1000



**Rescue Reel 800 ft**  
HEPREEL0800



**Rescue Reel 2000 ft**  
HEPREEL2000



**Spare Parts**  
HEPSPKT1000



**Tool Kit**  
HEPTLKT1000



**VHF Radios**  
HEPVHFR1002



**Waterproof Spray**  
HEPWASP1000



**Zip Ties**  
HEPZIPT1000





**Beach Rescue EMILY User Manual**  
HEPUSMN1000



**Swift Water Rescue EMILY User Manual**  
HEPUSMN2000



**SONAR EMILY User Manual**  
HEPUSMN3000



**CAMO SONAR EMILY User Manual**  
HEPUSMN3100



**MOBE User Manual**  
HEPUSMN5000



**Police User Manual**  
HEPUSMN6000

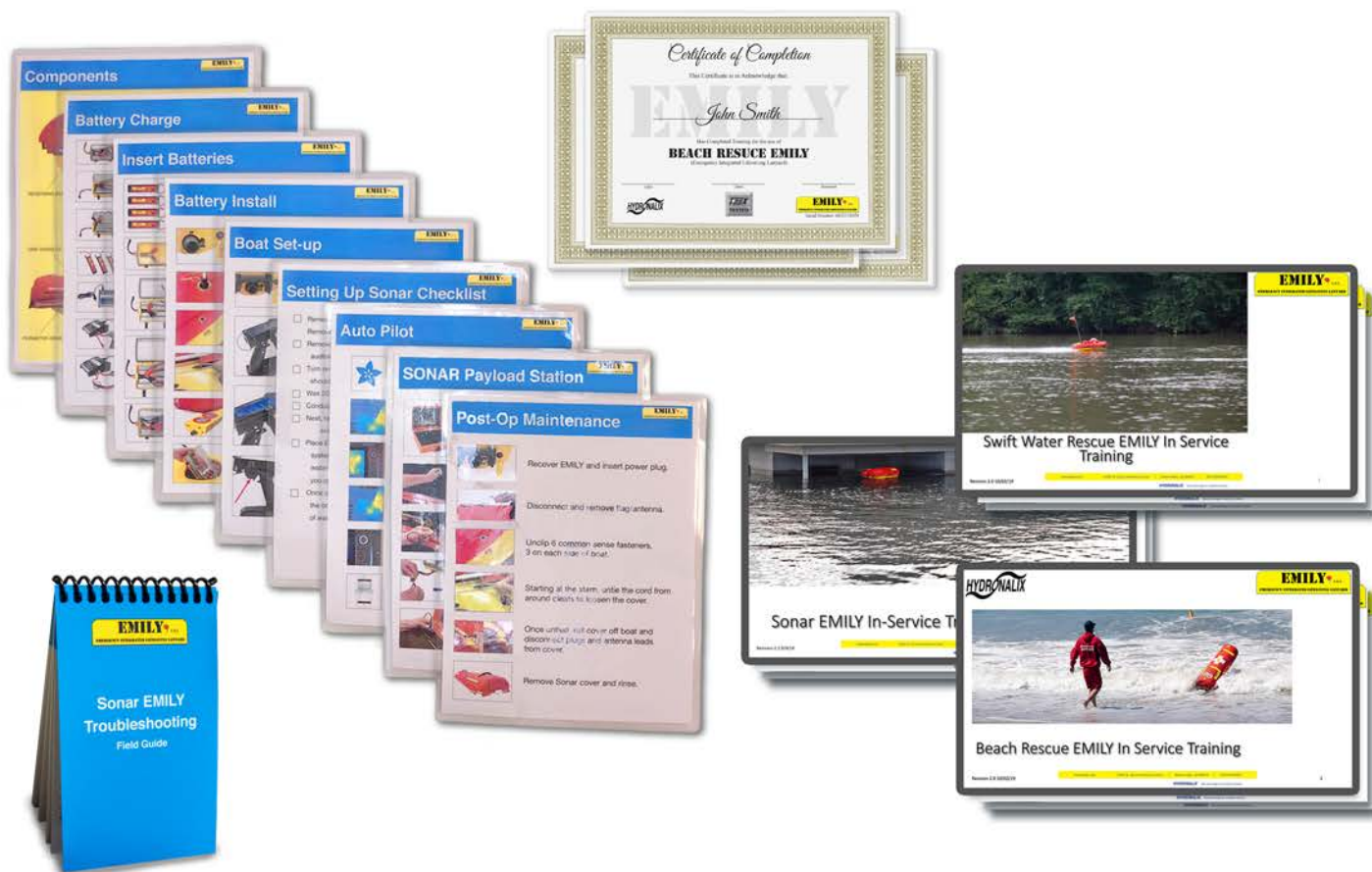


**SPEEDoo EMILY User Manual**  
HEPUSMN4000



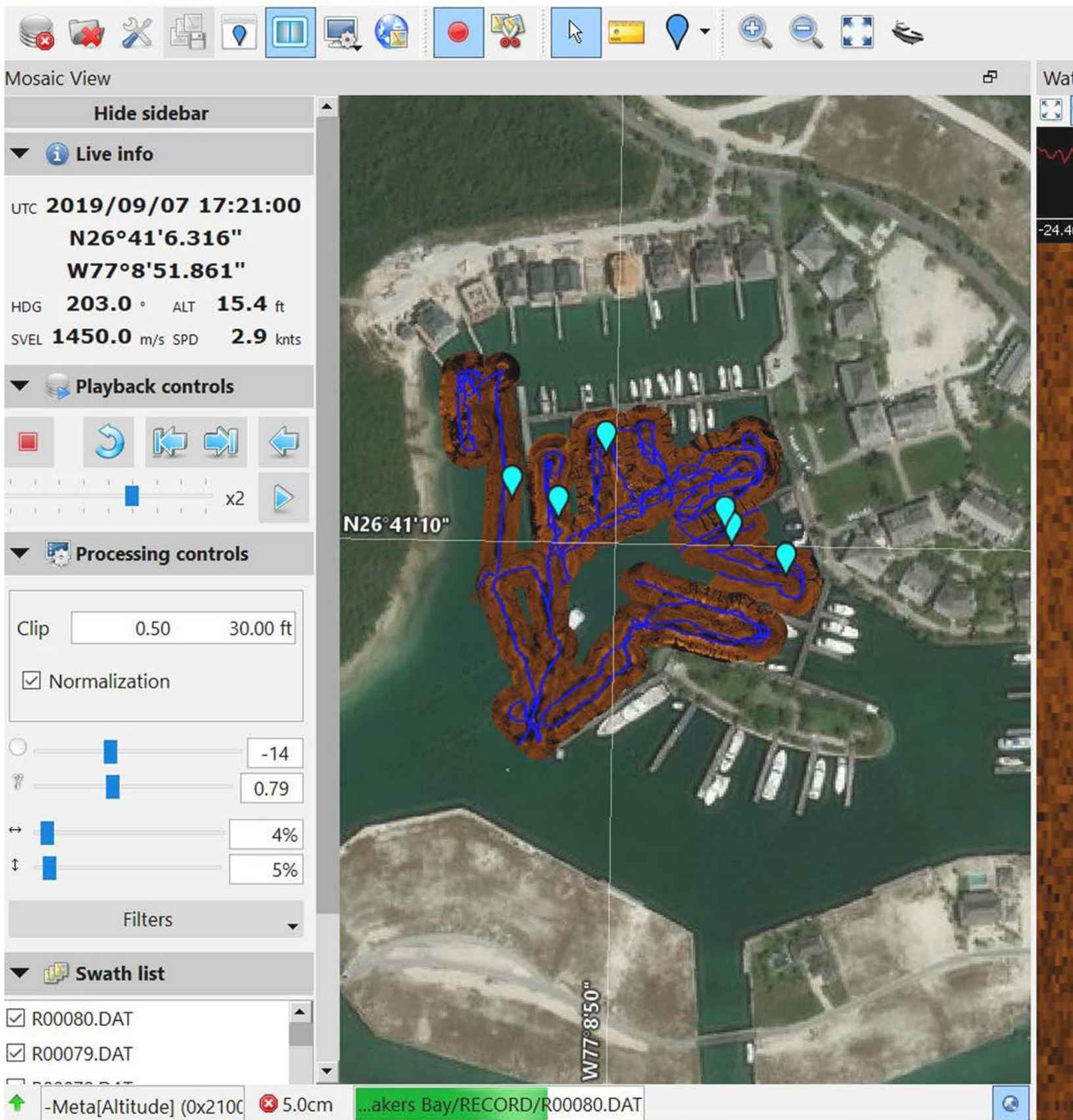
**MRC Vehicle User Manual**  
HEPUSMN7000







9-7-19 Bakers Bay VR - SAR HAWK v1.1.928 32-bit





## SAR HAWK

### THREE DAY ADVANCED HUMMINBIRD® SONAR EMILY TRAINING

The Humminbird® equipped Sonar EMILY poses both advantages and operational procedures specific to this small ASV. Black Laser Learning's advanced training is designed to be a comprehensive sensor and field operations course providing the user with mission-specific skills.

Day 1 of the three-day course will cover details on Humminbird® image analysis, settings, buttonology and data optimization. Data optimization includes mission parameters to improve data quality and search efficiency.

Day 2 is devoted to field practice and data collection.

Day 3 is back in the classroom to focus on advanced data analysis and post-processing utilizing both playback in the system and SAR HAWK® software.

Companion Guides – Each participant receives a full-color booklet with the charts used in the class and ample room for note-taking.

Certificates – A certificate and Black Laser Learning Sonar Operator patch will be sent for each participant who satisfactory completes of the course.

**Black Laser Learning®**





# 2020



Founded in 2009, Hydronalix has become a recognized leader and international symbol in robotics innovation for beach and flood rescue with our successful Patented Emergency Integrated Lifesaving Lanyard (EMILY) product line. We have 11,000 square feet of engineering, office and manufacturing space in Sahuarita, AZ. Company sales are both domestic and overseas with export distribution throughout Africa, Asia, Europe, the Middle East and the Americas.



National Science  
Foundation STTR  
Funded Company



Items in this catalog have been developed in part under the assistance of multiple U.S. Federal SBIR/STTR contracts listed below:

N6833514G0039  
N6833515C0138  
N6833513C0281  
DOCRA1333R14SE2877  
DOCRA133R11CN0188  
N0001410MO458  
N0001411MO119  
HR001112C0073  
NSF-1722355-A  
N6833518F0001

Hydronalix, Inc.  
[www.emilyrobot.com](http://www.emilyrobot.com)  
520.203.8351

