



## NOAA Technology Demonstration - USS Bass

<https://oceanexplorer.noaa.gov/technology/development-partnerships/ex1904/logs/welcome.html>



# Kraken Robotics

World Leaders in Underwater Sensors & Robotics

Jeffrey Bartkowski - [jbartkowski@krakenrobotics.com](mailto:jbartkowski@krakenrobotics.com)



# AquaPix® - Man Portable SAS Payload



*MP SAS Payload shown on 7.5" AUV*

- Modular Payload System designed to retro fit existing 7.5"– 9" vehicles
- Utilizes Kraken's new Light Weight SAS arrays
- Gen III RT SAS Processor for reduced power draw

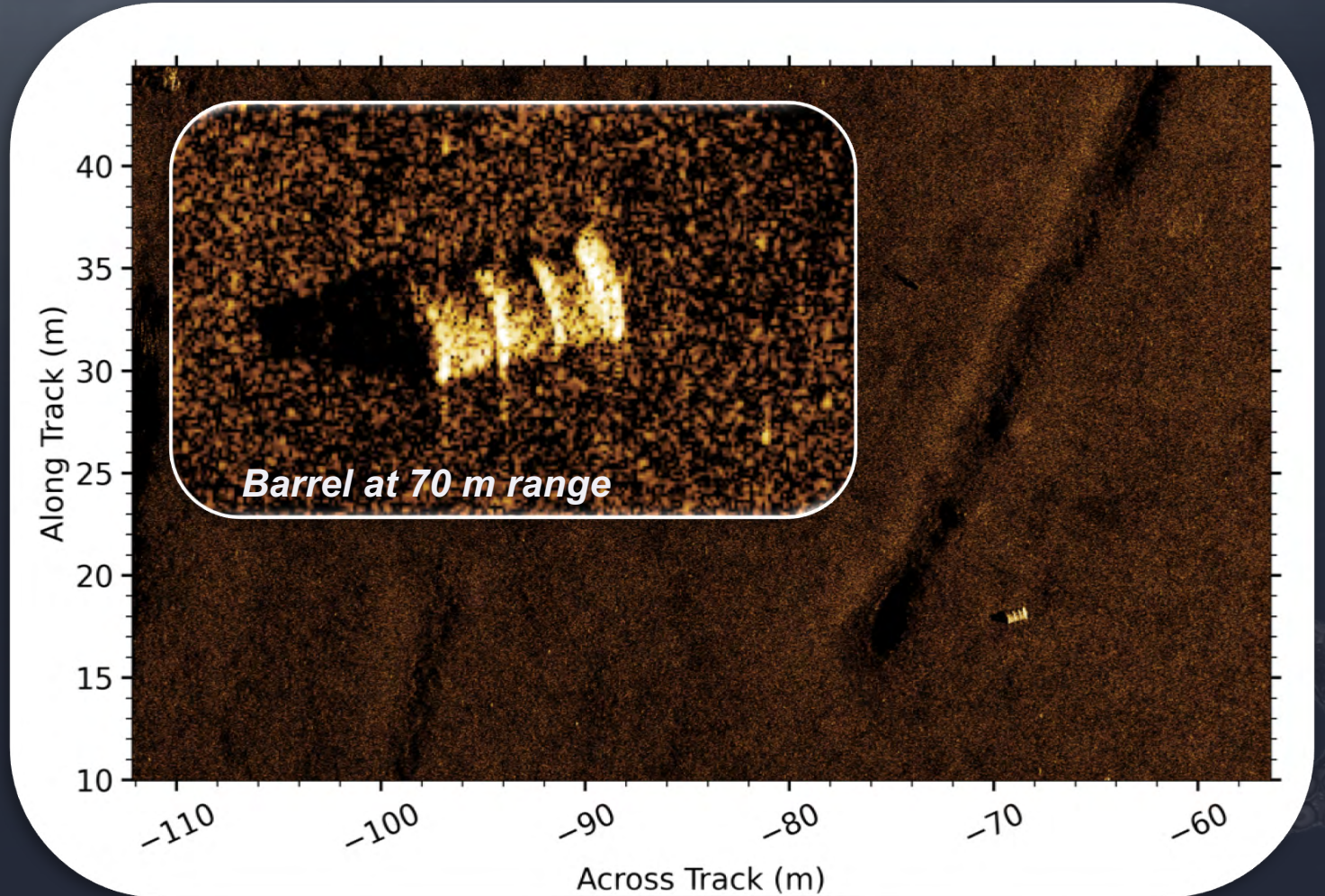




# AquaPix® - Synthetic Aperture Sonar Updates

## Ultra High Definition SAS

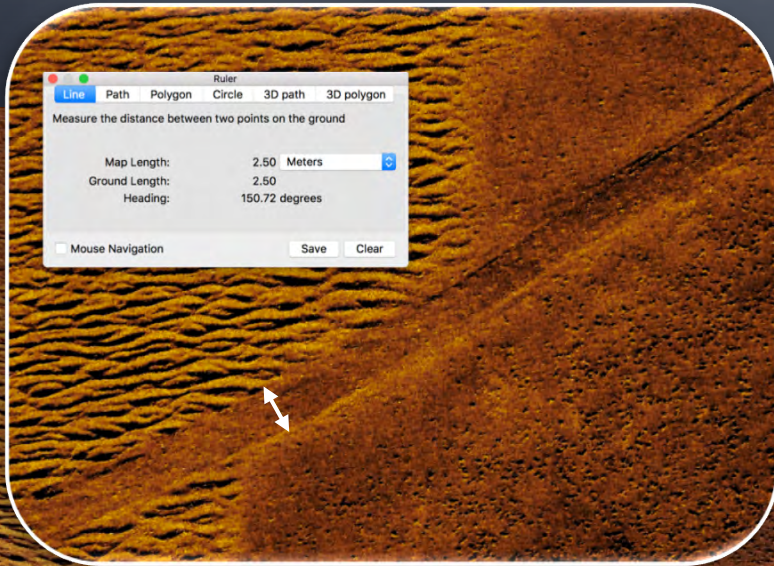
- Highest commercially available SAS resolution at 1.9 cm x 2.1 cm
- Constant, measurable resolution across swath width of up to 200 m per side
- Compatible with existing MINSAS systems



<https://krakenrobotics.com/kraken-announces-ultra-high-definition-upgrade-for-aquapix-imaging-sonars/>



# AquaPix® - Synthetic Aperture Sonar Updates



## Seamless SAS Processing

- Kraken traditionally processed SAS in 50 m along track tiles
- Seamless SAS allows for user defined along-track tile lengths to match the vehicles survey line e.g. 500m, 1000m, 2000m etc.
- Process and beamform on a Ping-by-Ping basis
- Reduces vehicle induced motion artifacts for higher quality mosaics

*Dredge Scrapes – Rhode Island*

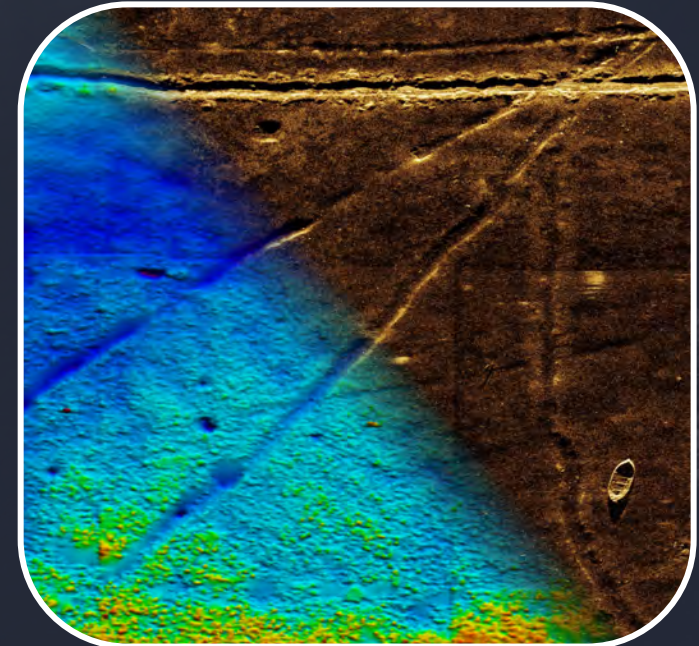
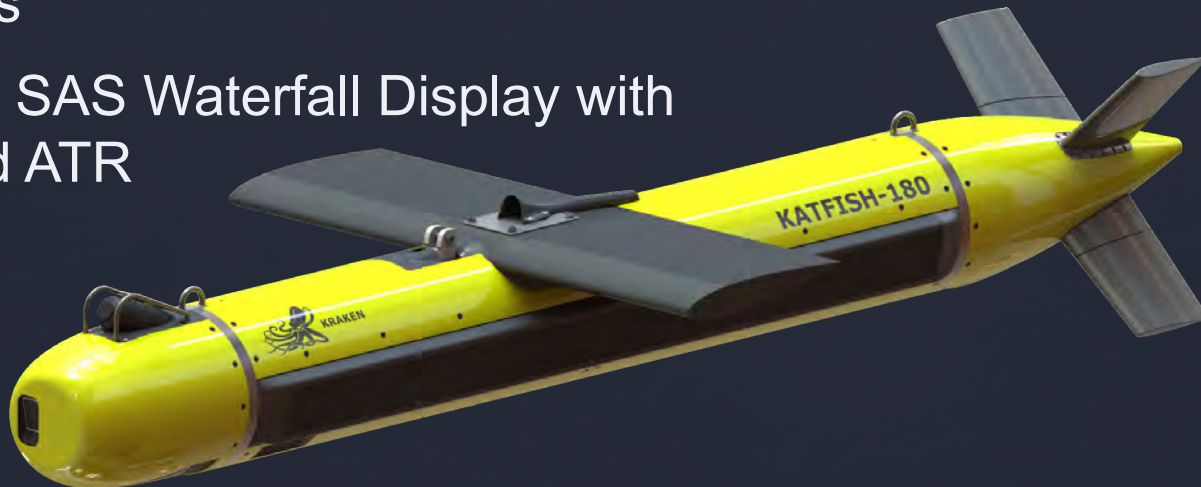
235 m



# KATFISH™ – High Speed SAS Towfish

## Commercial & Military Certified Versions

- Very High Resolution and ACR  
3.0 x 3.3 cm / 1.9 cm x 2.1 cm  
@ up to 4 km<sup>2</sup> / hr
- Advanced Obstacle Avoidance and  
Terrain Following
- Designed for USVs and Remote  
Operations
- Real Time SAS Waterfall Display with  
embedded ATR



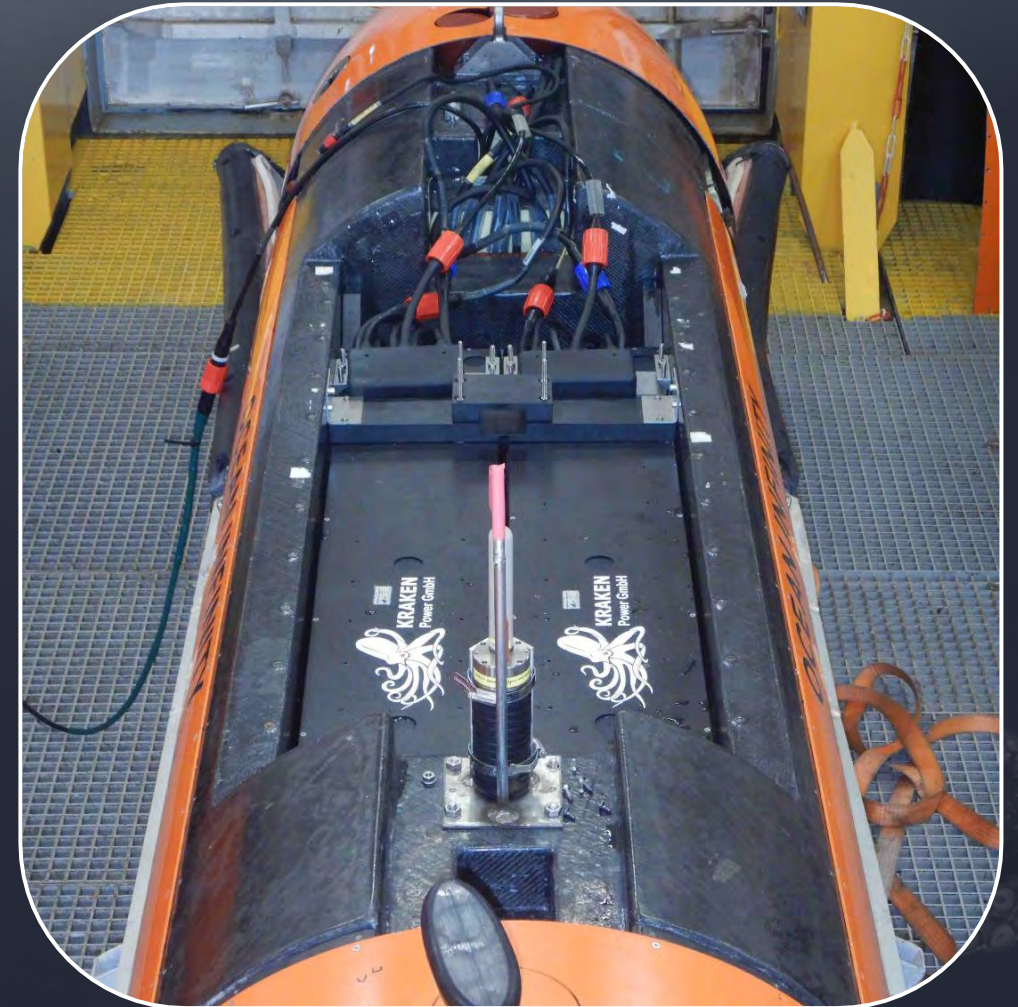


# Kraken SeaPower™ - Subsea Batteries

- Pressure Tolerant Battery Systems
- Gel encapsulation, No oil comps required
- 6000 m rated
- Multiple voltage and capacity options
- Advanced Battery Management System
- Demonstrated 100+ hour missions at 5000 m



***SeaPower - 2.6 kWh Blocks***



***HUGIN Battery Replacement System  
80 kWh***