



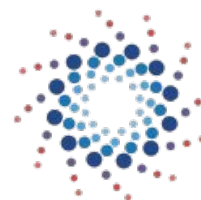
OCEANCOMM

Company Overview

- 13 Employees
- Offices in Champaign, Chicago
- Founded Jan 2015



CORPS
NSF Innovation Corps



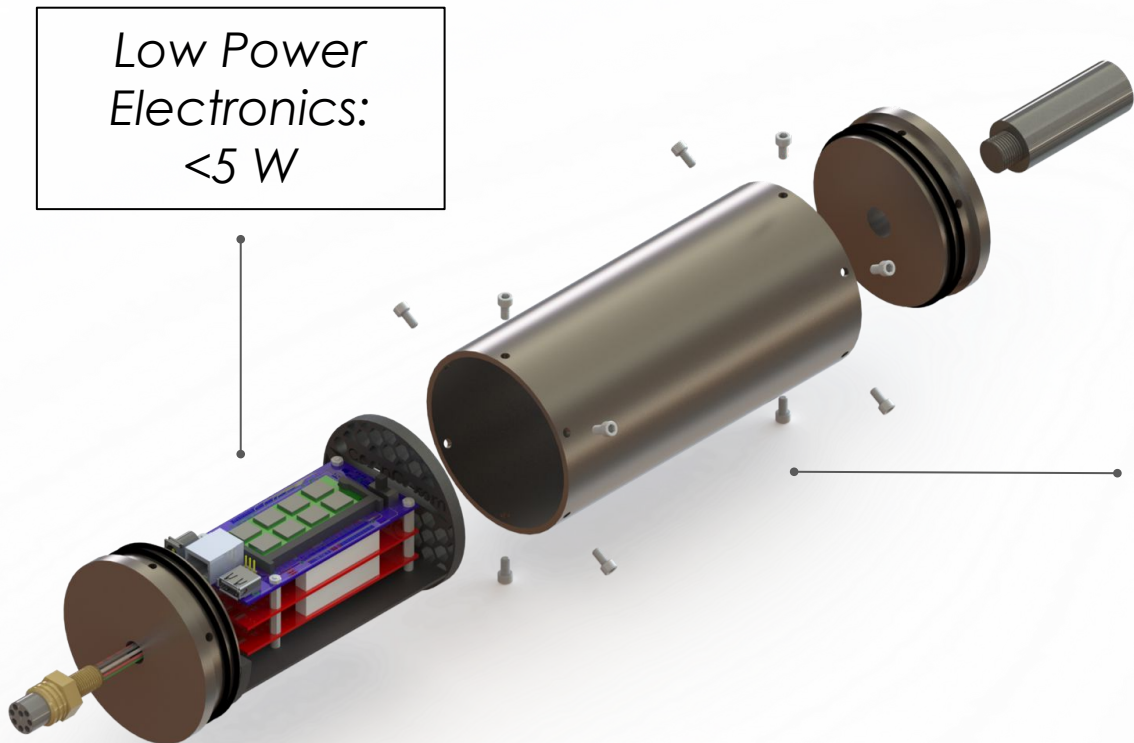
SBIR · STTR
America's Seed Fund

High-Frequency (HF) Acoustic Modems

*Low Power
Electronics:
<5 W*

*HF Transducer:
>100 kHz resonance*

*Small Form-Factor:
<9" long*



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HF Transducer:
 $>100\text{ kHz}$ resonance

$>1\text{ Mbps @ }100\text{ m}$

Form-Factor:
 $<9\text{''}$ long

High-Frequency (HF) Acoustic Modems

Model M300-L

General

Operating Depth	500 m, hard anodized aluminum housing
Operating Range	up to 700 m
Frequency Band	85 - 255 kHz
Beam Pattern	hemispherical

Connection

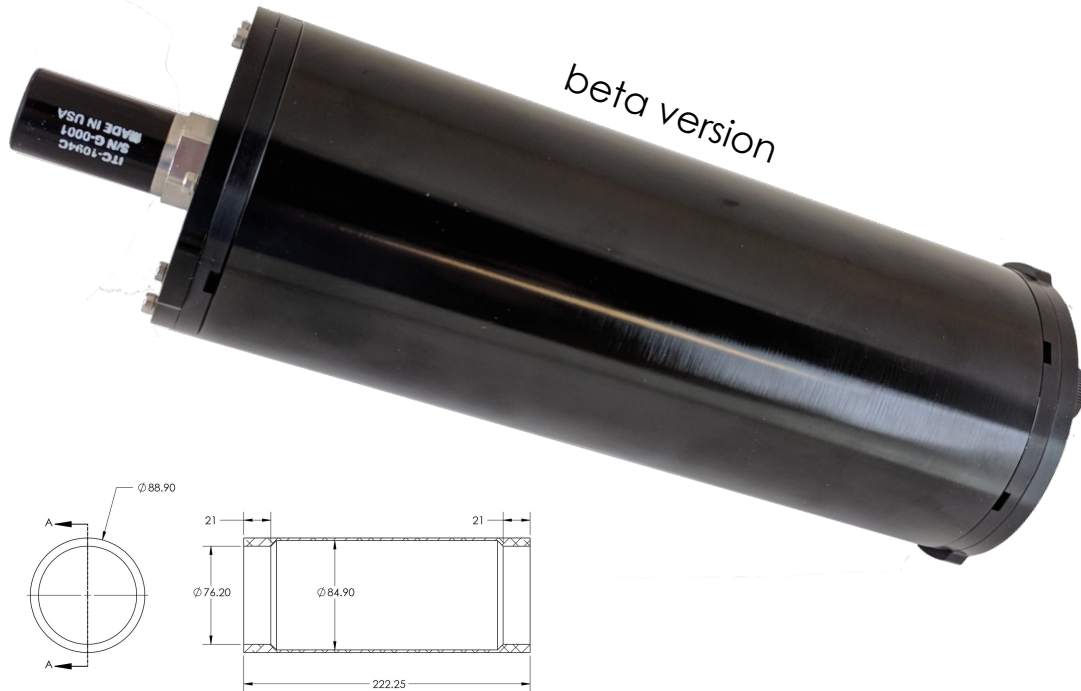
Payload Data Rate	up to 1.2 Mbps
Bit Error Rate	Less than 1E-10
Host Interface	Ethernet or RS-232

Power

Power Consumption	2 W @ 300 m (final product) 10 W @ 300 m (beta version)
Power Supply	24 VDC nominal

Physical

Dimensions	Housing $\varnothing 89$ mm x 222 mm
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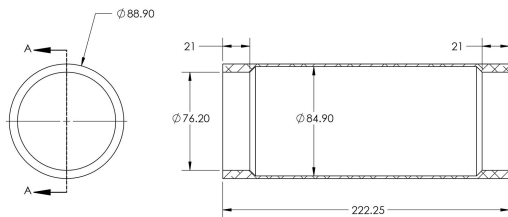
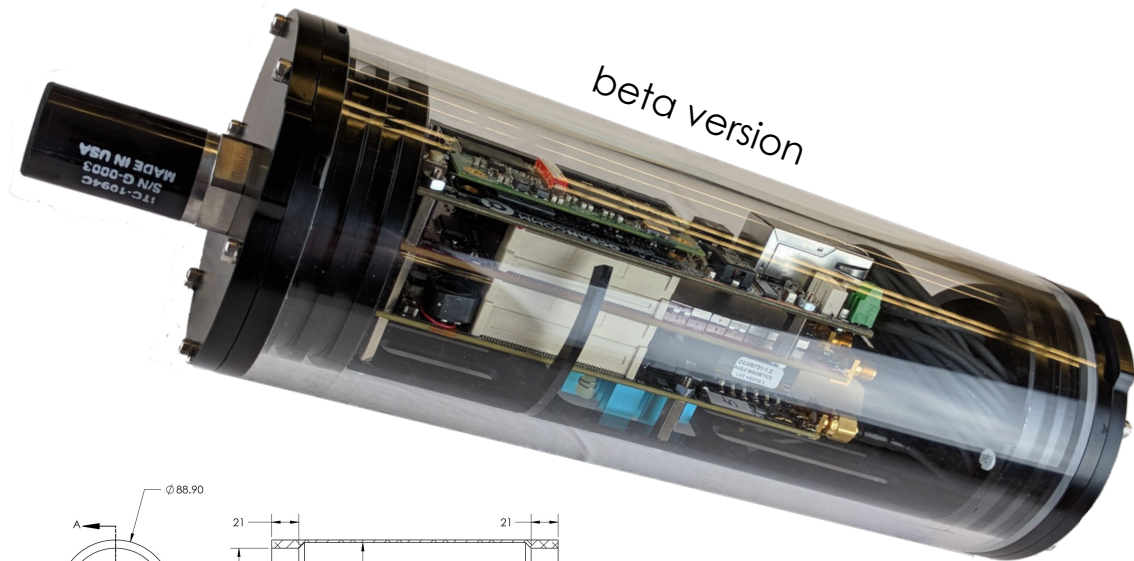
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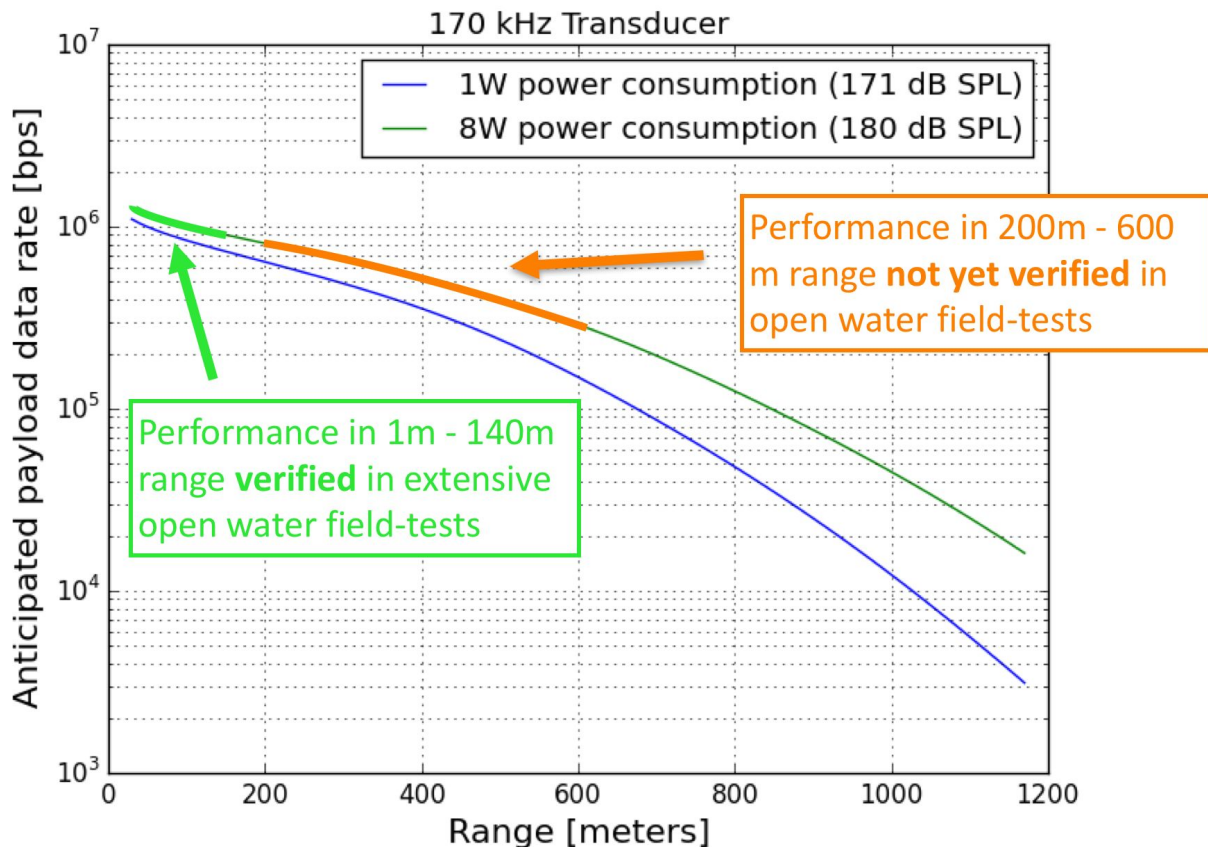
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OceanComm Confidential / Proprietary

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Open-water Test Results

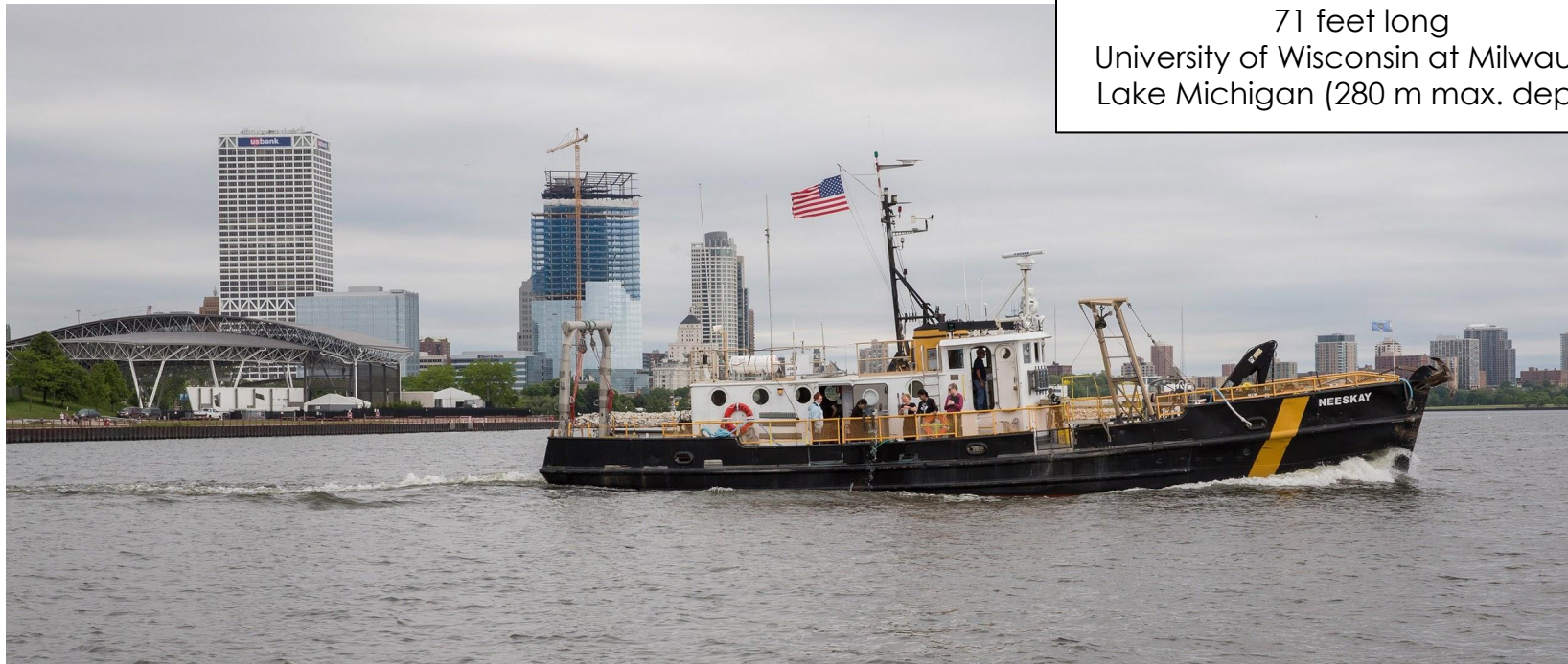
Date	Location	Environment	Depth [meters]	Distance [meters]	Date Rate [kbps]
2010	Ocean	Shallow water, Horizontal	100	2700	39
2010	Ocean	Shallow water, Horizontal	100	7200	23.4
2015	Lake	Shallow water, Horizontal	4	75	1200
2015	Lake	Shallow water, Horizontal	3	107	1000
2016	Lake	Shallow water, Horizontal	15	140	1200
2018 (planned)	Ocean	Deep water, Vertical	350	100	1000
2018 (planned)	Ocean	Deep water, Vertical	350	300	600
2018 (planned)	Ocean	Deep water, Horizontal	500	300	600
2018 (planned)	Ocean	Deep water, Horizontal	500	1000	200

Open-water Testing in Lake Michigan

R/V Neeskay

71 feet long

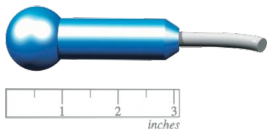
University of Wisconsin at Milwaukee
Lake Michigan (280 m max. depth)s



Open-water Testing in Lake Michigan

Piezo Sphere

~170 kHz resonance

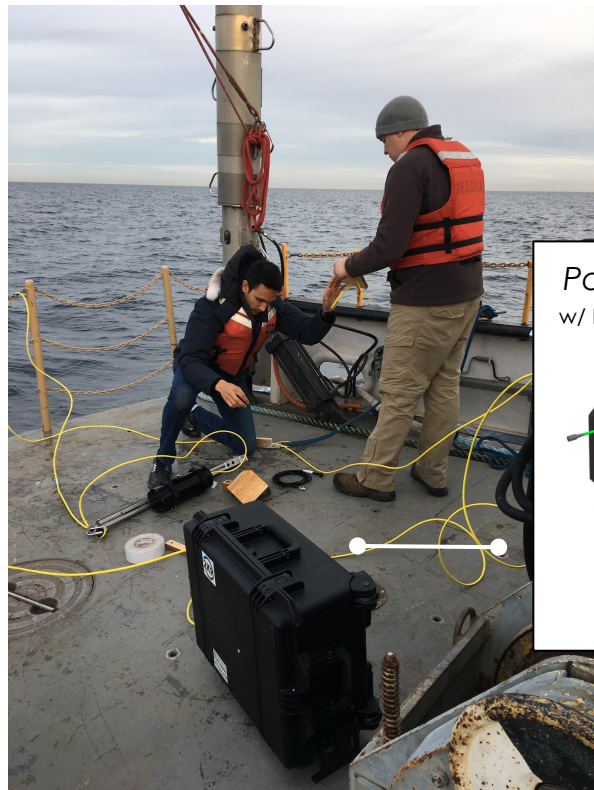


Subsea Housing

w/ Subsea Connectors,
Electronics, Battery

Deployment System

w/ Eye Bolts, Extruded
Aluminum, Weights



Portable Cable Reel

w/ Load Bearing Subsea Cable



END OF PRESENTATION