

MILET Cost-Effective Benthic Survey

The Modular Instrument Lander and Equipment Towed (MILET) is a towed platform for water column and ocean floor observation. The platform is suspended from a MacArtney Focus winch on 3000 m, armored, fiber optic and copper conductor cable capable of 18 kN working load.

Data and power are provided by a MacArtney Nexus Focus System. The Nexus system consists of thirteen serial (RS232, RS422 and TTL) communication channels, two GigE ethernet channels and one composite analog video channel capable of switch between three cameras. Power supplies provided at the subsea platform are 24V @ 500W, 48V @ 250W and 12V @ 150W.

A custom autopilot referenced from altitude provided by a Doppler Velocity Logger significantly reduces pilot fatigue and allows a fully instrumented platform to be operated by a few as two personnel.

The MILET is a flexible platform capable of interfacing most instrumentation provided by potential investigators. The Marine Field Group at Florida State University maintains instrumentation for physical oceanographic, photometric, and sub-surface acoustic surveying in addition to USBL survey grade geo-location capabilities. In addition a release can be integrated to release bottom landers at locations of opportunity

Navigation

Linquest USBL 5000HA w/Transponder-Transceiver 5010C

RDI Teledyne Doppler Velocity Logger, 600 kHz

Trimble Pathfinder Pro Series SBASS GPS w/NMEA output

IPS real time geo-positioning system

Photometric

Canon 10 Megapixel Ti3 Still Camera ("Beast Cam")

Deep Sea Power & Light Multi-Seacam analog composite video

Arecont digital video surveillance camera

Deep Sea Power & Light LED Matrix (4 units)

Imenco Lantern Shark Strobe Lights (2 units)

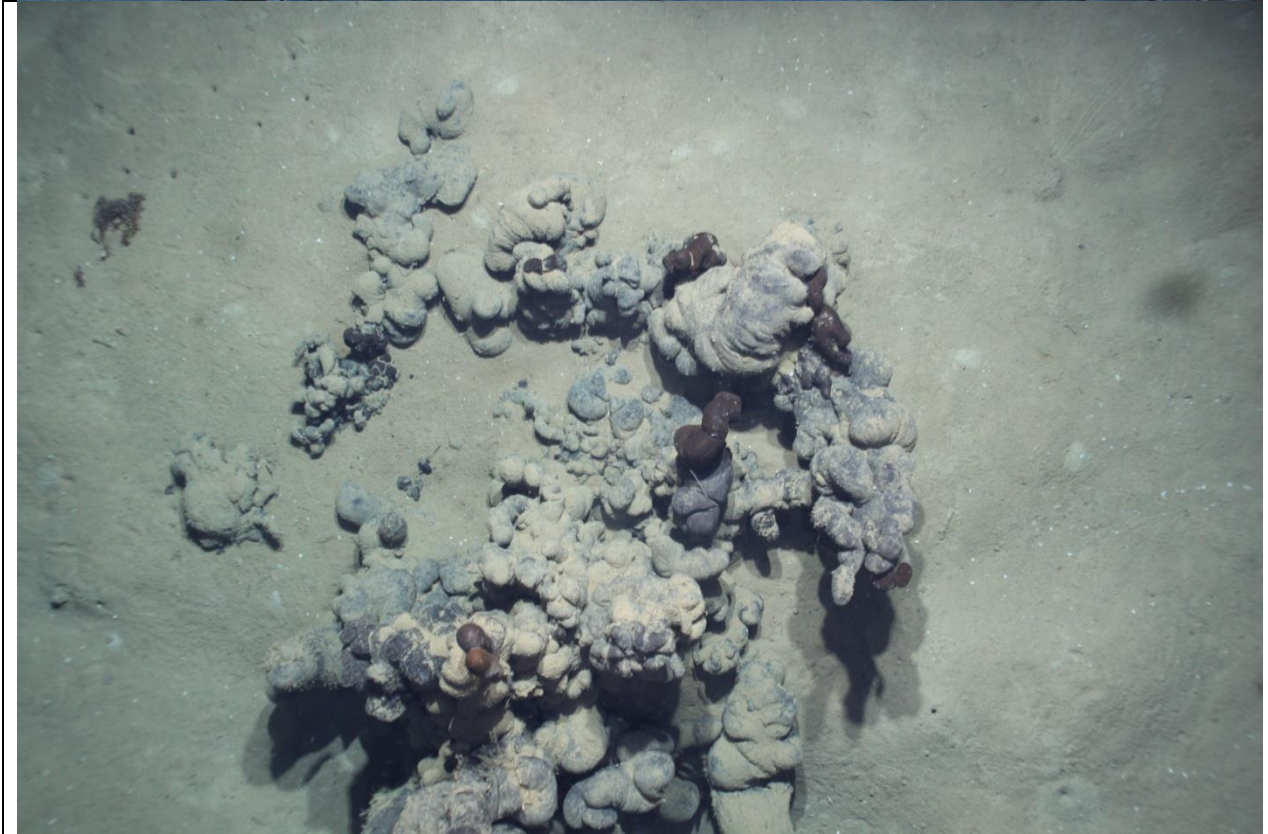
Deep Sea Power & Light Green Line Lasers (2 units)

Acoustic - Edgetech 2205/DW-106 Sub-Bottom Profiler

Physical - Seabird 19V2 plus with pumped DO

Release - Modified Edgetech 8242 for manual triggering from surface

Data - HP Touchsmart 610 computer, Buffalo 8 TB RAID Data Server



Upper—MILET being launched from stern A-Frame. Lower—High-resolution image of asphalt extrusion.

Costs:

The daily at-sea rate is \$2500/day FOB Tallahassee FL. Insurance for \$500,000 loss required. We have a truck and trailer and can transport the system to any Gulf port.