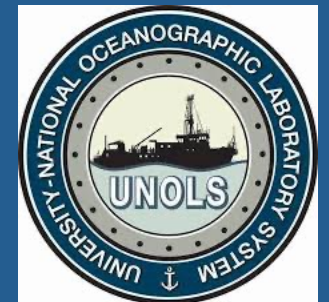

SIO Portable MCS Update

UNOLS MSROC Meeting 12/11/2022

Lee Ellett

Scripps Institution of Oceanography



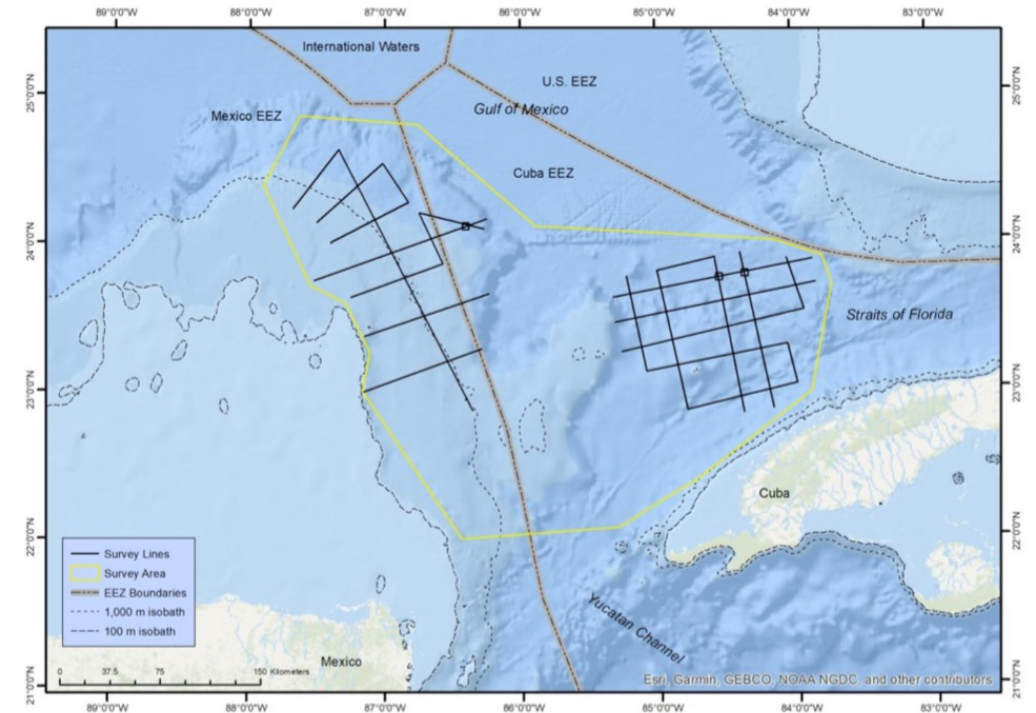
2022 Operations



1. Operations on B/O *Justo Sierra*

- Sound source operations
UTIG 3D Survey
- NSF funded survey PI Dr.
Chris Lowery

2. NSF funded Ross Sea Survey for PI Dr. Nathan Bangs on R/V *Nathaniel Palmer* (Streamer Only)



Portable Compressor Acquisition



Selection Criteria

1. Capable of supporting 1-4 GI sources in standard configurations with 10-12 sec rep rates.
2. Diesel driven
3. Availability of a long-term support maintenance support contract
4. 2000-3000 psi operational range
5. Compact containerized or enclosed footprint, smaller than a 20ft container
6. Single compressor weight within the capacity of some regional and local class research vessels
7. Condensate reservoir
8. Spill capture/environmental containment
9. Oil coalescing filtration

Portable Compressor Acquisition



ARF Vessel	Vessel Class	Operator	LMF11 Compressors
R/V <i>Roger Revelle</i>	Global	SIO	2
R/V <i>Thomas G Thompson</i>	Global	UW	2
R/V <i>Atlantis</i>	Global	WHOI	2
R/V <i>Sikuliaq</i>	Global	UAF	2
R/V <i>Neil Armstrong</i>	Ocean	WHOI	2
R/V <i>Sally Ride</i>	Ocean	SIO	2
R/V <i>Taani</i>	RCRV	OSU	1
R/V <i>Oceanus</i>	Intermediate	OSU	1
R/V <i>Atlantic Explorer</i>	Intermediate	BIOS	1
R/V <i>Endeavor</i>	Intermediate	URI	1
R/V <i>Hugh Sharp</i>	Regional	UDel	1
R/V <i>R. G. Sproul</i>	Coastal/Local	SIO	1



Portable Compressor Acquisition

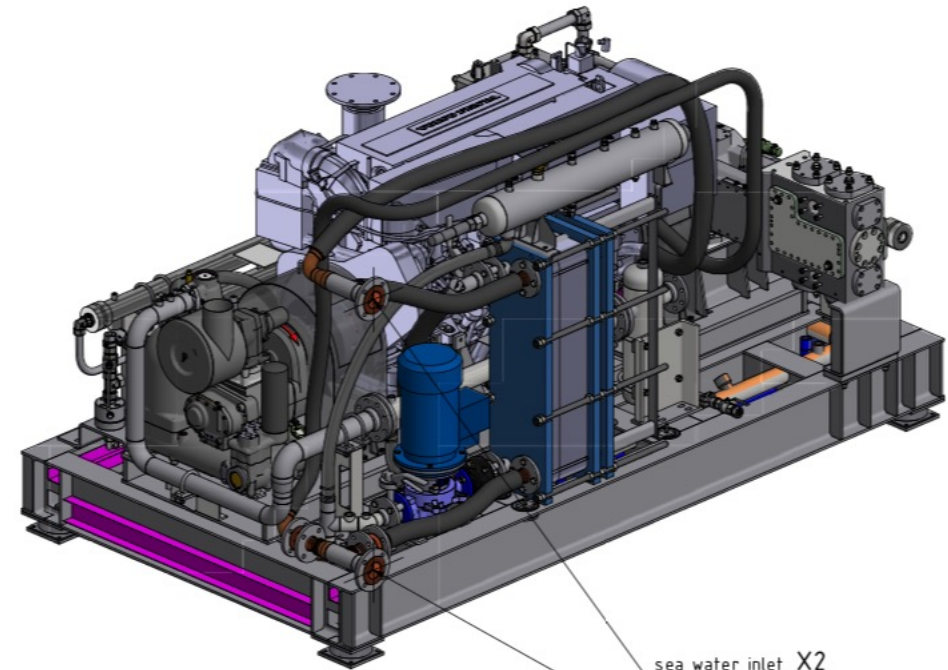
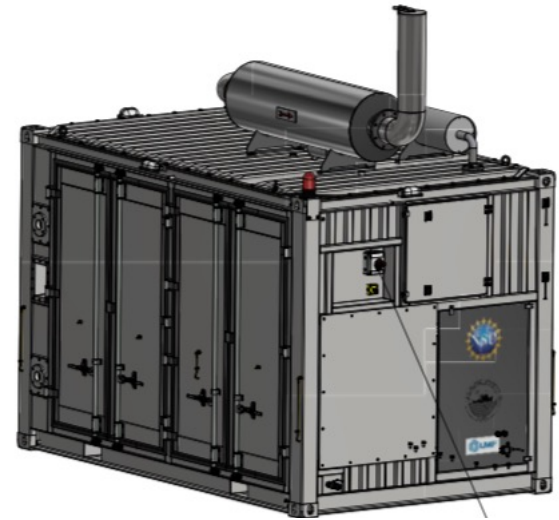


Project status

LMF 11s 385 cfm Compressors

Delivery Timeline

- Feb 2023 factory acceptance testing and training
- May 2023 delivery
- Summer 2023 field testing



sea water inlet X2