CANADIAN SCIENTIFIC SUBMERSIBLE FACILITY

SCIENCE FIRST.

A global leader in remotely operated submersible systems.

SCIENCE DRIVEN.

Our world-class ROV is designed for science-based research missions and piloted by the most experienced technicians available.

SCIENCE READY.

Our ROV is designed and equipped with leading edge technology, premium HD video cameras and instrumentation.

SCIENCE NOW.

With our technology and tools, fewer ship days are required and multiple experiments can be conducted at one time. Deployment is also fast and efficient.



CANADIAN SCIENTIFIC SUBMERSIBLE • Not-For-Profit - user pay facility

- Reliability 98% Uptime Minimal Maintenance Time
- Experienced operators and mature systems increasing efficiency
- Docking Head operations to current full depth 4000m.

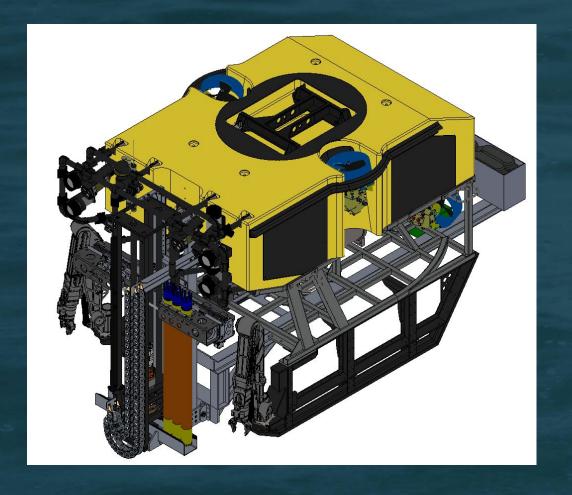
(Developing a plan to return to 5000m operations,





Highlight Missions is past few years

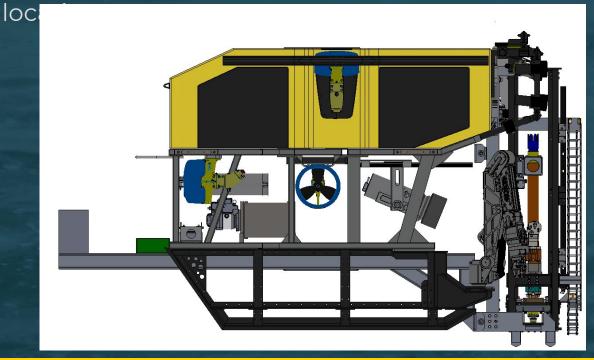
Vessel	Operator	System	Location	Objective
Akedemik Treshnikov	Russian Polar Research Fleet	3800m Mid Depth LARS	Antarctic	Diving on Ant-Arctic Ice Walls and Caverns
R/V Bigelow	NOAA	3800m Mid Depth Docking Head	NW Atlantic	MPA's, Corals, Sponges
Martha L Black	Canadian Coast Guard	1000m Shallow Vessel Crane	Laurentian Seaway	MPA's, Corals, Fish, Sponges
Tan Kah Kee	Xiamen University	4200m Mid Depth Docking Head	South China Sea	Manganese Nodules, Seafloor Geology
Pelagia	Netherlands Institute for Sea Research	3800m Mid Depth Docking Head	Indian Ocean	Exploration of Seafloor Leases held by Germany
RV Sonne	German Federal Ministry of Education and Research.	38000m Mid Depth Docking Head	Indian Ocean	Exploration of Seafloor Leases held by Germany



Latest System Tooling Multi-Core Drilling System

- Vertical drilling configuration for initial design, with an option to horizontally drill in future.
- · Assorted cutting heads for different seafloor substrate.
- "Load on bit" feedback for continuous, stable cutting.
 Minimizing vehicle torque.

Ability to fly and land on several sites from one vessel





Shallow Mode

- 3 to 8 ROPOS crew for 12 to 24-hour operations, with or without navigation services.
- 1000 metre operational depth.
- Much smaller support vessel required.

• We have operated without bringing any containers onboard.











- Multi-disciplinary dives
- CTD with pH and O2
- Core tubes
- Water Sampling
- Suction
- 4 x High Temperature Probes
- Gastight Samplers
- Sampling tools



Recent Developments

- 1. <u>5 Magazine coring tool for drilling operations in various substrate.</u>
- 2. <u>New Core Tube design, like MBARI's.</u>
- 3. New PT1000 based high temperatures probes and interface.
- 4. Magnum 5K 5000 metre rated Magnetometer.
- 5. <u>Wireless communications, investigating optical and acoustic.</u>
- 6. <u>Multi-sensor thermistor probe with internal logging and wireless</u> <u>communications.</u>
- 7. <u>Subsea Geiger Counter.</u>
- 8. Hot vent water sampler, 8 discrete containers.
- 9. <u>Autonomous operations of winch, tracking ROV depth.</u>

After all the cancelled mission's of 2020, if ROPOS can fill a void please give us a call.

