

COMPANY NAME: _____

COMPANY NUMBER: _____

**2015 MATE ROV COMPETITION
SCIENCE AND INDUSTRY IN THE ARCTIC
NAVIGATOR CLASS SAFETY CHECK LIST**

Companies must bring this check list, the ROV, tether, surface controls, and any other item used in the deployment and operation of the ROV. They will all be inspected as part of the safety check. In addition, documentation listed below must be provided to the Safety Judges during the inspection process.

1.0 Documentation	
	Electrical schematics & power distribution diagrams
	Fuse shown in electrical schematics?
	Pneumatics or Hydraulics Used? See item 4.0
2.0 Physical	
	Propellers are enclosed inside the frame of the ROV or shrouded such that they will not make contact with items outside of the ROV.
	No sharp edges or elements of ROV design that could cause injury to personnel or damage to pool surface.
	All items attached to ROV are secure and will not fall off.
	Hazardous items are identified and protection provided.
3.0 Electrical	
	Single attachment point to power source.
	Standard male banana plugs to connect to MATE power source.
	15 amp single inline fuse or circuit breaker within 30cm of attachment point.
	Motors are waterproofed.
	No exposed motors. Brushless motors are considered exposed unless electrically sealed after purchase.
	All wiring securely fastened and properly sealed*.
	Any splices in tether are properly sealed*.
	Tether is properly secured at surface control point and at ROV.
	Surface controls: All wiring and devices properly secured.
	Surface controls: All control elements are mounted with wiring inside an enclosure.
	No AC power sources.
	Cameras operate off the MATE 12VDC power supply through the single attachment point to power source.
*Properly sealed means that the wires cannot be exposed to water. Tape only sealing will allow the conduction of electricity through water. At minimum joints must be soldered, then sealed with silicone sealant and then finally taped. For in water taping, silicone self-vulcanizing tape is preferred over thermoplastic tape. Male to male connectors are not allowed.	

4.0 Pneumatic / Hydraulic (if using)	
	Pneumatic diagram?
	Hand or foot pump only? No electrical pump used?
	Uses water or air only?
	No pressure accumulators? No closed containers that air is being pumped into? All containers vent to pool?
	Buoyancy chamber vent holes at least 1/4" (6.35mm) diameter?
5.0 Lasers	
	No Lasers Present. - Not allowed in NAVIGATOR Class

INSPECTION #1	PASSED: 10
POINTS	
FAILED: Items to correct:	
INSPECTION #2	PASSED: 10
POINTS	
FAILED: Items to correct:	
INSPECTION #3	PASSED: 10
POINTS	
FAILED: Reason	
Cleared to enter the water:	
_____ Signature of competition official	
PASS/FAIL STAMP	