## EXPLORER & RANGER LASER SAFETY CHECK LIST

Companies must bring this check list attached to the main safety checklist to the Safety Inspection.

<table>
<thead>
<tr>
<th>1.0 Documentation</th>
<th></th>
<th>2.0 Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser specification sheet provided</td>
<td>Laser included on SID</td>
<td>Lasers have an on/off switch on the surface controller</td>
</tr>
<tr>
<td>Team is on Preapproved Laser list</td>
<td></td>
<td>Laser powered through the MATE surface power supply; no batteries onboard the ROV powering the laser.</td>
</tr>
</tbody>
</table>

Safety inspectors should check the laser specification sheet provided by the company to make sure the laser meets the necessary requirements (listed below).

- Visible Laser in 630-680 nm (red) or near 532 nm (green)
- Class I, Class II, or Class IIIa Category
- Red Laser: 5mW or less  
  Green Laser: 1.5 mW or less
- Laser voltage at or below laser rated voltage
- Presence of Laser shield or beam stop attachment within 30 cm of laser when out of water
- Shield is painted flat black
- Laser is not focused or deviates from collimated beam
- Team has laser safety glasses for all members at safety inspection; a specification sheet for the laser safety glasses is provided.

### LASER Safety Inspection Result

If failed, note the failed items and deduct points on the main safety sheet (companies that utilize a laser but fail to meet all the specifications, fail their main safety inspection).

**LASER Inspection Passed**

Signature of competition official

PASSED STAMP: