

## RCM-SAR Annual Vessel Inspection

### 2020 Edition

<b>Edition/Amendment</b>	<b>Approved by</b>	<b>Date</b>
2013 Edition - Version 1	Graeme Bergh, Safety Officer	May 15th 2013
Version 2; layout changes, additional items for Type II vessels, removal of SWL on towing bit	Graeme Bergh, Safety Officer	Oct 3 <sup>rd</sup> 2013
Version 3; layout changes, addition of access item	Graeme Bergh, Safety Officer	Oct 30 <sup>th</sup> 2013
Version 4; amend sections 1.4, 4.4, 5.11, 8.1, 8.16, 8.18, 11.2	Graeme Bergh, Safety Officer	March 27 <sup>th</sup> 2016
Version 5 (2018); amend sections 1.4, 2.1, 3, 4.4, 5.10, 5.11, 6.8, 6.12, 8.2, 8.12, 8.18, 9.4 and remove section 11 (repeat). Add PFD jig and fitness testing.	Marko Kessler, Safety Inspection Coordinator	April 5 <sup>th</sup> , 2018
Version 6 (2019); amend section 1.2, 3.3, 4.2, 4.6, 7.4, 8.16; re introduced section 3 added Critical items to crew safety items; 8.17, 8.18, 8.19, 8.20; added 2.7, 6.9, 6.10, 6.15, 6.16, 10.15, 10.16, 10.17, clarified number of other items.	Marko Kessler, Safety Inspection Coordinator	July 30, 2019
Version 7 (2020); amend section 1.4, 1.6, 1.7, 4.5, 4.7, 5.2, 5.3, 5.11, 6.2, 6.11, 6.13, 8.2, 8.4, 8.17, 9.5, 9.8 Add section 1.6, 4.8, 5.4, 5.6, 6.16, 8.22, 8.23	Marko Kessler, Safety Inspection Coordinator	November 15, 2020

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## **Overview**

The Royal Canadian Marine Search and Rescue (RCM-SAR) is committed to ensuring all vessels operating under its brand are conducting themselves to the highest health and safety standards. The first priority of all stations shall be to ensure the safety of their crew, the public and their vessel. In order to accomplish this, all stations must maintain their vessel and equipment to an acceptable operational standard. Safety inspection enables the station to discover its vulnerable areas and whether it may be in breach of a specific legal or system requirement.

Our comprehensive Safety inspection involves an initial critical evaluation of the stations existing systems for managing personnel, equipment and operations. We will inspect the structure and methods of operation and survey the workplace to identify hazards, unsafe acts or conditions and non-compliance with Regulations. We will then prepare a report on the findings with advice and agreed actions to be taken to comply with Safety Regulations, RCM-SAR policies and best operational practices.

Annual Vessel Inspection will replace old Bi-Annual, Annual and two-year audit (Sec 20.3, 20.4, 20.5 of the SMS Standing Procedures). By combining the three separate inspections into one annual in-depth inspection, we aim to simplify the process and thus create a more manageable program.

### **Frequency and Follow Up**

Every station must complete an annual inspection for each vessel in operation at its station. The station leader will be contacted at least two weeks prior to the inspection date and the station leader or a designated representative will be present to carry out the inspection. Each vessel will be issued a pass or fail and any non-conformity will be given a level of severity and subsequent completion date.

Items requiring attention will be categorized as either critical (red), priority (orange), non-critical (yellow) or Observation (green).

**Critical** (red) items are considered very serious and will need to be fixed before the vessel can go back into operation -**automatic out of service**. All critical non-conformities will require a re-inspection or proof of compliance by the Station and a sign off by the Inspector.

**Priority** (orange) items will be given a 30 days time frame for completion. The vessel will be able to operate as usual during this period.

**Non-critical** (yellow) items will require attention however they don't affect the overall operation or safety of the vessel. Non-critical items must be fixed within 90 days and the vessel can remain in service until they are rectified.

**Observation** (green) items will require attention however they don't affect the overall operation or safety of the vessel. Information items should be fixed before next scheduled annual inspection.

<b>Station Unit / Location:</b>	
<b>Station Leader and Members Present During Audit:</b>	
<b>Auditor (s):</b>	
<b>Date of Audit:</b>	
<b>Name and Type of Vessel(s) Audited:</b>	
<b>MMSI Number</b>	
<b>EPIRB Number + Expiry</b>	
<b>Vessel Registration #</b>	

1.0	Policy and Procedures	Yes/No	Comments
1.1	Maintenance log and plan?		
1.2	Vessel Log books completed?		
1.3	Manuals and technical data available?		
1.4	Vessel SOPs being followed?		
1.5	Expiry date tracking sheet?		
1.6	GAR implemented & visible?		
1.7	Covid-19 Signage visible, SOPs being followed?		

2.0	Organisation	Yes/No	Comments
2.1	Are regular meetings and training being carried out?  Are minutes of meetings being taken and circulated to all members.		
2.2	Members uploading reports to the SMS and/or notifying appropriate management of incidents?		
2.3	Is the society providing the vessel with what it needs?		
2.4	Are recruitment activities taking place?		
2.5	Are there adequate members to regularly crew vessel?		
2.6	Fitness testing implemented?		
2.7	Station Maintenance Structure?		

3.0	Management and Supervision	Yes/No	Comments
3.1	Is appropriate training given to members prior to them participating in SAR activities? What record is there of this training?		
3.2	Are crew being managed and appraised on their performance? Is there any record of this?		

3.3	Is there a process to identify crew member weaknesses and plans to help crew members improve?		
4.0	<b>Personal Protective Equipment</b>	<b>Yes/No</b>	<b>Comments</b>
4.1	Is appropriate PPE being issued to members?		
4.2	Have members received proper training in use of PPE?		
4.3	PFD's <ul style="list-style-type: none"> <li>• Condition and storage</li> <li>• Approved only (SALUS, NorthWater, Mustang)</li> <li>• One brand choice (Salus or NorthWater) – if mixed, plan to move towards standardization</li> </ul>		
4.4	Dry Suits <ul style="list-style-type: none"> <li>• Check integrity</li> <li>• Zippers greased</li> <li>• Approved only (Mustang or Ocean Rodeo)</li> </ul>		
4.5	Helmets (with 3M reflective tape) <ul style="list-style-type: none"> <li>• Approved: Gecko MK-10, Gath 52-15, Manta MH3 or MH4 (see spec sheet for specifics)</li> <li>• Pro-Tec, Gecko (older) and Cascade acceptable (when new helmets required, must upgrade to Approved as above)</li> </ul>		
4.6	Vests <ul style="list-style-type: none"> <li>• Knife, mirror, whistle and strobe</li> </ul>		
4.7	PFD Competency Rig <ul style="list-style-type: none"> <li>• Present</li> <li>• General condition</li> <li>• Cam cleats (optional)</li> </ul>		
4.8	Handheld VHF <ul style="list-style-type: none"> <li>• TC Approved, Waterproof</li> </ul>		

5.0	Lifesaving Equipment	Yes/No	Comments
5.1	First aid box <ul style="list-style-type: none"> <li>Check expiry and stowage</li> </ul>		
5.2	Fire extinguishers <ul style="list-style-type: none"> <li>Check expiry and stowage</li> <li>One required in boathouse/shed/etc</li> </ul>		Critical Item (boat house one not considered critical, only on vessel)
5.3	Buoyant heaving line (15 m line)		
5.4	Lifebuoy with 15m line – SOLAS or reflective tape		
5.5	Thermal Protective Aid (TPA)		
5.6	SAR Pump (Approved - Honda Models WB20, WH20, WMP20) <ul style="list-style-type: none"> <li>Securely Stowed</li> <li>Hoses and clamps</li> </ul>		
5.7	Spinal board <ul style="list-style-type: none"> <li>At the station or vessel</li> </ul>		
5.8	AED (if applicable) <ul style="list-style-type: none"> <li>Check battery, condition, pad expiration and stowage</li> </ul>		
5.9	Datum Marker Buoy (if applicable)		
5.10	Pyrotechnics (SOLAS only, no pistol style flares) <ul style="list-style-type: none"> <li>At least 6 flares, 12 for over 9m, expiry</li> <li>Make note of expiry</li> </ul>		Critical Item
5.11	EPIRB <ul style="list-style-type: none"> <li>Check hydrostatic release expiry (2 years) and properly labelled, Battery (5 years). Record expiry dates.</li> <li>Automatic only (Class 1) – must be replaced upon expiry to automatic</li> <li>Station to check if contacts are current with DND.</li> </ul>		Critical Item (Manual acceptable until refit. When unit expires or at refit, to be replaced with Automatic deployment unit)



5.12	Davit (if applicable) <ul style="list-style-type: none"> <li>• Approved Design</li> <li>• Securely Stowed</li> <li>• Good condition</li> </ul>		
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6.0	Navigational Equipment	Yes/No	Comments
6.1	RADARS <ul style="list-style-type: none"> <li>• Functioning</li> <li>• Check alignment</li> </ul>		Critical Item for Night Navigation
6.2	Sound signalling device		Critical Item
6.3	VHF Radios <ul style="list-style-type: none"> <li>• DSC, MMSI, GPS input</li> <li>• Post MMSI on Radio – LABEL</li> </ul>		Critical Item
6.4	Magnetic Compass <ul style="list-style-type: none"> <li>• Deviation card recommended</li> </ul>		Critical Item
6.5	Illumination working on all equipment		
6.6	Charts and Publications <ul style="list-style-type: none"> <li>• Correct charts onboard</li> <li>• Condition of Chart</li> <li>• Publications – at station</li> <li>• Tide table – on board</li> </ul>		
6.7	GPS <ul style="list-style-type: none"> <li>• Check HDOP</li> </ul>		
6.8	Search Light		
6.9	Binoculars		
6.10	Chart Plotter		Priority
6.11	Navigation lights <ul style="list-style-type: none"> <li>• Spare bulbs recommended</li> </ul>		Critical Item for night operation
6.12	Radio Direction Finder (if applicable)		

6.13	AIS <ul style="list-style-type: none"> <li>• Operating properly</li> <li>• Standard Naming Followed</li> <li>• Always on (unless no power on dock) – if not consider rewiring</li> </ul>		
6.14	Depth Sounder		
6.15	RADAR Reflector		
6.16	Night Vision / FLIR (if equipped)		

7.0	Electrical Systems	Yes/No	Comments
7.1	Interior lights		
7.2	Deck lights		
7.3	Batteries <ul style="list-style-type: none"> <li>• Check fasteners securing batteries for corrosion</li> <li>• Access to batteries</li> </ul>		
7.4	Camera (s)		
7.5	Fan (s)		
7.6	Wipers		
7.7	Loud Hailer		
7.8	Fuse box/breaker		
7.9	Siren		
7.10	Blue Strobe light		
7.11	Intercom system (if applicable) <ul style="list-style-type: none"> <li>• All headsets operational</li> <li>• Radio comms on headsets</li> <li>• Sufficient headsets for crew</li> <li>• If wireless – spare batteries</li> </ul>		
7.12	AIS-DMB receiver (if applicable) <ul style="list-style-type: none"> <li>• Operational</li> <li>• Target shows on MFD</li> <li>• Operates on VHF ch.15</li> </ul>		

8.0	Engine Space / Mechanical Systems	Yes/No	Comments
8.1	Self-Righting Mechanism <ul style="list-style-type: none"> <li>Hoses, bottles, valves, bag housing, pull cord, swim away line on transom - if applicable Service records</li> </ul>		Critical Item
8.2	Fuel shut off valve <ul style="list-style-type: none"> <li>Out of engine bay (if not – requirement on refit)</li> <li>Accessible</li> </ul>		
8.3	Bilge pump <ul style="list-style-type: none"> <li>Automatic / Manual</li> <li>Bailer</li> </ul>		
8.4	Racor filter <ul style="list-style-type: none"> <li>Clear type if outside of enclosed engine space</li> <li>Clear ones acceptable if it has metal heat shield</li> <li>Metal ones if in engine bay</li> <li>Type 1 – move outside at next refit.</li> </ul>		
8.5	Engine oil		
8.6	Coolant level (if applicable)		
8.7	Transmission oil (if applicable)		
8.8	Jet oil (if applicable)		
8.9	Leg oil (if applicable)		
8.10	Intake strainers (if applicable)		
8.11	Drive belt (if applicable)		
8.12	Kill cord (if applicable) <ul style="list-style-type: none"> <li>Spare cord</li> </ul>		Critical Item if equipped
8.13	Steering rod		
8.14	Fuel lines		

8.15	Yamaha (outboard only) <ul style="list-style-type: none"> <li>• Check propeller</li> <li>• Flushing system (recommended)</li> </ul>		
8.16	Engine fire suppression system (Type II) <ul style="list-style-type: none"> <li>• Original manufacturer equipment acceptable with annual inspection</li> <li>• No auto-activation fuse</li> <li>• Inspection records visible and current</li> <li>• FirePro for newer vessels or reinstallation</li> </ul>		Critical Item
8.17	Engine block heaters (Type II) <ul style="list-style-type: none"> <li>• Check temperature</li> </ul>		
8.18	Engine Raw Water Hoses (Type II, and III) <ul style="list-style-type: none"> <li>• Condition/ Service records</li> </ul>		
8.19	Roll over engine protection system (Type II) <ul style="list-style-type: none"> <li>• Check for corrosion</li> <li>• Wire Harness Integrity</li> </ul>		
8.20	ICE Shock Absorbers (Type I) <ul style="list-style-type: none"> <li>• Pressure check</li> </ul>		
8.21	ICE Shock Cage Integrity (Type I)		
8.22	Bilge Blower (if equipped)		
8.23	Engine type, HP, hours		

9.0	Loose Gear	Yes/No	Comments
9.1	Boat hook		
9.2	Axe		
9.3	Lines		
9.4	Floating Basket stretcher (if appl)		
9.5	Oxygen (if applicable) <ul style="list-style-type: none"> <li>• Hydrostatic stamp check</li> </ul>		
9.6	Paddle (if applicable)		
9.7	Flashlight		

9.8	Re-boarding ladder <ul style="list-style-type: none"> <li>• Ready to use</li> <li>• Easily accessible</li> </ul>		Critical Item if freeboard is over 0.5 meters
9.9	Tool kit		

10.0	General Vessel & Hull Condition	Yes/No	Comments
10.1	Cleats <ul style="list-style-type: none"> <li>• Check base for cracking, general condition</li> </ul>		
10.2	Towing Bit <ul style="list-style-type: none"> <li>• Check base for cracking, warping</li> <li>• Stamped with safe working load</li> </ul>		
10.3	Anchor & Drogue <ul style="list-style-type: none"> <li>• General condition</li> <li>• Drogue properly sized for vessel</li> </ul>		
10.4	Anchor chain <ul style="list-style-type: none"> <li>• How many shackles, condition of links, properly stowed</li> </ul>		
10.5	Tubes <ul style="list-style-type: none"> <li>• Condition, clean, inflated properly</li> </ul>		
10.6	Paint <ul style="list-style-type: none"> <li>• Last paint job, anti-fouling used</li> </ul>		
10.7	Anti-slip <ul style="list-style-type: none"> <li>• Tread and non-slip paint in correct places and not worn out</li> </ul>		
10.8	Hull condition (waterline) <ul style="list-style-type: none"> <li>• Severity of dents</li> <li>• Excessive growth</li> <li>• Overall condition</li> </ul>		
10.9	Fenders <ul style="list-style-type: none"> <li>• Adequate number and condition</li> </ul>		
10.10	Rubbing strake <ul style="list-style-type: none"> <li>• Intact , level of wear</li> </ul>		
10.11	Windows <ul style="list-style-type: none"> <li>• Intact</li> <li>• No cracks or leaks</li> </ul>		

10.12	Towing Line <ul style="list-style-type: none"> <li>Length, condition, width, type (frayed, discoloured, max 10% broken strands)</li> <li>See towline spec sheet for type/width by SWL</li> </ul>		
10.13	Vessel Access <ul style="list-style-type: none"> <li>Approach to vessel</li> <li>Dock</li> <li>Ramp</li> </ul>		
10.14	Vessel Top Speed <ul style="list-style-type: none"> <li>Max 40 knots</li> </ul>		
10.15	Vessel under way <ul style="list-style-type: none"> <li>How does vessel behave at higher speed?</li> <li>Any stability issues?</li> </ul>		
10.16	Trailer Availability		
10.17	Check SMS list		

<b>11.0 Infrastructure/Boathouse</b>			
11.1	Condition of Infrastructure <ul style="list-style-type: none"> <li>Sturdy/safe</li> <li>Maintenance</li> <li>Has fire extinguisher</li> </ul>		

**12.0 Summary and Recommendations**

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Unit Representative:

Name (Print):

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Signature:

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Safety Inspector:

Name (Print):

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Signature:

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