

# **RCM-SAR Annual Vessel Inspection**

#### 2019 Edition

Edition/Amendment	Approved by	Date
2013 Edition - Version 1	Graeme Bergh, Safety Officer	May15th 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

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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 either the Safety Coordinator or a Safety Representative will 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).

<u>Critical</u> (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 by a Safety Representative and a sign off by the Safety Officer.

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

**<u>Non-critical</u>** (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.

<u>Observation</u> (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.

Station Unit / Location:	
Station Leader and Members Present During Audit:	
Auditor (s):	
Date of Audit:	
Name and Type of Vessel(s) Audited:	

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	SOP's being followed?		
1.5	Plan for expiration dates?		

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?		

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4.0	Personal Protective Equipment	Yes/No	Comments
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> <li>Condition and storage</li> </ul>		
	<ul> <li>Approved only (SALUS, NorthWater, Mustang)</li> </ul>		
	<ul> <li>One brand choice (Salus or NorthWater)</li> </ul>		
4.4	Dry Suits		
	<ul> <li>Check integrity</li> </ul>		
	<ul> <li>Zippers greased</li> </ul>		
	<ul> <li>Approved only (Mustang or Ocean Rodeo)</li> </ul>		
4.4	Helmets		
	<ul> <li>Gecko MK-10 or Gath 52- 15 approved</li> </ul>		
	<ul> <li>Pro-Tec, Gecko (older) and Cascade acceptable (two models above are only approved when new helmets required)</li> </ul>		
	<ul> <li>3M Reflective tape</li> </ul>		
4.5	Vests		
	<ul> <li>Knife, mirror, whistle and strobe</li> </ul>		
4.6	PFD Competency Rig		
	General condition		

Lifesaving Equipment	Yes/No	Comments
First aid box		
Check expiry and stowage		
Fire extinguishers		Critical Item
<ul> <li>Check expiry and stowage</li> </ul>		
<ul> <li>One required in boathouse/shed/etc</li> </ul>		
Buoyant heaving line		
Lifebuoy with 15m line		
Thermal Protective Aid (TPA)		
SAR Pump     Securely Stowed     Hoses and clamps		
Spinal board		
At the station or vessel		
AED (if applicable)		
<ul> <li>Check battery, condition, pad expiration and stowage</li> </ul>		
Datum Marker Buoy (if applicable)		
Pyrotechnics		Critical Item
(SOLAS only, no pistol style flares)		
<ul> <li>At least 6 flares, 12 for over 9m, expiry</li> </ul>		
<ul> <li>SOLAS REQUIRED when existing flares expire</li> </ul>		
EPIRB		Critical Item
<ul> <li>Check hydrostatic release expiry (2 years) and properly labelled, battery (5 years)</li> </ul>		
<ul> <li>Record EPIRB Registration number.</li> </ul>		
<ul> <li>Station to check if contacts are current with DND.</li> </ul>		
Davit (if applicable)		
<ul> <li>Approved Design</li> </ul>		
<ul> <li>Securely Stowed</li> </ul>		
Good condition		
	First aid box	First aid box  Check expiry and stowage  Fire extinguishers  Check expiry and stowage  One required in boathouse/shed/etc  Buoyant heaving line  Lifebuoy with 15m line  Thermal Protective Aid (TPA)  SAR Pump  Securely Stowed Hoses and clamps  Spinal board  At the station or vessel  AED (if applicable)  Check battery, condition, pad expiration and stowage  Datum Marker Buoy (if applicable)  Pyrotechnics  (SOLAS only, no pistol style flares)  At least 6 flares, 12 for over 9m, expiry  SOLAS REQUIRED when existing flares expire  EPIRB  Check hydrostatic release expiry (2 years) and properly labelled, battery (5 years)  Record EPIRB Registration number.  Station to check if contacts are current with DND.  Davit (if applicable) Approved Design Securely Stowed

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6.0	Navigational Equipment	Yes/No	Comments
6.1	RADARS		Critical Item for Night Navigation
	<ul> <li>Functioning</li> </ul>		
	Check alignment		
6.2	Sound signalling device		
6.3	VHF Radios		Critical Item
	<ul> <li>DSC, MMSI, GPS input</li> </ul>		
	<ul> <li>Post MMSI on Radio – LABEL</li> </ul>		
6.4	Magnetic Compass		Critical Item
	<ul> <li>Deviation card recommended</li> </ul>		
6.5	Illumination working on all equipment		
6.6	Charts and Publications		
	Correct charts onboard		
	Condition of Chart		
	<ul> <li>Publications – at station</li> </ul>		
	Tide table – on board		
6.7	GPS		
	Check HDOP		
6.8	Search Light		
6.9	Binoculars		
6.10	Chart Plotter		Priority
6.11	Navigation lights		Critical Item for night operation
6.12	Radio Direction Finder (if applicable)		
6.13	AIS (if applicable)		
	Operating properly		
	If not installed, procure     and install within 1 year		
6.14	Depth Sounder		
6.15	RADAR Reflector		
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7.0	Electrical Systems	Yes/No	Comments
7.1	Interior lights		
7.2	Deck lights		
7.3	Batteries		
	<ul> <li>Check fasteners securing batteries for corrosion</li> </ul>		
	Access to batteries		
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)		
	All headsets operational		
	Radio comms on headsets		
	Sufficient headsets for crew		
	If wireless – spare batteries		
7.12	AIS-DMB receiver (if applicable)		
	Operational		
	Target shows on MFD		
	Operates on VHF ch.15		

8.0	Engine Space / Mechanical Systems	Yes/No	Comments
8.1	Self-Righting Mechanism		Critical Item
	<ul> <li>Hoses, bottles, valves, bag housing, pull cord, swim away line on transom - if applicable Service records</li> </ul>		
8.2	Fuel shut off valve		
8.3	Bilge pump		
	Automatic / Manual		
	Handheld pump		

8.4	Racor filter	
	<ul> <li>Clear type if outside of enclosed engine space</li> </ul>	
	<ul> <li>Clear ones acceptable if it has metal heat shield</li> </ul>	
	Metal ones if in engine bay	
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)	Critical Item if equipped
	<ul> <li>Spare cord</li> </ul>	
8.13	Steering rod	
8.14	Fuel lines	
8.15	Yamaha (outboard only)	
	<ul> <li>Check propeller</li> </ul>	
	<ul> <li>Flushing system (recommended)</li> </ul>	
8.16	Engine fire suppression system (Type II)      Original manufacturer     equipment acceptable with     annual inspection      No auto-activation fuse     Inspection records visible     and current     Dampers     FirePro for newer vessels     or reinstallation	Critical Item
8.17	Engine block heaters (Type II)	
8.18	Engine Raw Water Hoses (Type II and III)	
	Condition/ Service records	
8.19	Roll over engine protection system (Type II)	
	<ul> <li>Check for corrosion</li> </ul>	
	Wire Harness Integrity	

8.20	ICE Shock Absorbers (Type I)	
	Pressure check	
8.21	ICE Shock Cage Integrity (Type I)	

9.0	Loose Gear	Yes/No	Comments
9.1	Boat hook		
9.2	Axe		
9.3	Lines		
9.4	Floating Basket stretcher (if applicable)		
9.5	Oxygen (if applicable)		
9.6	Paddle (if applicable)		
9.7	Flashlight		
9.8	Re-boarding ladder  Ready to use Easily accessible		
9.9	Tool kit		

10.0	General Vessel & Hull	Yes/No	Comments
	Condition		
10.1	Cleats		
	Check base for cracking,  general condition.		
40.0	general condition		
10.2	Towing Bit		
	<ul> <li>Check base for cracking, warping</li> </ul>		
	Stamped with safe		
	working load		
10.3	Anchor & Drogue		
	<ul> <li>General condition</li> </ul>		
	<ul> <li>Drogue properly sized for</li> </ul>		
	vessel		
10.4	Anchor chain		
	<ul> <li>How many shackles,</li> </ul>		
	condition of links,		
	properly stowed		

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10.5	Tubes	
10.5	Condition, clean, inflated	
	properly	
10.6	Paint	
	Last paint job, anti-fouling	
	used	
10.7	Anti-slip	
	Tread and non-slip paint	
	in correct places and not worn out	
10.8	Hull condition (waterline)	
	Severity of dents	
	Excessive growth	
	overall condition	
10.9	Fenders	
	Adequate number and condition	
10.10	Rubbing strake	
	Intact	
	level of wear	
10.11	Windows	
	Intact	
	No cracks	
	No leaks	
10.12	Towing Line	
	Length, condition (frayed,	
	discoloured, varying widths, maximum %10	
	broken strands)	
10.13	Vessel Access	
	Approach to vessel	
	Dock     Bomp	
10.14	Ramp  Vessel Top Speed	
	Below 40 knots	
10.15	Vessel under way	
	How does vessel behave	
	at higher speed?  • Any stability issues?	
10.16	Trailer Availability	
10.17	Check SMS list	
<u></u>		

11.0	Infrastructure/Boathouse		
11.1	Condition of Infrastructure		
	Sturdy/safe		
	Maintenance		
	Has fire extinguisher		
12.0	Summary and Recommendations		
I Init Re	epresentative:		
Name		Signature:	
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			-
Safety	Inspector:		
Name	(Print):	Signature:	
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