

SOP-BMCC-001 Critical Equipment

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1.0 Purpose

Chapter 10 “Maintenance of Ships and Equipment” establishes the definitions of critical and standby critical equipment and sets forth the guidelines that will ensure all this equipment on our vessels is identified and maintained in readiness at all times.

This SOP lists the critical systems, equipment, standby critical equipment, and recommended spares specific to the R/V Brooks McCall.

2.0 Critical Systems and Equipment

The Company recognizes the importance of all vessel equipment, but has identified the following systems as critical for the R/V Brooks McCall:

Systems: subsystems	Recommended Spares
Ship's Hull: Hull Internal bulkheads Watertight doors	1 Damage control kit
Electrical Generation Plant Main generators: Two 12v-71 Detroit Diesel Main switchboard panel Electronic Governor batteries	1 Cylinder head 2 Pistons 6 injectors 1 blower 1 fuel pump 1 water pump 2 magnetic pick ups 1 spare 8/D battery for governor

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Propulsion Main engines: Three 16v-92 Detroit Diesel	1 Spare water pump 1 Spare fuel pump 1 Spare blower 8 Injectors
Steering Gear Two Steering pumps/ Vickers	1 Solenoid set

3.0 Standby Critical Equipment

Air Compressors	Recommended Spares
Pressure Tanks	4 Filters, compressor oil
Electrical Supply	none

Electrical Generators	Recommended Spares
One Standby generator 6-71 Detroit Diesel	6 Injectors 1 fuel pump

Lifesaving Appliances	Recommended Spares
Life rafts Life vests	

Firefighting Apparatus	Recommended Spares
Fire pumps Fixed fire extinguishing system Flame detector Fire detection alarm panel	

Communications	Redundancy (no spares)
VHF Radios General Alarm Ship's whistle/ horn	Multiple units and portables, VSAT, Single side band Ship's PA, whistle, horn Portable, manual horns

Navigation	Recommended Spares
Radar	Redundancy in place

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Satellite Compass GPS	
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Bilge Systems	Recommended Spares
Ballast pump	redundancy with fire and ballast pumps
Bilge alarm	Engine Room, Bow Thruster Room
Bilge pump #1 and #2	redundancy with fire and ballast pumps
Oily Water Separator	Solenoids

Ship Security Surveillance and Warning system	Recommended Spares
Cameras	None- domestic water operation only

4.0 Maintenance

General maintenance procedures established to ensure their reliability are recorded in the computer-based maintenance program.

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