

Surveys On-Board Survey Vessel Black Jack

Reference Number: RA14

Date of Risk Assessment:

Risk Assessment completed by: Lauren Parkhouse

Activity	What are the hazards?	Who might be affected?	Risk Level			Control Measures	Risk Level		
			Severity	Likelihood	Risk Level		Severity	Likelihood	Risk Level
1. Flying array camera system									
Connecting the monitor to the power supply.	Possible electric shock from the power supply, surface control box, cable. Potentially fatal.	Staff	3	2	6M	<ul style="list-style-type: none">• Set up the surface control box and all power connections to PC's, monitors and other electrical equipment in dry areas.• Follow all manufacturers' connection instructions.• Ensure hands are dry when handling the power supply cable and the surface control box.• Use an RCD device on the main power supply.• Ensure all connections along the cable and to the cameras and lights are secure.• Check the cable for visible signs of damage that may allow water ingress.	2	2	2L
Array deployed and on seabed	Array becoming entangled in obstacles, fishing gear or in crevices on the seabed. Fast tightening or rapid paying out of umbilical. Crush injuries if caught between cable and bulwarks/rails. Falling overboard. Musculo-skeletal injuries in particularly when recovering equipment, cuts, abrasions. Boat sinking, drowning.	Staff	3	2	6M	<ul style="list-style-type: none">• Use the real time footage to monitor for hazards on the sea bed such as pinnacles, large boulders and fishing gear• Filming and towing the equipment should stop if there is a significant risk of snagging• Skipper and crew to keep a watch out for buoys and dahns and fishing vessels operating nearby• Skipper to contact vessels operating in the area prior to survey and deployment of gear through telecommunications and / or VHF radio to inform on the location of planned survey work and get information on fishing activity and gear hazards in the vicinity of planned survey	2	1	2L

						<ul style="list-style-type: none"> • Environment Officer in charge and Skipper to undertake a dynamic risk assessment, decide on course of action and brief the deck crew of procedures if the frame becomes entangled. • Deck crew to take care not to stand on the cable or in a coil of cable laid on deck. • Do not stand between any bulwark or rail and the cable. • Wear gloves when handling the umbilical. • Wear lifejackets at all times on deck • Wear reinforced toe cap boots at all times on the vessel • Ensure that the winch/gantry operator has a clear view of the work area and all moving equipment • Maintain good communication between all crew members at all times • Remove any trip hazards from the deck that are not necessary for the deployment of the equipment. 			
Deploying and recovering the flying array. Activity while the array is in use.	Trips or falls over cable and other fixed structures. Crush injuries if caught between array/cable and bulwarks/rails. Falling overboard. Musculo-skeletal injuries, cuts, abrasions, drowning. Clothing or PPE snagging in equipment deployment leading to immersion and drowning.	Staff	3	2	6M	<ul style="list-style-type: none"> • Take care not to stand on the cable or in a coil of cable laid on deck. • Do not stand between any bulwark or rail and the array. • Wear gloves when handling the cable. • Do not overreach outboard when deploying or recovering the array. • Wear a lifejacket at all times on deck. • Wear reinforced toe cap boots at all times on the vessel • Ensure all crew members are trained in the use of the winch and gantry and ensure the winch and gantry are used in proper manner in order to keep array under control during deployment and recovery. • Ensure no loose items are hanging from clothing or PPE, as it may become snagged. Remove any unnecessary items 	2	1	2L

						<p>that may add to risk of snagging such as jewellery.</p> <ul style="list-style-type: none"> • Tie back long hair. • Ensure that the winch/gantry operator has a clear view of the work area and all moving equipment • Take direction from the winch operator during operation • Maintain good communication between all crew members • Remove any trip hazards from the deck that are not necessary for the deployment of the equipment • Manual Handling Training based on manual handling Regulations must be completed and regulations followed by all carrying out camera work. • All personnel required to deploy the camera and sled must have received training/instruction from Environment Officer in charge and / or skipper. • The skipper is an overall charge as to whether the operation is safe to take place and continue is weather and sea conditions change. However, individuals can stop activities at any time if dynamic risk assessment identifies activity is becoming unsafe. 			
2. SeaKing side scan sonar									
Connecting the sonar to the surface control unit and power supply.	Possible electric shock from the power supply, surface control box, cable or sonar. Potentially fatal.	Staff	3	2	6M	<ul style="list-style-type: none"> • Set up the surface control box and all power connections to PC's and laptops in dry areas. • Follow the manufacturer's connection instructions. • Ensure hands are dry when handling the power adaptor or surface control box, also when using any PC that controls the imaging software. • Use RCD device on the main power supply. • Do not overload the main power supply outlet. 	2	1	2L

						<ul style="list-style-type: none"> • Check the cable and sonar for signs of damage that may allow the ingress of water, do not use if any are found. • Ensure the sonar is “switched off” when deploying or retrieving and when left on deck awaiting deployment. • Do not use when power-line surges may occur, e.g. lighting storms. 			
Deploying or recovering the sonar.	Trips or falls over cable. Crush injuries if caught between cable and bulwarks/rails. Falling overboard. Musculo-skeletal injuries, cuts, abrasions. Crush injuries is equipment is dropped. Cable becoming entangled with propellers.	Staff	3	2	6M	<ul style="list-style-type: none"> • Take care not to stand on the cable or in a coil of cable. • Do not stand between the cable and any bulwarks or rails. • Wear gloves when handling the cable. • Do not overreach outboard when deploying or recovering the sonar. • Wear a lifejacket at all times on deck. • Wear reinforced toe cap boots at all times on the vessel • Ensure good communications between crew. • Check that sidescan and cable at always being towed away from the stern of the vessel and propellers. • Ensure that the winch/gantry operator has a clear view of the work area and all moving equipment. • Remove any trip hazards form the deck that are not necessary for the deployment of the equipment 	2	1	2L

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