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Argyll Maritime Design Services Ltd.- Naval Architects& Marine Surveyors.

MARINE SURVEY SAFETY POLICY

Given that the extent and level of risk can and does vary significantly from vessel to vessel, and survey to survey, and cannot be reasonably assessed remote from the ship or boat to be surveyed. It is expected that the vessel's owner, operator or contracted shipyard will have prepared and provided a safe working environment in advance of attendance. If in my assessment this is found not to be the case either before or during the survey the inspection would be halted.

The level of risk will be continuously assessed both on initial approach to the vessel and as the survey progresses, with all potential hazards for a given survey procedure or location within the vessel initially **assumed to be potentially high** and only after a personal assessment that allows down grading of the potential risk to acceptable levels will the survey start or progress. This assessment is based on 30 years experience in the ship building and marine survey industry.

Where the level of risk cannot be down graded to an acceptable safe level the survey would not start or be halted either as whole or for a given space or element of the survey until such time as owners, operators or shipyard can, through implementation of specific risk assessment and method statement, put in place provisions to reduce the risk to an acceptable level to allow the survey to continue.

Where the survey is being carried out with the vessel in operation or under repair or refit, and where it is considered that the operator's crew or shipyard staff to be engaging in unsafe working practice the survey would be halted, and the surveyor would immediately leave the vessel and report reasons to the company or shipyard management's representative.

Without exception the vessel's owner/operator or shipyard's Health and safety policy will be followed as a minimum standard, however this should not prevent the provision of additional safeguards that in my opinion of the attending surveyor are reasonable and appropriate for continued safe conduct of the survey.

The following PPE is included a part of my personal survey equipment:-

Safety shoes/boots
Flame retardant overall
High vis. Vest.
Gloves
Safety glasses or goggles
Ear defenders
Hard hat.
Torch
4 gas personal Gas Monitor to include O2.
Auto-release, gas inflate lifejacket
Waterproof wet weather gear.

Potentail Risks

The following listing of risks is not exhaustive and can be encountered either individually, in multiples or as whole on any vessel on any survey.

Vessel on the hard for inspection, build, repair or refit.			
	Injury	Cause	Action
1	Crushing	Vessel inadequately supported	Halt survey.
2	Injury from falling objects	Lack of care by workforce above	Wear hard hat & high vis. Vest.
3	Falling	Unsafe access, ladders & scaffold	Halt survey.
4	Falling	Unguarded open deck hatches and manholes	Cover or guard opening or post watchkeeper
5	Falling	Working at height on masts and superstructures	Working and height precautions apply, to include use of safety harness as appropriate.
6	Tripping/Slipping	Loose gear, & temporary cables, hoses and equipment. Oil or ice/frost on decks.	Wear PPE and good visual awareness based on experience.
7	Burns	Surveying in proximity recently completed or in progress Hot work.	Liason with workforce. Wear PPE.
8	Eye injury	Surveying in proximity to grinding, welding or painting works	Liase with workforce. Wear PPE
9	Hearing damage	Surveying in machinery spaces. Structural born construction noise.	Wear PPE temporarily halt adjacent works when entering enclosed or confined spaces.
10	Foot injury/ crushing	Falling equipment or steelwork	Wear PPE
11	Electrocution	Poor shipyard practice	Halt survey
12	Entrapment	Surveying moving machinery or adjacent to moving machinery.	Where possible isolate equipment. Personal awareness of exposed moving parts. Wear PPE
13	Entrapment	Accessing and inspecting severely restricted spaces and hull structure.	Watch keeper present at all times. Good lighting. Awareness of personal physical fitness & limitations.

Vessel on the hard for inspection, build, repair or refit.			
14	Suffocation	Confined space access.	Space to be naturally ventilated with all hatches open for a min. 24hrs plus forced ventilation if considered necessary; or forced ventilation for 1 hr prior to entry. (min 12 exchanges of air.) In extreme cases a shipyard or owner supply chemists certificate will be required. Good lighting. Watch keeper posted. Continuous forced ventilation where practical. Personal gas monitor/alarm worn at all times Evacuation equipment available and in readiness.
Vessel afloat additional to 1 – 14 above			
15	Drowning	Poor embarkation provisions from shore or service craft.	Wear life jacket. In extreme case halt survey
16	Drowning	Falling overboard	Wear lifejacket and if appropriate safety harness
17	Drowning	Vessel capsize, sinking or swamping.	Assess vessel stability prior to boarding and/or crane operations based on experience, loading, trim, freeboard etc. If in doubt don't board or halt survey and immediate disembarkation.
18	Crushing	Between vessel side and service craft during embarkation/disembarking particularly in heavy seas.	Non slip foot wear. In extreme cases halt survey until sea conditions improve
19	Impact & crushing injury	Impact with ship's structure under sever ship motions. Impact or crushing due to moving equipment, stores or cargo.	Good practice (move with care use grab rails etc.) Halt survey and seek port or shelter if risk of moving equipment or cargo.
20	Head or crushing injury	Lifting operations and crane load testing	Wear PPE to include Hard hat.

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