

#	HAZARD IDENTIFICATION			RISK ASSESSMENT				RISK CONTROL MEASURES					RISK CONTROL PROCEDURE				COMMENTS
	HAZARD DESCRIPTION	INJURY	PERSONS AFFECTED	CODE	COMPLIES	BASIC RISK	CONSEQUENCE	ENGINEERING CONTROLS			ADMINISTRATIVE CONTROLS		PROPOSED RISK CONTROL MEASURES	ACTION	PRIORITY / DATE	CONFIRMATION	
								ELIMIN	RE-DESIGN	MAINT	INSP	TRAIN					
Ref No	Describe the nature of the failure, e.g. "slip off edge of platform", "touch earth & active thru case"	Describe the likely outcome of the failure e.g. crush, fall, fire, shock	List persons who may be exposed to the hazard	List applicable Standards and Clause no.s.	Verify that the element under consideration complies with the code	Assess the likelihood of the hazard occurring.	Assessment of the worst possible outcome should the hazard arise.	Eliminate the hazard or remove persons from the hazard.	Reduce the risk by redesign or plant systems or procedures	Reduce the probability of failure by periodic maintenance or replacement of components prior to failure occurring.	Reduce the probability of failure by periodic inspection - increasing the likelihood of detection of a fault condition prior to failure occurring.	Reduce the probability of the hazard arising by proper training and instruction	Use personal protective equipment	Describe the relevant controls that are to be put in place, or may be in place.	State who and how controls are to be effected	Allocate a date for completion of control measures, having regard to the magnitude of the risk	Confirm that the necessary action has been completed
			O = Operator P = Patron B = Bystander M = Maint C = Child	AS = Aust Std OS = Other Std EP = Engineering Practice NA = Not applicable	Y/N	H = High M = Medium L = Low R = Rare	F = Fatality S = Severe Injury M = Moderate L = Light Injury	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N				
1	OPERATIONAL																
1.1	Injury due to mechanical or structural failure		O,B,M	AS1418.10		L	F	NA	Y	Y	Y	Y	N	Verify the design as in accordance with applicable standards	PH		Units Designed to AS1418-1996
														Identify critical (non-redundant elements) requiring periodic inspection..	PH		Included in manual ref clauses 1.4.1 and 5.3.1
														Specify inspection procedures	PH		Included in manual ref clauses 4.2.2.2.
1.1.1	Injury due to overload		O,B,M	AS2550.10		L	F	NA	Y	N	N	Y		Train operators	HA		Overload Alarm Noted
														Specify calibration checks in manual.	PH		Included in manual ie. 110% load cut out
														Specify clearing procedure in and around overload alarm stop.	PH		Included in manual ref clause 5.3.1

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								ELIM'N	RE-DESIGN	MAINT	INSP	TRAIN	PPE					
	Confusion over load rating													Provide correct sign on machine (not properly completed.)	PH			Current sign is new Haulotte standard and allows for varying weight of personnel
1.1.2	Injury due to operation outside specification	GI	O,B,M	AS2550.10		L	F		Y					Clarify operational specification.	HA			Unit is interlocked to prevent operation outside pre-set operating parameters
										Y		Y		Maintain tilt switch	OP			The tilt switch is maintenance free
1.1.3	Injury due to instability	GI	O,B,M	AS1418.10		L	F	NA	Y	N	N	Y		Verify test in accordance with AS 1418.10	PH			Unit tested to AS1418.10-1996
				AS1418.10 1.14.2(f)										Provide Stability Test procedures in Manual	PH			Included in manual ref clause 4.4.4
1.2	Operator Injured by fall due to failure of harness point	GI	O	AS1418.10	N	L	F	N	Y					Verify harness anchor capacity complying with AS 1891 (15kN Ultimate Capacity)	PH			Complies with AS1891
1.2.1	Operator injured by fall due to failure to attach to harness point			EP										Fit Warning Wear Safety Harness Sign in Basket	PH			Warning sign fitted
1.3	Ground crew injured from Falling objects from platform	GI	GC,B	NA	N	L	F	NA	Y					Provide mesh infill in platform	PH			Not a requirement
1.4	Operator injured due to non observance of safety signs	GI	O	NA	N	L	F	N	Y					Provide inspection Program.	PH			Note included in manual ref clause 1.1.2
														Maintain signs	OP			Note in manual
1.5	Injury due to excessive travel speed.	GI	O	En280	?	L	S	Y						Reduce travel speed to a more acceptable range.	HA			unit speed adjusted to meet standard specification
1.6	Operator injured using platform tilt	GI	O	AS1418.10	Y	L	L		Y					Operate switch through Deadman control.	PH			Field experience shows current approach is acceptable
1.7	Operator/ground crew electrocuted due to close proximity to live electrical wires.	AX	O,B,GC	AS2550.1		L	F		Y					Fit sign to unit specifying clearances to be observed.	HA			Sign fitted ref Clause 2.6.2 No. 10
1.8	Ground Crew Crushed under wheels		GC,B	EP		M	S		Y			Y		Fit Motion Alarm on travel.	HA,PH			Travel alarm fitted on all units
2	EMERGENCY OPERATION																	
2.1	Loss of necessary tools to enable emergency operation.	GI	O	EP		L	S		Y					Provide a receptacle or clip for the distributor handle.	HA			handle fixed to machine under side cover
2.2	Instability during rescue using base controls	GI	O,B,M											Provide interlocks preventing lowering of boom prior to retraction if slope or overload is triggered OR	PH			Unit is interlocked to prevent it from being moved to a position of less stability.

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								ELIM'N	RE-DESIGN	MAINT	INSP	TRAIN					
													Provide warning sign at base controls requiring retraction prior to lowering boom.	PH			Sign included ref clause 2.6.5
2.3	Failure to extinguish fire due to incorrect fire extinguisher or poorly maintained extinguisher	GI	O	EP	N	L	F		Y	Y			Provide specification in manual relating to type of extinguisher to be installed.	PH			Operator responsible for selecting extinguisher appropriate to the hazardous area being worked in
3	SAFETY INSTRUCTION																
3.1	Operators injured due to confusion over safety instructions	GI	OP	AS1418.10	N	L	S		Y				Provide definitions in manual relating to terms such as "derricking, pendulum arm, boom, DaN" etc which are not universal.	PH			Manual corrected
													Clarify load rating is specification as 250KG not 250 daN.	PH			Manual corrected
3.2	Confusion relating to wheel loading?	GI	OP	AS1418.10					Y			Y	Distinguish between max force on wheel and max ground pressure these should relate to each other	PH			Manual corrected
3.3	Confusion of meaning of "Max bearing distance"			NA		?							Clarify meaning	PH			Manual corrected. Maximum bearing distance
3.4	Confusion relating to wheel loading?	GI	OP	AS1418.10					Y			Y	Distinguish between max force on wheel and max ground pressure these should relate to each other	PH			Manual corrected
4	MAINTENANCE																
4.1	Person injured as a result of unsecured swing out engine compartment?	CR	OP,M,B	NA		L	S		Y				Provide warning regarding hazard and failure to secure compartment.	PH			Note added in manual ref clause 5.1
4.2	Person injured from falling boom when maintaining unit	CR	M	NA	N	L	F		Y			Y	Provide check for boom cylinder Provide instructions for use	PH PH			Note added in manual ref.clause 5.1 Ref clause 5.1
4.3	Persons injured refueling unit	GI	M	NA	N	L	L		Y			Y	Provide safe refueling procedure - use of fuel pump.	PH			Sign included on unit ref clause 2.5.6 No.3