RISK ASSESSMENT OF PLANT

DATE OF ASSESSMENT : 18th October 2010	**PLANT DESCRIPTION: SELF PROPELLED ELECTRIC BOOM LIFT HAULOTTE MODEL HA12C J**	**ORGANISATION : HAULOTTE AUSTRALIA (HAA)**
Preliminary Assessment for Review	**RISK ASSESSMENT METHOD USED: SAFETY REVIEW**	**ADDRESS : 43 Greens Rd Dandenong Vic 3175**

A	B	C	D	E	F	X	Y	Z
Hazard No.	**Hazard Description -** (the situation or parts of plant which could cause injury or illness)	**Is there any risk?** Describe the risk control measures ALREADY implemented	**Risk** L = Low M = Med. H = High	**Proposed SUPPLEMENTARY risk control measure**	**Are the control measures practicable?** Yes/No	**For Action by whom**	**Confirmation that the necessary action has been completed**	**Notes**
0.0.	**Operation General**							
1.4.	Structural failure due to operation on a slope	Tilt Alarm fitted to provide warning when the incline exceeds the maximum permitted and prevents driving and lifting. Description of operation provided in manual. [E-3.1.2]. Slope limit provided in manual [G] Additional notes in AS2550.10		Specify specific models in the manual to which the functional outcome described in the test applies.	Yes	HA	Manual updated	
1.6.	EWP could collapse as a result of poor structural/mechanical condition due to fatigue/wear	Machine designed and manufactured by a reputable and experienced company Pre-start checks include checks of general structural and mechanical	L	List replacement parts necessary to maintain the machine in a state of conservation throughout the life of the machine AND Specify the intended service life.	Yes Yes	HA HA	All parts listed in Spare parts manual Maintenanc	

A	B	C	D	E	F	X	Y	Z
Hazard No.	**Hazard Description -** **(the situation or parts of plant which could cause injury or illness)**	**Is there any risk?** Describe the risk control measures ALREADY implemented	**Risk** L = Low M = Med. H = High	**Proposed SUPPLEMENTARY risk control measure**	**Are the control measures practicable?** Yes/No	**For Action by whom**	**Confirmation that the necessary action has been completed**	**Notes**
		items and are included in manual. [B-5] Notes in manual regarding State of conservation.[A3.1] Scheduled Replacement parts listed in maintenance manual					e book updated	
2.0.	**Overturning**							
3.0.	**Operation**							
3.3.	Confusion in operation due to illogical controls		L	Remove the jib rotation selector controls applicable to the CJ12+ from the control panel.	Yes	HA	Installed switch not considered a risk	[ii]
4.0.	**Slips, trips, falls**							
5.0.	**Falling Objects**							
6.0.	**Electrical Risks**							
6.1.	Persons could be injured due to contact or approach to live electrical apparatus	Warnings provided in manual [A3.2.3] Legislative requirements to maintain clearances Warnings in AS2550.10	M	Install EWPA Electrical clearance sign ES1 applicable to this EWP which specifies No Go Zones per AS2550.10 .	Yes	HA	Manual updated Fitted by factory during production	
7.0.	**Fire or Burns**							
8.0.	**Hydraulic**							
9.0.	**Driving Transport & Handling**							
9.5.	Injury from unsecured unit left unattended.	Key Switch provided.	M	Add note to manual regarding the precautions necessary to prevent unauthorised use.	Yes	HA	Manual updated	
9.6.	Injury lifting unit	Instructions provided in manual and warnings given Specifications provided in manual.	M	Add lifting capacity and ties down signs to each lifting eye and include a schedule of signs in the manual AND Verify the capacity of the lifting eyes	Yes Yes	HA HA	Sign added to machine and manual updated	[iii] [iv]

A	B	C	D	E	F	X	Y	Z
Hazard No.	**Hazard Description -** **(the situation or parts of plant which could cause injury or illness)**	**Is there any risk?** Describe the risk control measures ALREADY implemented	**Risk** L = Low M = Med. H = High	**Proposed SUPPLEMENTARY risk control measure**	**Are the control measures practicable?** Yes/No	**For Action by whom**	**Confirmation that the necessary action has been completed**	**Notes**
				having regard to the fact that they are used as tie down points also and the ties pull predominantly perpendicular to the plate. AND List the tie down points as an inspection item in the manual AND Amend the inconsistency in the manual regarding marking with adequate capacity:	 Yes Yes	 HA HA s	Strength of lifting eyes for intended purpose confirmed Lifting eyes added to inspection regime in manual	
10.0	**Control malfunction & uncontrolled motions**							
10.4.	As a result of hose failure	Holding valves fitted to load holding cylinders	L	Re route hydraulic hoses at end of jib to reduce tension and wear	Yes	HA	Hose routing adjusted to correct problem	
10.5.	Malfunction due to worn Transducer cables		L	Re route the cable to protect it from wear	Yes	HA	Hose routing adjusted to correct problem	
11.0.	**Maintenance**							
12.0.	**Emergency Procedures**							
12.1.	Injuries exacerbated due to inability to retrieve platform – absence of key in lower controls		M	Reconfigure controls so that, when the upper and lower controls are selected the key cannot be removed.	Yes	HA	AS2550.10 requires that there is a person present at ground level who is trained to deal with emergencies at the platform.	v

A	B	C	D	E	F	X	Y	Z
Hazard No.	**Hazard Description -** **(the situation or parts of plant which could cause injury or illness)**	**Is there any risk?** Describe the risk control measures ALREADY implemented	**Risk** L = Low M = Med. H = High	**Proposed SUPPLEMENTARY risk control measure**	**Are the control measures practicable?** Yes/No	**For Action by whom**	**Confirmation that the necessary action has been completed**	**Notes**
							This person should have spare key at all times	
13.0.	**General**							

C.Carrillo 11/04/2010

[i] The manual applies to numerous machines and the outcome of a functional test of a safety system varies between machines. It is necessary to describe which functional outcome applies to which machine e.g. the manual states "For equipped machines, the sensor prevent driving and lifting movements". The person checking must be able to know that this requirement applies to the machine being tested.

[ii] Redundant switches should not be present on a control panel as this leads to confusion and the inference that systems are faulty.

[iii] A schedule of signs applicable to the AS CJ12 is not provided in the manual.

[iv] The manual [F] shows the eyes as being marked with a tie down sign when the sign is not listed and not fitted to the machine.

[v] If the keyswitch is left unaltered then the manual should refer to the necessity for a ground person to carry a key in order to facilitate emergency retrieval using the standard controls.

NOTES:

1. **MGMT:** Refers to the person legally responsible for the use of the unit; it generally means the employer, the company or the legal entity that has responsibility under the Health and Safety legislation in the State or Territory in which the unit is being used.
2. **OP:** Is the operator, authorized by management and responsible for the operation and preoperational inspection and use of the unit.
3. **OWNER:** Is the person or organisation that owns the unit and is responsible for its condition and state of repair.

GENERAL NOTES:

1. *This Risk Assessment has been prepared for HAULOTTE AUSTRALIA for the subject plant and is not transferable to other plant or parties.*

2. *Item Numbers refer to hazards, which can exist if the unit is not adequately maintained – e.g. Guards not fitted, gauges fail to correctly display readings etc. The measures listed to control risks arising from this type of hazard can include reference to operating procedures. Operating Procedures cannot make the operator responsible for inadequate maintenance/repairs etc but is only intended to ensure that the procedures include the need for the operator to report any faults detected.*

3. *This Hazard Identification and Risk Assessment document has been prepared based on information available at the date of publication. In order to ensure this Hazard Identification, Risk Assessment, Risk Control document is* ***both accurate and complete;*** *"Management of the Unit" must review it:*

   (a) ***According to the particular circumstances under which the plant and/or process is used and maintained,***

   (b) ***As new hazards are identified or as risks are re-assessed,***

   (c) ***As new or revised control measures are implemented,***

   (d) ***As and when work procedures are altered.***

   Although every attempt has been made by to identify reasonably foreseeable circumstances, no guarantee as to the completeness of this assessment is implied or provided.

4. *"Preliminary" is placed in this document to indicate that the Controls listed in* ***Columns C and E*** *are a practicable way of controlling the risks arising out of the Hazards listed in* ***Column B.*** *"Preliminary" status remains in place until the "Management of the Unit" agrees that the assessment is complete and that the controls proposed are practicable.*

5. ***Column Y has*** *been provided on the document to allow the "Management of the Unit" to record that their Hazard Identification, Risk Assessment, and Risk Control process has been completed and that all controls are in place and operating. When* ***Column Y*** *is completed, the document becomes a record of the completeness of the process and the documentation (subject to any changes which need to be further reviewed in accordance with Item 3 above).*

6. *The use of the word "AND" or "&" in the supplementary risk control measure column is intended to mean that the combination of risk control measures are to be implemented on the whole not in part.*

Risk Management

Risk management is a five-step process for controlling exposure to health and safety risks associated with hazards in the workplace.
To properly manage exposure to risks, a person must:

(a) Identify hazards;
(b) Assess risks that may result because of the hazards;
(c) Decide on appropriate control measures to prevent or minimise the level of the risks;
(d) Implement control measures; and
(e) Monitor and review the effectiveness of the measures.

Hazards and risks are NOT the same thing.
*A **hazard** is something with the potential to cause harm. This can include substances, plant, work processes or other aspects of the work environment.*
***Risk** is the likelihood that death, injury or illness might result because of the hazard.*

As examples:

- *The hazard is electricity—the risk is the likelihood that a worker might be electrocuted because of exposure to electrical wires that are inadequately insulated.*
- *The hazard is a 40 kg bag—the risk is the likelihood that a worker might suffer back strain from manually lifting 40 kg bags.*
- *The hazard is carbon monoxide—the risk is the likelihood that a worker might suffer carbon monoxide poisoning because they are using a petrol-operated pump in a well.*

When undertaking risk management:

(a) Involve workers in the process; (it is legal requirement that all stakeholders are consulted)
(b) Don't use it to justify a decision that has already been made;
(c) Consider good industry practice; and be aware of the current State of Knowledge in relation to the hazard
(d) Record any risk management activities undertaken.

Under the relevant Workplace Health and Safety Acts, to properly manage exposure to risks, a person should consider the appropriateness of control measures in the following order (sometimes referred to as the 'Hierarchy of Control'):

(a) Eliminating the hazard or preventing the risk; or
(b) If eliminating the hazard or preventing the risk is not possible, minimising the risk by measures that must be considered n the following order:

(i) Substituting the hazard giving rise to the risk with a hazard giving rise to a lesser risk;
(ii) Isolating the hazard giving rise to the risk from anyone who may be at risk;
(iii) Minimising the risk by engineering means;
(iv) Applying administrative measures; and
(v) Using personal protective equipment.

Examples of subparagraph (iii)—redesigning work, plant, equipment, components or premises.
Examples of subparagraph (iv)—training, reasonable hours of work.

The higher in the hierarchy of control, the better and more reliable the control is. In practice, several control options are often used in combination. Personal protective equipment is usually used in conjunction with other control measures.
Control measures must be implemented before work commences.