

Risk Assessment

Exhibit Name	FORCES		
Area	West Corridor		
Who is at Risk	Employee, public, volunteers, visitors	No. of exhibits	15

Compiled by (print) **Sandra Voss** (sign)

Hazard Identified	Likelihood (L,M,H)	Severity (L,M,H)	Risk (L,M,H)	Action Required	Date Action Taken	By Whom
Mains electricity to: Flying Ring, Vacuum lift, Build a motor, vacuum former, collision, bouncing balls, electromagnetic crane, air stream – risk of electric shock	L	H	M	Annual PAT test	17/01/08	K. Long
Flying Ring – trapped fingers underneath the ring	L	L	L	Adult supervision	When used	
Vacuum Lift – trapped fingers Falling from chair	L L	L L	L L	Adult supervision Stop put on to minimise height that chair rises	28/09/05	S.Pizzey
Bulid a Motor – moving parts catching long hair	L	L	L	Shield the moving parts as much as possible Adult supervision	17/10/05	Workshop
Magnetic Brake - risk of cuts	L	L	L	Adult supervision		
Vacuum Former - risk of burns	M	M	H	Only operated by trained staff, provide signage, manned constantly when switched on	On Installation	
Orbits - risk of choking	L	L	L	Provide signage – not suitable for children under 3 years. Adult supervision		
Parabola - friction burns	L	M	M	Adult supervision		
Anti Gravity Wheel - risk of cuts, friction burns, falling from wall	L	L	L	Adult supervision Check it is securely fastened to wall	Daily	Staff on duty
Collision - risk of pinched fingers	L	L	L	Adult supervision		
Magic Bowl – slip hazard if water spilled	L	M	M	Mop and dry wet floor, safety signs when appropriate	When appropriate	Staff on duty
Horizontal Wave – plastic knob on dangling rope hitting eyes, head etc, breaking lights	M	L	M	Adult supervision, prevent people swinging the rope, keep rope as short as possible		

Likelihood: The chance of the hazard or event actually occurring during the life of the exhibit.
High (H): Could happen frequently Medium (M): Could happen occasionally Low (L): Could happen, but only rarely

Severity: The extent of the harm (injury or ill health) should the hazard occur.
High (H): Irreversible injury Medium (M): Reversible injury requiring a week to recover Low (L): Negligable injury requiring First Aid

Risk Rating: Once the likelihood & severity have been determined, the risk is calculated as follows:			
	Likelihood		
Severity	H	M	L
H	High	High	Medium
M	High	High	Medium
L	Medium	Medium	Low

Risk Assessment

Exhibit Name	New Forces		
Area	West Corridor	No. of exhibits	15

Description of exhibit function	
FLYING RING	An aluminium ring is fired over an arch track when the buttons are pushed
VACUUM LIFT	A person sits on a seat and is raised into the air by the suction of a vacuum cleaner.
BUILD A MOTOR	2 magnets are brought together around a coil of wire and 2 electrical contacts are brought together at the end of the coil. The coil rotates rapidly and a motor is formed
MAGNETIC BRAKE	2 discs are rotated and a magnet is slid between the discs to slow the movement
VACUUM FORMER	Plastic signs are made using a heating element and a vacuum pump mechanism
ORBITS	Small balls are spun around the edge of a well and collected at the bottom.
PARABOLA TANK	A circular tank is spun which contains another tank of liquid. A parabola shape is formed in the liquid by the force of motion
ANTI GRAVITY WHEEL	A vertical wheel is spun and a bean bag is dropped inside it. The bean bag spins around with the wheel until it slows down
COLLISION	Trucks attached to an air stream track are slid along the track to see what happens when they collide. Loose weights are available to add to the trucks
CHAOTIC PENDULUM	A knob is turned to set the pendulum swinging inside the enclosed wheel
BOUNCING BALLS	A movable hoop is positioned so that a bouncing ball goes through the middle of it
TRAIN GENERATOR	A handle is turned to generate enough energy to make an electric train move on the track above the corridor
ELECTROMAGNETIC CRANE	An electromagnet is moved over magnetic and non-magnetic objects
AIR STREAM	A ball is placed in a stream of air coming through a tube. The tube is manoeuvred to try and get the ball through a hoop
CYCLOID TRACK	Balls are rolled down 2 different tracks to see which one runs the fastest
MAGIC BOWL	A brass bowl with handles is half filled with water. When the handles are rubbed with wet hands the vibrations cause the water to "dance"
HORIZONTAL WAVE	A cord is pulled to start a wave moving to the far end of the corridor and back

Risk assessment is a simple process that must be applied to show that all identified risks have been eliminated or minimised to an acceptable level.

Any risk identified during a regular review of the exhibit should be recorded on the risk assessment form. All actions taken should be recorded to illustrate that this risk has been reduced to a minimum

