

Risk Assessment Form

Site	RAF Museum Cosford	Event Location	Cosford	Date of Assessment	24/11/2021
Event Name	Access and Learning General Risk Assessment				
Description of Event/Activities	General risk assessment for both onsite and online workshops, self-guided visits and learning events at RAF Museum Cosford				
Lead Assessor (Name)	Sophie Millward	Lead Assessor Signature	S Millward	Review frequency	Annual
Assessment Team (Names)	Access and Learning Officers: Jack Rowley, Kelly Harley, Mary Kujawski Head of Access and Learning Cosford: Julie Brierley		Version Number	1	
Approved By (Name)	Julie Brierley	Approvers Signature		Approved Date	9/2/22

1. Risk matrix and risk level rational

Likelihood of a harmful event – Likelihood is based on information known about the hazard and on hazard-related events experienced in similar circumstances.

Likelihood (expected frequency)	
1 - Not likely	Likelihood is assessed as not likely if a harmful occurrence resulting from exposure is possible but improbable. The assessor assumes that it will not occur, but the occurrence is not impossible based on activities.
2 - Seldom	Likelihood is assessed as seldom where a harmful occurrence is expected to happen infrequently. The event is viewed as a remotely possible and may occur at some time. Usually, several things must go wrong at once for the harmful event to happen based on activities.
3 - Occasional	Likelihood is assessed as occasional if a harmful occurrence is expected to happen sporadically or immediately because of exposure – the event is neither common nor uncommon based on activities.
4 - Likely	Likelihood is assessed as likely if a harmful occurrence is expected to happen several or numerous times. – the event commonly happens based on activities.
5 - Frequent	Likelihood is assessed as frequent if a harmful occurrence is known to happen continuously, regularly or inevitably based on activities.

Consequence of a harmful event – The consequence level does not consider likelihood: consequence is an estimate of the loss that would follow the envisaged event.

Consequence (expected consequences)	
1 - Insignificant	Consequence is estimated as insignificant if the consequences of an event, if it occurs, are expected to include, no injury, illness, loss or damage: no operational degradation or reduction in future capability.
2 - Minor	Consequence is estimated as minor if the consequences of an event, if it occurs, are expected to include, minor injury, illness, (3 days off work) loss or damage: slight operational degradation: or reduction in future capability.
3 – Significant	Consequence is estimated as significant if the consequences of an event, if it occurs, are expected to include, significant injury, illness, (7 days+ off work) loss or damage: significant operational degradation: or reduction in future capability.
4 - Severe	Consequence is estimated as severe if the consequences of an event, if it occurs, are expected to include severe injury, illness, (long term) loss or damage: severe operational degradation: or reduction in future capability.
5 - Critical	A Consequence level is estimated as critical when consequence of an event, if it occurs, are expected to include death, unacceptable loss or damage: immediate operational failure: or loss of future capabilities

Risk level Matrix – Likelihood of a harmful event x Consequence of a harmful event = Risk Level explanation

Risk Matrix		Consequence (expected consequences)				
		1 – Negligible	2 - Minor	3 – Significant	4 – Severe	5 – Critical
Likelihood (expected frequency)	1 – Not Likely	1 = Low	2 = Low	3 = Tolerable	4 = Tolerable	5 = Tolerable
	2 - Seldom	2 = Low	4 = Tolerable	6 = Tolerable	8 = Increased	10 = Increased
	3 - Occasional	3 = Tolerable	6 = Tolerable	9 = Increased	12 = Increased	15 = High
	4 – Likely	4 = Tolerable	8 = Increased	12 = Increased	16 = High	20 = High
	5 – Frequent	5 = Tolerable	10 = Increased	15 = High	20 = high	25 = High

2. Residual risk rational and control measures

Residual Risk – Residual risk is the risk that remains after controls are applied. Dependent on the level risk the following actions should be considered:

Low Risk (1-2)	Tolerable Risk (3-6)	Increased Risk (8-12)	High Risk (15-25)
Acceptable activity or policy, Additional consideration: No further actions required	Acceptable activity or policy, with controls and suitable supervision Additional consideration: Efforts should be made to reduce the risk further, but the cost of prevention should be carefully measured to ensure that they are reasonably practicable.	Acceptable activity or policy, with stringent controls and high levels of supervision Additional consideration: Efforts must be made to reduce the risk further, but the cost of prevention should be carefully measured to ensure that they are reasonably practicable.	Unacceptable activity or policy. Additional considerations: No work is to be undertaken unless the risk level is reduced. If immediate actions to reduce the risk are not apparent, stop work and seek advice from competent specialists as a matter of urgency.

Control measures – Control measures are to be considered and implied in order of priority. The hierarchy of controls table below shows these priorities:

Hierarchy of controls	
1st Elimination	Redesign the job or eliminate materials or substances so that the hazard is removed or eliminated.
2nd Substitution	Replace the materials, substances, or process with a less hazardous one
3rd Engineering controls	Use work equipment or other measures. For example, to prevent falls where you cannot avoid working at height, install or use additional machinery to control risks from dust or fumes or separate the hazard from operators by methods such as enclosing or guarding dangerous items of machinery or equipment. Give priority to measures which protect collectively over individual measures.
4th Administrative controls	These are all about identifying and implementing the procedures you need to work safely. For example: reducing the time workers are exposed to hazards (e.g. by job rotation): prohibiting use of mobile phones in hazardous areas: increasing safety signage and giving training.
5th Personal protective equipment (PPE)	Only after all the previous measures have been tried and found ineffective in controlling risks to a reasonably practicable level, must personal protective equipment (PPE) be used.

Suitability of controls – The Suitability of the control measure(s) can be assessed by applying the following:

Suitability of controls	
Feasibility	The organisation has the capability to implement the controls
Acceptability	The benefit gained by implementing the controls justifies the cost in resources and time. This assessment of acceptance is largely subjective. Experience, company guidance and other external restrictions can influence the outcome.
Suitability	The control(s) removes the hazard(s) or mitigates the residual risk to an acceptable level (to be determined by a responsible individual).
Supported	Adequate personal, equipment, supplies and facilities are available to implement the proposed controls.
Explicitness	The controls clearly specify who, what, where and when, why and how each control will be used.
Standards	Guidance and procedures for implementing the controls are clear, practicable and specific.
Training	The knowledge and skills of the workforce are adequate to implement the controls.
Leadership	Management is ready, willing, and able to implement the controls
The individual	Individual members of the workforce are sufficiently self-disciplined and capable of implementing the control.

3. Definitions and terms

Definitions	Who may be harmed												
<p>Definition of hazard:</p> <p>A hazard is the potential for a substance, activity or process to cause harm</p> <p>Definition of harm:</p> <p>Harm is the infection or ill health of people, or operational, or reputational loss because of an event. See opposite for whom may be harmed.</p> <p>Definition of risk:</p> <p>Risk is the Likelihood of a substance, activity or process to cause harm and the Consequence or consequences of that harm. This is referred to as the Risk Level.</p> <p>Definition of Controls or Control measure:</p> <p>Controls are methods used for reducing the risk to 'as low as reasonably practicable.</p> <p>Definition of significant risks:</p> <p>Those risks which arise more often and/or those with more serious consequences</p>	<p>Based on activities in this assessment, those that may be harmed have been identified as follows:</p> <ul style="list-style-type: none"> Directly affected <table border="1" data-bbox="1249 550 2027 957"> <tbody> <tr> <td style="background-color: #1a3d54; color: white;">Staff</td> <td></td> </tr> <tr> <td style="background-color: #1a3d54; color: white;">Public &Visitors</td> <td></td> </tr> <tr> <td style="background-color: #1a3d54; color: white;">Volunteers</td> <td></td> </tr> <tr> <td style="background-color: #1a3d54; color: white;">Contractors</td> <td></td> </tr> <tr> <td style="background-color: #1a3d54; color: white;">Young Persons</td> <td></td> </tr> <tr> <td style="background-color: #1a3d54; color: white;">Others: State</td> <td></td> </tr> </tbody> </table>	Staff		Public &Visitors		Volunteers		Contractors		Young Persons		Others: State	
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4. Risk Assessment Findings

Hazard and/or hazardous event	Who or what is at risk	Likelihood x consequence = Initial Risk Level			Controls in place	Likelihood x consequence = Residual Risk Level			Further actions required or additional information
		L	C	R		L	C	R	
Visiting the Museum – Trips, slips and falls	ALL	2	2	4	<ul style="list-style-type: none"> ▪ Designated pathways indoors and outdoors ▪ Any hazards at floor height are marked clearly ▪ Wet or mopped floors will always be barriered off or marked clearly with wet floor signs ▪ Running is not allowed in any of the hangars ▪ All Visitor Experience and Access & Learning staff are first aid trained. ▪ Daily health & safety checks are carried out of buildings to remove any risks 	1	2	2	
Crossing roads – fatalities or injuries due to collision with vehicles	ALL	2	4	8	<ul style="list-style-type: none"> ▪ Strict speed limit around site of 15mph ▪ All car parks have a central walkway with crossing lines ▪ Staff to wear hi-vis when out on car parks ▪ Visitors encouraged to use pathways at all times 				
Contact with COVID-19 virus	ALL	3	3	9	<ul style="list-style-type: none"> ▪ Deep cleaning in all teaching and eating spaces where applicable ▪ Teaching and eating spaces are all well ventilated – doors and windows open weather permitting ▪ Cleaning staff regularly rota'd to clean all high touch point areas ▪ Staff to wear masks and regularly sanitise hands and equipment and to social distance <ul style="list-style-type: none"> ▪ Staff encouraged to test regularly ▪ Students and teachers encouraged to wear masks and sanitise regularly 	2	3	6	

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					<ul style="list-style-type: none"> Limited visitor numbers in place to assist with social distancing PPE available all over site for all visitors and staff 				
Safeguarding – Lost Child	Young Persons	2	3	6	<ul style="list-style-type: none"> Museum has a strict lost child guideline policy that all staff are trained in. Visiting staff to inform any member of Museum staff to ensure the policy is undertaken All internal and external spaces on Museum grounds have CCTV which can be reviewed 	2	2	4	
Safeguarding – Lost Vulnerable Person	Public and Visitors	2	3	6	<ul style="list-style-type: none"> Museum has a strict lost vulnerable person guideline policy that all staff are trained in. Visiting staff to inform any member of Museum staff to ensure the policy is undertaken All internal and external spaces on Museum grounds have CCTV which can be reviewed 	2	2	4	
	ALL	3	3	9	<ul style="list-style-type: none"> All Staff are DBS checked and trained and briefed in Safeguarding protocols and procedures as per the RAF Museum policy 	2	3	6	

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Safeguarding – risk of sexual abuse, neglect, violence, or harassment					<ul style="list-style-type: none"> Staff are trained in how to respond to disclosures and any safeguarding incidents. Supervisory staff are trained to level 3 Designated Safeguarding Officers. Heads of Department are trained to Designated Safeguarding Leads. 				
First Aid – Incidents or injury from workshops or general visits	ALL	3	3	9	<ul style="list-style-type: none"> All staff on site are first aid trained regularly Staff are trained to report any incidents in the correct way All spaces have first aid kits available and ready to use, as well as defibrillators around site 	2	2	4	
Fire – misuse of electrical equipment resulting in building fire	ALL	2	5	10	<ul style="list-style-type: none"> All hangar staff are Fire Warden trained Electrics are PAT-tested annually, and any new electricals are PAT- tested upon purchase 	1	5	5	
Radiation – risk of ill health from contact with radioactive aircraft/instruments	ALL	2	4	8	<ul style="list-style-type: none"> All aircraft are regularly tested and monitored for radioactivity Time limits and ratings in place for specific aircraft which all staff are aware of and guidance is regularly updated by the conservation team 	1	4	4	

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					<ul style="list-style-type: none"> Aircraft barriered to prevent close contact with members of public and visitors 				
Aircraft access – injuries due to trips or poor condition of exhibits	ALL	3	2	6	<ul style="list-style-type: none"> All participants briefed before access Collections team to ensure correct equipment is in place before access and risk assessed Correct opening procedures undertaken and check sheet completed First Aid staff present 	2	2	4	
Movement of Aircraft – collision with moving aircraft resulting in injury	ALL	2	4	8	<ul style="list-style-type: none"> Aircraft only moved when the Museum is closed to the public In the event that aircraft are moved during opening times, the pathway and area will be barriered off by conservation staff All conservation staff will wear high-vis and direct staff and public away from movement areas Hangars will be closed to all in the instance of moving aircraft within 	1	4	4	

Access and Learning Onsite Workshops include:

- Second World War Spirit of the Blitz
- Second World War Battle of Britain
- Second World War Artefact Handling
- Cold War Clash of Conflicts
- Cold War Artefact Handling
- Flying Equipment through the Ages
- Parachutes and Helicopters
- Rockets
- Rocket Cars

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<ul style="list-style-type: none"> • Rover Repair • Smart Materials • STEM Days • Sphero: Pilot Communications • Sphero: Asteroid Field • Drone School • Christmas at War 									
Touching/sharing objects and surfaces – increased contact with COVID-19	ALL	2	2	4	<ul style="list-style-type: none"> ▪ All surfaces and objects are regularly cleaned before and after any sessions ▪ PPE provided in all learning spaces if necessary to clean further ▪ For shared equipment, staff will try and provide enough equipment for one per student. If not, staff member will wipe down objects with sanitiser in between uses. 	2	2	4	
Collapsed tables causing injury	ALL	2	3	6	<ul style="list-style-type: none"> ▪ Tables to be checked regularly by Access and Learning staff ▪ Tables to be set up and set down properly when in use ▪ Students advised not to lean on tables 				
Use of scissors and sellotape dispensers– cuts and injuries	Young People	2	2	4	<ul style="list-style-type: none"> ▪ Safety scissors to be provided ▪ Students to be briefed on how to use scissors and supervised throughout workshop ▪ Adults to help with Sellotape dispensers if needed 	1	2	2	
Use of glue – ingested or inhaled	Young People	2	2	4	<ul style="list-style-type: none"> ▪ Use of non-toxic glue within sessions 	1	2	2	

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					<ul style="list-style-type: none"> Students to be supervised throughout workshop 				
Use of skewers and wooden picks – cuts or punctures to skin	Young People	2	2	4	<ul style="list-style-type: none"> Students to be supervised at all times and shown how to correctly use materials to prevent injury Gloves available for preventative measures 				
Use of Rocket launcher and foot pump – trapped fingers or bruising	ALL	2	2	4	<ul style="list-style-type: none"> Equipment maintained and checked regularly Learners to be observed and supervised at all times 	1	2	2	
History sessions – fear or panic due to distressing sounds (air raid siren), spaces (anderson shelter) or images (Cold War – nuclear bomb)	Young People, Public and Visitors	2	2	4	<ul style="list-style-type: none"> Museum staff to enquire with teaching staff about any specific needs of the group and if any students have a nervous disposition Staff to alert students beforehand that distressing content may come up 	1	2	2	
Use of devices for coding – access to explicit or personal information	ALL	2	3	4	<ul style="list-style-type: none"> Devices to be logged into a general learning account to prevent personal data being saved on the devices Devices checked regularly to ensure that they are safe for use for students 	1	3	3	
Use of Sphero robots – slips, trips and falls	ALL	2	2	4	<ul style="list-style-type: none"> Sphero's to only be used inside of VEX board or wooden frame Sphero's to always be lit at maximum to ensure they can be seen All to be advised to keep robots within parameters and to check floor before moving around space 	1	2	2	
Use of Sphero robots – flashing lights	ALL	2	3	6	<ul style="list-style-type: none"> Students to always be supervised when using spheros Adults to be made aware of any sensory issues or medical diagnoses regarding to 	1	3	3	

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					flashing lights and Sphero lights to be adjusted in the event of any issues				
Use of Museum iPads/Devices – safeguarding or GDPR issues	Young People	1	2	2	<ul style="list-style-type: none"> iPads and Devices to be regularly checked for any personal information or photographs If students are using Museum devices, they should be restored after use. Adult supervision when using Museum assets 	1	2	2	
Collision with falling objects leading to head injury (Parachutes and Helicopters/Rover Repair)	ALL	2	2	4	<ul style="list-style-type: none"> Students to be accompanied upstairs and only told to drop items when all is clear Staff waiting around drop area to ensure no-one is stood beneath 	1	2	2	
Collision with flying objects leading to head injury (Rockets or Gliders)	ALL	2	2	4	<ul style="list-style-type: none"> All students briefed prior to flight Assign 'air traffic controllers' (Staff or pupils) to ensure gliders are flown in an orderly way towards an open area and always away from people. Ensure pupils do not run to retrieve rockets/ gliders or measure flights while other students are still launching gliders. Require pupils to not launch a rockets/glider when people are in the potential flight path. 	1	2	2	
Slips, trips and falls up or down stairs	ALL	2	2	4	<ul style="list-style-type: none"> Students accompanied upstairs by members of staff and instructed to hold hand rail 	1	2	2	
Working from height – potential falls and injury	ALL	2	3	6	<ul style="list-style-type: none"> Hand rails in place for any balconies and high areas Students to be accompanied by adults at all times 	1	3	3	

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Allergic reactions to substances used within workshops or materials in clothing	ALL	2	3	6	<ul style="list-style-type: none"> Museum staff to be fully aware of any allergens present in materials used and to let anyone handling such items know before hand PPE to be available to prevent contact in any instances First Aid trained staff available at all times 	1	3	3	
Access and Learning Online Workshops include: <ul style="list-style-type: none"> Second World War Spirit of the Blitz Second World War Battle of Britain Flying Equipment through the Ages Parachutes and Helicopters Virtual STEM Days Christmas at War Event specific live-streamed webinars (KS3 Glider Challenge, STAAR Programme) 									
Using online platforms - Pupils maybe exposed to upsetting or inappropriate content online	Young People	2	3	6	<ul style="list-style-type: none"> One member of A&L staff will be monitoring the feed at all times. Students are to be supervised at all times by an adult Teachers or RAFM staff could shut the feed down immediately if necessary. Schools and RAFM staff will have agreed to and signed a code of conduct prior to the session. Only pre-booked schools will be sent the link to join the online session. 	1	3	3	
Using online platforms – safeguarding or GDPR	ALL	2	2	4	<ul style="list-style-type: none"> Museum staff to advise at beginning of all sessions for teachers not to use personal names when utilising Q&A function Museum staff will only publish anonymous questions/announcements 	1	2	2	

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					<ul style="list-style-type: none"> Museum staff will not call out any school, teacher or pupil names when answering queries Museum staff to moderate for any disclosures via Q&A function Museum staff to ensure that the live stream setting is full vetted for safeguarding purposes, including removal of any background materials or personal identification All online sessions to run via Microsoft Teams Live Stream platform – the students will be able to see the Museum presenter but the Museum presenter cannot see the students. 				
Access and Learning events include but not limited to: <ul style="list-style-type: none"> Beyond Image KS2/KS3 Glider Challenge Forces in STEM STAAR Programme Cosford Air Show Ed Tech Convention Youth Teen Fiction Awards School Interview Days Museum Sleepovers 									
Safeguarding – risk of neglect, abuse or violence by external speakers/STEM Ambassadors/partners interacting with students	Young People	2	3	6	<ul style="list-style-type: none"> All adults that will be interacting with young people to provide DBS check, or be supervised by someone with a DBS certificate Speakers to be vetted and any presentations to be checked to ensure that they are appropriate for audience 	1	2	2	

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		L	C	R		L	C	R	
					<ul style="list-style-type: none"> Safeguarding procedures and protocols made available Separate toilet and lunch facilities made available for adults, to ensure they are not sharing with any young people 				
Use of staple gun – cuts, puncture wounds or severe injury	Staff	2	3	6	<ul style="list-style-type: none"> Safety goggles available Correct procedures abided by for use of staple gun Safety catch always used when gun is not in use 	1	3	3	
Use of mallet for wooden stakes for event signage – contusions and injury from blunt force	Staff	2	3	6	<ul style="list-style-type: none"> Two members of staff around when driving stakes in using mallet to ensure that one person can hold the stake and prevent injury Rubber mallet to be used to prevent severe injury Check that ground is pliable to ensure that there will be softened impact when mallet is in use 	1	3	3	
Use of hot water urns - burns and scalds	ALL	2	4	8	<ul style="list-style-type: none"> Signage to be put in place around hot water urns Correct instructions included and supervision in place if required 	1	4	4	
Overnight stays and chaperoning – safeguarding of children whilst attending residential or sleepovers	ALL	2	3	6	<ul style="list-style-type: none"> All staff that are chaperoning are DBS checked and made aware of the safeguarding protocol and process A Designated Safeguarding Lead will stay overnight to deal with disclosures or safeguarding incidents There will be one chaperone per 10 students, and at least 2 of each gender chaperone 	1	3	3	

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					<ul style="list-style-type: none"> Chaperones will have access to parent/guardian information at all times via secure online platform incase of emergency 				
Use of knives – cuts and injuries to self and others	ALL	2	4	8	<ul style="list-style-type: none"> Museum staff to sign knives in and out of areas and ensure knowledge of whereabouts at all times Ensure pupils are aware of all the supplied knife safety guidance and that they know they are required to follow it. Provide a dedicated and supervised cutting area and that knives remain in it. Ensure knife blades are retracted when not in use. Ensure appropriate cutting mats or boards are used. Ensure only safety rulers are used and that knives remain sharp to avoid 'tearing out' of the blade from the material. Establish 'traffic control' for cutting areas (e.g. no fast moving, always check that people are not holding a knife when passing them, etc.) If there is any concern with any cutting task, have it done by a responsible adult. Print and share knife safety guidance Display safety guidance near areas where pupils will use knives. No "snap off" blades to be used. 	1	4	4	First Aid staff to be present at all times
Use of glue gun: Possible burns through misuse	ALL	2	3	6	<ul style="list-style-type: none"> Ensure the gluing work station is supervised at all times by STEM ambassadors/volunteers/Museum staff 	1	3	3	First Aid staff to be present at all times

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		L	C	R		L	C	R	
					<ul style="list-style-type: none"> ▪ All glue guns are new and PAT tested and are low temperature cool guns so do not reach high temps. ▪ Glue sticks used are non-toxic and safe ▪ Switched off when not in use ▪ School staff should brief students on safe use. 				