### **Risk Assessment – Your Health and Safety Plan** Page 1 of 8

Risk Assessment – Your Health and Sa	afety Plan of Action:		Hierarchy	of Risk Control Measures
<ul> <li>Use this form to capture your risk ass</li> <li>You can do this individually or as part</li> <li>You can share your assessment with o produce safer ways of working.</li> <li>Remember to monitor your arrangement</li> </ul>	sessment (remember to apply the hierarch	ork/activity safer by design and to w your assessment for any change	es (e.g.	EliminationPhysicall removing hazardSubstitutionReplacing the hazardSubstitutionIsolating people 
School/SBU/Department:	SPECS/PAM	Location(s) of Activity: (Campus, Building, Room)		ordbury, Observatory
Assessor Name:	David Campbell & Sam Rolfe	Assessor Role (Job Title):	Princi Tutor	ipal Technical Officer, Technica
Assessment Date:	19/09/2024	Assessment Review Date: Set a review date for your ass	essment.	19/09/2025
Activity Title/Description:	Bayfordbury Observatory, general use o			
<b>Agreed with:</b> (Line Manager or Representative)	Name/Signature: Giorgos Gkizelis The line manager/representative provide	rean	ent so thev can gare	ee a safe approach.
<b>Checked by:</b> (H&S Advisor or Lab Manager)	Name/Signature: David Campbell         If necessary – refer to your SBU approva	cun		

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Note: further guidance for completing your risk assessment is available on the last page of this plan.

				Risk Assessment and Risk Management >											
IDENTIFY HAZARDS	WHO COULD E HO		Risk Before Controls			EVALUATE THE RISK AND DECIDE ON CONTROLS		Risk After Controls		RECORD YOUR FINDINGS AND IMPLEMENT THEM					
Hazards associated with the activity/task/Event? What are the significant hazards with the potential to cause harm? Review the activity, location & people involved. Check equipment or manufacturer Instructions. Check UH, Sector or HSE guidance.	Who could be harmed? Who is at risk from harm: Students, Staff, Visitors and/or Contractors?	How could they be harmed? Types of injury: Major or Minor Injuries from Lifting/Handling, Slips/Trips/Falls or III Health Effects.	Likelihood	Consequence	Risk Rating	What controls are currently in place and what further action is necessary to reduce the risk? What is already in place to reduce the likelihood of harm and/or impact of harm occurring? What further actions or additional controls are required to reduce the remaining risk?	Likelihood	Consequence	Risk Rating:	<b>Remaining Actions –</b> Actions by <b>Who</b> and by <b>When</b> ?	Actions Completed Completed (Y/N)				
Fire and Building Evacuation: In the event of a fire - fire detection in the Patrick Moore Building	Staff, students, visitors, contractors, public	Injury or death from fire or smoke inhalation	2	5	10	All existing controls apply to be sure adequate fire safety evacuation measures are in place. <u>Patrick</u> <u>Moore Observatory Fire Plan is available on Herts Hub</u> and a copy is displayed in the PMB foyer. Line manager to be aware of personnel on site and using facilities. Security to be informed of site use outside of normal working hours (as per UPR HS 05). People are advised not to fight the fire unless in accordance with training, but to raise the alarm, evacuate and wait in the designated safe area. Weekly tests of fire detection system in PMB are conducted and recorded by Estates. Annual fire drills are conducted by UH Safety. Staff undertake regular Fire Awareness training.	1	5	5	N/A					
Fire and Building Evacuation: Domes/Huts	Staff, students, visitors, contractors	Smoke inhalation, burns, mental distress, death	2	5	10	All existing controls apply to be sure adequate fire safety evacuation measures are in place. <u>Bayfordbury</u>	1	5	5	N/A					

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Hazard Assessment >					essm	nent and Risk Management >						
IDENTIFY HAZARDS	WHO COULD E HO			Risk Before Controls		EVALUATE THE RISK AND DECIDE ON CONTROLS		Risk After Controls		RECORD YOUR FINDINGS AND IMPLEMENT THEM		
Hazards associated with the activity/task/Event? What are the significant hazards with the potential to cause harm? Review the activity, location & people involved. Check equipment or manufacturer Instructions. Check UH, Sector or HSE guidance.	Who could be harmed? Who is at risk from harm: Students, Staff, Visitors and/or Contractors?	How could they be harmed? Types of injury: Major or Minor Injuries from Lifting/Handling, Slips/Trips/Falls or III Health Effects.	Likelihood	Consequence	Risk Rating	What controls are currently in place and what further action is necessary to reduce the risk? What is already in place to reduce the likelihood of harm and/or impact of harm occurring? What further actions or additional controls are required to reduce the remaining risk?	Likelihood	Consequence	Risk Rating:	Remaining Actions – Actions by Who and by When?	Actions Completed Completed (Y/N)	
						Observatory Domes Fire Plan is available on Herts Hub and a copy is displayed in the PMB foyer. Line manager to be aware of personnel on site and using facilities. Security to be informed of site use outside of normal working hours (as per UPR HS 05). People are advised not to fight the fire unless in accordance with training, but to raise the alarm, evacuate and wait in the designated safe area. Fortnightly tests of smoke detectors are conducted and recorded by SPECS technical staff. Annual fire drills are conducted by UH Safety. Staff undertake regular Fire Awareness training.						
Movement around the site (including at night): Outside on pathways, uneven grass and rabbit holes.	Staff, students, visitors, contractors	Trips, slips, falls	4	4	16	Staff to include in inductions or event information a warning to stay on pathways to avoid hazards. If lighting is off to reduce light pollution, use a torch when moving around.	2	4	8	N/A		

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Hazard Assessment >			Ris	k Ass	essm	ent and Risk Management >						
IDENTIFY HAZARDS	WHO COULD B HO		Risk Before Controls			EVALUATE THE RISK AND DECIDE ON CONTROLS		sk Afi ontro		RECORD YOUR FINDINGS AND IMPLEMENT THEM		
Hazards associated with the activity/task/Event? What are the significant hazards with the potential to cause harm? Review the activity, location & people involved. Check equipment or manufacturer Instructions. Check UH, Sector or HSE guidance.	Who could be harmed? Who is at risk from harm: Students, Staff, Visitors and/or Contractors?	How could they be harmed? Types of injury: Major or Minor Injuries from Lifting/Handling, Slips/Trips/Falls or III Health Effects.	Likelihood	Consequence	Risk Rating	What controls are currently in place and what further action is necessary to reduce the risk? What is already in place to reduce the likelihood of harm and/or impact of harm occurring? What further actions or additional controls are required to reduce the remaining risk?	Likelihood	Consequence	Risk Rating:	Remaining Actions – Actions by Who and by When?	Actions Completed Completed (Y/N)	
Intruders on site	Staff, students, visitors, contractors	Confrontation with intruders, anxiety, physical threat or harm.	4	4	16	Regular patrols are undertaken by security. UPR HS05 contains general rules on site and personal security that must be followed, as well as specific rules governing the use of the Bayfordbury site by Astronomy staff and students.	2	4	8	Estates: A second barrier to be implemented by the BSB just beyond the car park to restrict vehicle entry to the majority of the site. To be completed by July 2025.	Ν	
Lone working	Staff, students, contractors	Injuries from trips/falls etc, mental distress, death	3	5	15	Technical staff as of date of this document included in and covered by UPR HS05, Section 8.1.3 vi. Review of accreditation programme and student ("authorised users") access to site detailed in URP. Portable lone worker alarms to be regularly tested and recorded.	2	5	10	Review and replace outdated security coverage and lone working protocols at Bayfordbury Campus currently covered by UPR HS05, Section 8.1; especially as it does not cover astronomy technical staff.		

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Hazard Assessment >	Hazard Assessment >				essm	ent and Risk Management >						
IDENTIFY HAZARDS	WHO COULD B HO		Risk Before Controls			EVALUATE THE RISK AND DECIDE ON CONTROLS		Risk After Controls		RECORD YOUR FINDINGS AND IMPLEMENT THEM		
Hazards associated with the activity/task/Event? What are the significant hazards with the potential to cause harm? Review the activity, location & people involved. Check equipment or manufacturer Instructions. Check UH, Sector or HSE guidance.	Who could be harmed? Who is at risk from harm: Students, Staff, Visitors and/or Contractors?	How could they be harmed? Types of injury: Major or Minor Injuries from Lifting/Handling, Slips/Trips/Falls or III Health Effects.	Likelihood	Consequence	Risk Rating	What controls are currently in place and what further action is necessary to reduce the risk? What is already in place to reduce the likelihood of harm and/or impact of harm occurring? What further actions or additional controls are required to reduce the remaining risk?	Likelihood	Consequence	Risk Rating:	Remaining Actions – Actions by Who and by When?	Actions Completed Completed (Y/N)	
										Technical staff to work with SPECS safety team, to be completed by July 2025.		
Electrical hazards	Staff, students, visitors, contractors	Electric shock, burns, electrocution	2	5	10	Equipment is regularly inspected by SPECS technicians, removed from use if found to be faulty and the relevant party notified to repair or replace item. PAT testing is undertaken by the School at intervals appropriate to the type and use of equipment. Regular servicing of electrical systems to be conducted and recorded by Estates (as often as required by regulations).	1	5	5	N/A		
Misbehaviour or improper use of equipment	Staff, students, visitors, contractors, public	Dangerous use of equipment, movement around site	3	4	12	Emphasis is placed on the individual to ensure general workplace behaviours is maintained. All students and staff are subjected to follow Health & Safety and Code of Conduct regulations.	1	4	4	N/A		

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Hazard Assessment >			Ris	k Ass	essm	ent and Risk Management >					
IDENTIFY HAZARDS	IDENTIFY HAZARDS WHO COULD BE HARMED & HOW		Risk Before Controls			EVALUATE THE RISK AND DECIDE ON CONTROLS		Risk After Controls		RECORD YOUR FINDINGS AND IMPLEMENT THEM	
Hazards associated with the activity/task/Event? What are the significant hazards with the potential to cause harm? Review the activity, location & people involved. Check equipment or manufacturer Instructions. Check UH, Sector or HSE guidance.	Who could be harmed? Who is at risk from harm: Students, Staff, Visitors and/or Contractors?	How could they be harmed? Types of injury: Major or Minor Injuries from Lifting/Handling, Slips/Trips/Falls or III Health Effects.	Likelihood	Consequence	Risk Rating	What controls are currently in place and what further action is necessary to reduce the risk? What is already in place to reduce the likelihood of harm and/or impact of harm occurring? What further actions or additional controls are required to reduce the remaining risk?	Likelihood	Consequence	Risk Rating:	Remaining Actions – Actions by Who and by When?	Actions Completed Completed (Y/N)
						For visitors, contractors, public: polite reminders can be issued by staff and security can be called if required.					
Contact with radio telescopes	Staff, students, visitors, contractors	Collision injuries with remote controlled/autom ated moving dishes	3	4	12	Fencing is installed around each radio telescope with signs visible from all sides to discourage people from approaching equipment and prevent collision. Cameras allows operators to view each telescope and the immediate surroundings for any dangers. Local induction includes making aware of the radio telescopes as a potential hazard, and to stay on the paths.	1	4	4	N/A	
Contact with external equipment, including the gantry	Staff, students, visitors, contractors	Collision, trip/fall injuries	3	4	12	Local induction includes making people aware of the external equipment as potential hazard, that no one other than technical staff should be interacting with it and to stay on the paths. Gantry should not be accessed by anyone other than technical staff (unless accompanied by technical staff), tensile barrier and signage in place to discourage entry.	1	4	4	N/A	

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#### **Guidance Pages:**

Risk Assessment Guidance (here you will find useful tools to help you assess your risks and produce your health and safety plan):

				Consequence (Severi	ty)	
		1 Negligible/ Insignificant	2 Minor Impact/Injury	3 Moderate Impact/Injury	4 Major Impact/Injury	5 Severe Impact/Fatality
	Risk Matrix	Minimal to no harm or impact/no absences.	Minor injury or ill health. Basic first-aid/no absences.	Injury or ill health requiring first- aid support or medical treatment. Short-term impact/absences.	Major injury or ill health requiring immediate attention, emergency services or transport to A&E. Long-term impact/absences (over 7 days).	Severe (life changing) injuries or fatalities. Multiple casualties. Emergency Services Required.
	<b>5 Certain</b> This will happen imminently.	Medium 5	High 10	High 15	Very High 20	Very High 25
	<ul> <li>4 Very Likely</li> <li>It's highly likely this <u>will</u> happen at some point.</li> <li>Has happened before in this location or elsewhere within UH – known incidents within the sector or industry.</li> </ul>	Low 4	Medium 8	High 12	High 16	Very High 20
Likelihood	<ul> <li>3 Likely</li> <li>Will probably happen at some time.</li> <li>Known incidents within the sector or within industry.</li> </ul>	Low 3	Medium 6	Medium 9	High 12	High 15
	<ul> <li>2 Unlikely</li> <li>This would be unlikely to happen but it's possible under certain circumstances.</li> <li>Rare incidents within the sector or within industry.</li> </ul>	Low 2	Low 4	Medium 6	Medium 8	High 10
	<ul> <li><b>1 Remote (Rare)</b></li> <li>This would be improbable or rare.</li> <li>Incidents are unknown within the sector or within industry.</li> </ul>	Low 1	Low 2	Low 3	Low 4	Medium 5

Risk Matrix – table adapted from IOSH and Nebosh training resources.

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#### **Guidance Pages:**

Risk Assessment Guidance (here you will find useful tools to help you assess your risks and produce your health and safety plan):

#### **Risk Level and Action Guide:**

Risk Level		Suggested Action(s) to Manage Risk
Low	1-4	No further risk controls should be required. Continue to monitor the work/activity. Observe that existing controls are being maintained/followed. Review if there are any changes in the level of risk e.g. following an incident or from a change of equipment/process.
Medium	5-9	Aim to reduce the risk where reasonably practicable (balancing the need to reduce the risk with the level of cost, time and effort required to achieve this). Continue to monitor the work/activity. Observe that existing controls are being maintained/followed. Review if there are any changes in the level of risk e.g. following an incident or from a change of equipment/process.
High	10-16	You must consider ways to reduce the risk further and/or change the work/activity so it can be done in a safer way. If the risk remains high, you will need to consider using the best available resources to achieve this. Continue to monitor the work/activity. Observe that existing controls are being maintained/followed. Review if there are any changes in the level of risk e.g. following an incident or from a change of equipment/process.
Very High	20-25	The work/activity must not start or continue until the risk has been reduced e.g. changing the work/activity so it can be done in a safer way. If it is not possible to reduce the risk, even with the best available resources, the work/activity must be prohibited.