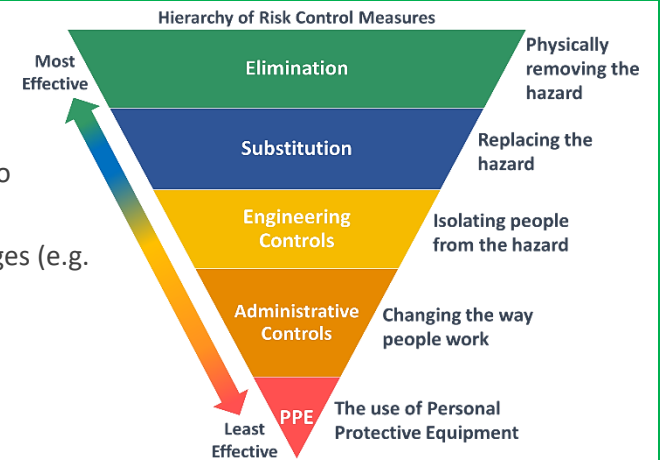



### Risk Assessment – Your Health and Safety Plan of Action:

- Use this form to capture your risk assessment (*remember to apply the hierarchy of controls*).
- You can do this individually or as part of a group involved in the work.
- You can share your assessment with others and use the results to make the work/activity safer by design and to produce safer ways of working.
- Remember to monitor your arrangements to see if they are working and review your assessment for any changes (e.g. changes to people, processes, equipment, the work environment or following an incident or near-miss).



<b>School/SBU/Department:</b>	SPECS/PAM	<b>Location(s) of Activity:</b> (Campus, Building, Room)	Bayfordbury, Observatory
<b>Assessor Name:</b>	David Campbell, Sam Rolfe	<b>Assessor Role (Job Title):</b>	Principal Technical Officer, Technical Tutor
<b>Assessment Date:</b>	19/06/2024	<b>Assessment Review Date:</b> Set a review date for your assessment.	19/06/2025
<b>Activity Title/Description:</b>	Use of a "Sunspotter" (folded projection telescope) for indirect viewing of the Sun.		
	<i>A short summary explaining the nature of the activity being assessed.</i>		
<b>Agreed with:</b> (Line Manager or Representative)	Name/Signature:	Giorgos Gkizelis	
	<i>The line manager/representative providing oversight of the risk assessment so they can agree a safe approach.</i>		

<b>Checked by:</b> (H&S Advisor or Lab Manager)	Name/Signature: David Campbell 
	<i>If necessary – refer to your SBU approval procedures.</i>

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

Hazard Assessment >			Risk Assessment and Risk Management >								
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	
<b>Hazards associated with the activity/task/Event?</b> <i>What are the significant hazards with the potential to cause harm?</i> Review the activity, location & people involved. Check equipment or manufacturer Instructions. Check UH, Sector or HSE guidance.	<b>Who could be harmed?</b> <i>Who is at risk from harm:</i> Students, Staff, Visitors and/or Contractors?	<b>How could they be harmed?</b> <i>Types of injury:</i> Major or Minor Injuries from Lifting/Handling, Slips/Trips/Falls or Ill Health Effects.	Likelihood	Consequence	Risk Rating	<b>What controls are currently in place and what further action is necessary to reduce the risk?</b> <i>What is already in place to reduce the likelihood of harm and/or impact of harm occurring?</i> <i>What further actions or additional controls are required to reduce the remaining risk?</i>	Likelihood	Consequence	Risk Rating:	<b>Remaining Actions –</b> <i>Actions by Who and by When?</i>	<b>Actions Completed</b> <i>Completed (Y/N)</i>
Direct viewing of reflection of the Sun from incorrect use	Students, Staff, Visitors	Eye injury	1	5	5	The Sunspotter is designed to be safe during normal use as users only view a projected image. Care should be taken that reflective objects (e.g. watches, jewellery) are not inadvertently put into the optical path, which may cause reflections of the Sun out of the telescope. Sunspotters should not be left unsupervised outside to prevent accidental use by untrained or unsupervised persons.	1	5	5	SOP to be provided by technical staff for safe use. Staff or students instructed to follow SOP, and supervise the use by untrained persons.	Y
Accidental burning/ignition of material entering the optical path inside the telescope.	Students, Staff, Visitors	Smoke inhalation, burns	1	3	3	The Sunspotter is designed to be safe during normal use, however the Sun's rays are particularly concentrated around the projecting eyepiece near the top of the Sunspotter, and care should be taken to avoid placing hands or objects into this part of the Sunspotter. Sunspotters should not be left unsupervised outside to prevent accidental use by untrained or unsupervised persons.	1	3	3	SOP to be provided by technical staff for safe use. Staff or students instructed to follow SOP, and supervise the use by untrained persons.	Y

Hazard Assessment >			Risk Assessment and Risk Management >								
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? <i>What are the significant hazards with the potential to cause harm? Review the activity, location &amp; people involved. Check equipment or manufacturer Instructions. Check UH, Sector or HSE guidance.</i>	Who could be harmed? <i>Who is at risk from harm: Students, Staff, Visitors and/or Contractors?</i>	How could they be harmed? <i>Types of injury: Major or Minor Injuries from Lifting/Handling, Slips/Trips/Falls or Ill Health Effects.</i>	Likelihood	Consequence	Risk Rating	What controls are currently in place and what further action is necessary to reduce the risk? <i>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?</i>	Likelihood	Consequence	Risk Rating:	Remaining Actions – <i>Actions by Who and by When?</i>	Actions Completed <i>Completed (Y/N)</i>
Damage to the Sunspotter causing malfunction	Students, Staff, Visitors	Eye injury, smoke inhalation, burns	1	3	3	The Sunspotter is unlikely to be damaged in such a way to make it unsafe. However care should be taken to ensure it is not damaged by improper use. Ensure it is used only on a stable surface where it will not be knocked over. Do not use in wet or windy conditions. Inspect the optical elements before use to ensure they are in place and in good condition.	1	3	3	SOP to be provided by technical staff for safe use. Staff or students instructed to follow SOP, and supervise the use by untrained persons.	Y

Hazard Assessment >			Risk Assessment and Risk Management >										
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? <i>What are the significant hazards with the potential to cause harm?</i> Review the activity, location & people involved. Check equipment or manufacturer Instructions. Check UH, Sector or HSE guidance.	Who could be harmed? <i>Who is at risk from harm:</i> Students, Staff, Visitors and/or Contractors?	How could they be harmed? <i>Types of injury:</i> Major or Minor Injuries from Lifting/Handling, Slips/Trips/Falls or Ill Health Effects.	Likelihood	Consequence	Risk Rating	What controls are currently in place and what further action is necessary to reduce the risk? <i>What is already in place to reduce the likelihood of harm and/or impact of harm occurring?</i> <i>What further actions or additional controls are required to reduce the remaining risk?</i>	Likelihood	Consequence	Risk Rating:	Remaining Actions – Actions by <b>Who</b> and by <b>When</b> ?	Actions Completed (Y/N)	

### 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 Matrix		Consequence (Severity)				
		1 Negligible/Insignificant	2 Minor Impact/Injury	3 Moderate Impact/Injury	4 Major Impact/Injury	5 Severe Impact/Fatality
		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.
Likelihood	<b>5 Certain</b> This will happen imminently.	Medium 5	High 10	High 15	Very High 20	Very High 25
	<b>4 Very Likely</b> It's highly likely this <u>will</u> happen at some point. • Has happened before in this location or elsewhere within UH – known incidents within the sector or industry.	Low 4	Medium 8	High 12	High 16	Very High 20
	<b>3 Likely</b> Will probably happen at some time. • Known incidents within the sector or within industry.	Low 3	Medium 6	Medium 9	High 12	High 15
	<b>2 Unlikely</b> This would be unlikely to happen but it's possible under certain circumstances. • Rare incidents within the sector or within industry.	Low 2	Low 4	Medium 6	Medium 8	High 10
	<b>1 Remote (Rare)</b> This would be improbable or rare. • Incidents are unknown within the sector or within industry.	Low 1	Low 2	Low 3	Low 4	Medium 5

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

### 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	<p>No further risk controls should be required.</p> <p>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.</p>
Medium	5-9	<p>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).</p> <p>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.</p>
High	10-16	<p>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.</p> <p>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.</p>
Very High	20-25	<p>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.</p>