J4Key Guidance This section provides a quick overview of some of the key concepts in Army risk assessment. Refer to Notes section for further information. The first line of the risk assessment table, below, shows an illustrative example.

Hazard is anything that may cause harm, e.g. working at height on a ladder.

Risk is the chance that someone or something could be harmed by the hazard, measured by combining (multiplying) the likelihood of it happening with its impact (severity). For example, there may be a 'possible' likelihood that someone that is not competent could fall from a ladder (3 rating – see right) combined with a 'moderate' impact of multiple injuries (2 rating), which creates a score of 6 (low risk). However, the risk should be reduced to as low as reasonably practicable (ALARP) through the implementation of control measures, such as ensuring that only trained people climb the ladder.

Dynamic Risk Assessment compliments generic and specific risk assessment. Regardless of completing this AF 5010, it is beholden on the person creating the risk to continue to monitor the activity and the control measures. Any changes to the activity (including the environmental conditions) or the control measures, must be addressed via the mechanism of a dynamic risk assessment such that risks remain ALARP.

Note however that persons undergoing training cannot be deemed competent until their capability is properly assessed

Likelihood (L)	**Multiplied by**	**Impact (I)**	**Equals**
1 – Remote / Rare 2 – Unlikely 3 – Possible 4 – Probable 5 – Highly Probable (Almost Certain)		1 – Minor 2 – Moderate 3 – Major 4 – Severe 5 – Critical *Note: impact number is unlikely to change with control measures*	

Risk Score Calculation

		Likelihood				
		1	**2**	**3**	**4**	**5**
Impact	**5**	**5**	**10**	**15**	**20**	**25**
	4	**4**	**8**	**12**	**16**	**20**
	3	**3**	**6**	**9**	**12**	**15**
	2	**2**	**4**	**6**	**8**	**10**
	1	**1**	**2**	**3**	**4**	**5**

5 Step Process → Step 1 – Identify the hazards | Step 2 – Decide who might be harmed and how | Step 3 – Evaluate the risks and decide on precautions (control measures) | Step 4 – Record your significant findings and include in Ex / Coord instructions as necessary. Implement control measures | Step 5 – Review your risk assessment and update as necessary

Dept / Sub-Unit / Unit / Formation:	Army Winter Sports Association	**Assessor (No, Rank, Name):**	24507782 WO2 GR Holmes
Activity (SSW) / Exercise (SST):	Army Ice Sports Ex Racing Ice 1 2024. Igls Ice Track, Innsbruck, Austria	**Assessor's signature:**	
Generic or Specific Risk Assessment:	Specific **RA No** AIS 01-2023	**Assessment Date:**	14/01/2024
Relevant Publications / Pamphlets / Procedures:	JSP 375 (Management of Health and Safety in Defence), Chapter 42, Cold Injury Prevention Ver 1.0 An Individual's Guide to Cold Injury	**Review Date for GRA** (Step 5)**:**	26/01/2024

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
Ref	**Activity / element** (Step 1a)	**Hazards identified** (Step 1b)	**Who or what might be harmed and how**, e.g. • Military personnel - fatality • Civ staff / contractors - injury • General public - injury (Step 2)	**Existing control measures** (Step 3a)	**Assessment with existing controls**			**Is residual risk acceptable in the context of risk appetite for the activity? (Yes / No) – Refer to Risk Score Calculation above** *If Yes, move to column (n). If No, identify additional controls* (Step 3e)	**Reasonable additional controls that can be implemented to reduce risk to ALARP** (Step 3f)	**Reassessment with additional control measures**			**List required action(s) to instigate controls** (Step 3j)
					L (1 to 5) (Step 3b)	**I (1 to 5)** (Step 3c)	**Score (L x I)** (Step 3d)			**L (1 to 5)** (Step 3g)	**I (1 to 5)** (Step 3h)	**Score (L x I)** (Step 3i)	
1	**Hazards (Include Hazard Survey Number where applicable)** **Manual handling of sleds**	Incorrect lifting technique of heavy equipment	Military Personnel – Injury Civ Staff - Injury	Briefing of correct manual handling techniques. Staff and Peer monitoring and enforcement of good MHT	3	2	6	Yes					**To Run in conjunction with Army Ice Sports Safety Plan 2023-2024 (Amended Feb 2023)**
2	**Sliding**	Injury to athlete due to impact with track or eqpt during descent at speeds of up to 120km/h	Military Personnel – Injury Civ Staff - Injury	Ex staff are aware of shortfall and monitoring progression closely of novice sliders. All sliders are to be assessed on daily basis for their subtility, ability to continue sliding. Safety briefing prior to start of Exercise .Coaching and supervision of all training runs with feedback process: no slider may slide if not deemed safe by staff. Use of appropriate PPE (helmet and gloves mandatory, padding optional at athlete discretion to minimise impact of minor	3	4	12	Yes					**To Run in conjunction with Army Ice Sports Safety Plan 2023-2024 (Amended Feb 2023)**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
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				impacts. Track safety system to be adhered to at all times. Sliding to be controlled by start staff and track manager at all times to ensure only one sled on track at any time. Trained first aider/military medic to be available to triage injuries and administer emergency casualty management/treatment as required. All trackside staff (incl. medic) to have voice comms with start and finish, either direct (radio/telephone) or through relaying of messages. All athletes confirmed as physically fit and alcohol-free prior to run. Athletes briefed and rehearsed in the actions on accidents whilst descending ice track at the respective start point and the finish straight.								All practicable control measures in place. Monitor and amend if necessary, during exercise. Medical risk assessment held in conjunction to RA. Medical staff to be present during all sliding and in communication with track manager in case of medical emergency
3	**Trackside assistance**	Injury to staff and athlete due to impact with eqpt, athlete or track	Military Personnel – Injury Civ Staff - Injury	Appropriate footwear to be worn when on foot in track. Safety brief to all staff prior to exercise. No staff in track when sled commences descent.	3	4	12	Yes					All practicable control measures in place. Rating due to environmental conditions (ice underfoot).
4	**Slips and Trip falls**	Injury to slip/trip falls on ice	Military Personnel – Injury Civ Staff - Injury	Brief to include good eqpt husbandry practices to minimise risk of eqpt left where it may cause an accident. Correct footwear to be worn at all times, appropriate to conditions (weather, temperature and activity).	3	3	9	Yes					All practicable control measures in place. Rating due to environmental conditions (ice underfoot
5	**Cold weather injury**	Injury to personnel due to exposure to cold climatic conditions	Military Personnel – Injury Civ Staff - Injury	All personnel to be briefed on cold weather injury and the prevention of it. Cold injury occurs as a result of the effects of cold, in either wet or dry conditions, on the body. The cold may affect either the whole body by reducing the core body temperature (generalised cold injury) or affect a specific body part (localised cold	3	4	12	No					All practicable control measures in place. Rating due to environmental conditions (cold weather). **All attendees are read and comply with the MOD booklet, An Individual's Guide to Cold Injury (PDF**

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				injury). The body normally maintains a stable core temperature of 37°C by balancing the rate of heat production (predominantly through internal metabolic heat generation) with heat lost. In cold environmental conditions heat lost to the atmosphere e.g. through breathing, contact with cold surfaces and sweating may exceed the warmth that can be generated by the body, e.g. by exercising and shivering. Core body temperature = heat gained – heat lost. Cold injury remains a significant issue for the Armed Forces. The incidence of cold injury depends on numbers exposed to the risk and how well that risk is managed. The overall incidence rate of cold injury cases has not changed over the past five years7. There were 488 UK Armed Forces personnel who were identified as having a cold injury during the period Oct 2015 - Sep 2016 (120 of which were in the UK summer). Cold injury rates are higher in the untrained and the young (16-19 years)8. The Institute of Naval Medicine (INM) Cold Injury Clinic (CIC) saw 225 cold injury patients in FY16-17, 39 of which were new winter referrals . Generalised cold injury (hypothermia). Allowing the core body temperature to fall below 37°C, by as little as 2°C, may lead to hypothermia. It may be moderate or sever Environmental conditions Minimum working temperature. Temperature is only one risk factor for cold injury. Setting a minimum working temperature could be too prescriptive and result in loss of training opportunities. The rate of heat lost from the body depends on a number of environmental factors. Commanders should ensure they obtain local meteorological measurements and accurate weather forecasts13, paying particular attention to: Still Air Temperature (SAT). Heat will be lost from the body when the external air temperature is lower than the skin temperature: the colder the SAT the greater the effect of cooling on the body. SAT is the ambient outdoor temperature and can be									**Attached) at start of exercise.**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
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				measured using a dry bulb thermometer. Changes in altitude have a significant effect on SAT. SAT falls by approximately 1°C for every 150 metres of increased altitude. Commanders should note the following: (1) Minus 5°C SAT: extra care is needed during outdoor training; gloves must be worn. (2) Minus 13°C SAT: personnel should be advised to avoid high intensity aerobic physical activity such as running and ski-racing due to risk of damage to the lungs. a. Wet conditions. Wet skin will lose heat much quicker than dry skin. When estimating the severity of risk associated with cold, wet conditions should be considered as a significant risk factor. b. Wind chill. Wind chill is often referred to as the 'feels like' temperature and is the temperature felt, instead of the actual air temperature shown on weather forecasts. Wind chill factor takes into account wind speeds and humidity to assess how the human body actually feels temperature. Wind speed is measured using an anemometer or where unavailable estimated using the Beaufort scale. http://www.metoffice.gov.uk/guide/weather/marine/beaufort-scale (accessed Jan 17). Table 2, Wind Chill Chart, also provides the risk of freezing injury on bare skin. Travel in open vehicles will have the same chilling effect as exposure to the wind. (1) Minus 30°C Wind Chill Index: all training should be avoided, and shelter should be sought									
6	**Movement into and out of vehicles**	Injury to personnel/damage to eqpt when entering/dismounting camion or other vehicles	Military Personnel – Injury Civ Staff - Injury	All athletes to be briefed on correct mount/dismount techniques for use of vehicles at track. Camion drivers monitor rear compartment for unsafe behaviour and intervene as necessary.	3	3	9	Yes					Note: Safe Systems of Track Provider must be adhered to.
7	**Damage to eqpt: transit, wear and tear, in use, in**	Incorrect loading, storage and handling causing eqpt to	Military Personnel – Injury Civ Staff - Injury	All athletes briefed in manual handling, safe transit and husbandry of eqpt.	3	3	9						**To Run in conjunction with Army Ice Sports Safety Plan 2023-2024**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
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	storage	become U/S. Misuse Third Party Poor handling In use		Loading and storage supervised by experienced staff/athletes. Athletes to inspect eqpt prior to each slide. Suspect eqpt to be highlighted to staff immediately. Staff to inspect eqpt after sliding each day. Coach led maintenance regime to minimise risk of damage/use of U/S eqpt. Coaching and instruction to minimise risk of damage in use (on track) due to impact during descent. Staff and peer monitoring of standards, intervention where necessary.									**(Amended Feb 2023)**
8	**Security of eqpt**	Theft Damage from third parties	Military Personnel – Injury Civ Staff - Injury	Secure storage provided at track, hotel and in transit. No other storage to be utilised. All athletes briefed on eqpt husbandry, and not leaving eqpt unattended and unsecured.	2	2	4						**To Run in conjunction with Army Ice Sports Safety Plan 2023-2024 (Amended Feb 2023)**
9	**Loss of eqpt**	Poor eqpt husbandry leads to loss or degradation of eqpt	Military Personnel – Injury Civ Staff - Injury	Staff/athletes briefed. Daily checks of equipment	2	3	6						**To Run in conjunction with Army Ice Sports Safety Plan 2023-2024 (Amended Feb 2023)**

Authorising Officer / Warrant Officer (at unit level)	**No, Rank, Name**	**Post**	**Date**	**Signature**
Existing and additional controls agreed				
Where risk is elevated up the CoC, CO to confirm additional controls implemented				

NOTES

Risk = Likelihood x Impact

Likelihood		**Definition**
5	**Highly Probable (Almost Certain)**	Is expected to occur in most circumstances

Step 5 - Review the generic risk assessment and update if necessary - All generic risk assessments should be regularly reviewed at a frequency proportional to the risk prior to any controls being proposed. In practice generic risk assessments should be reviewed at least annually, or more frequently:

- where required by local instructions/procedures;
- if the safe execution of the activity relies on stringent supervision and/or adherence to a safe system of work;
- if there is reason to doubt the effectiveness of the assessment.

4	**Probable**	Will probably occur at some time, or in most circumstances
3	**Possible**	Fairly likely to occur at some time, or some circumstances
2	**Unlikely**	Is unlikely to occur, but could occur at sometime
1	**Remote / Rare**	May only occur in exceptional circumstances

Impact		**Definition (Health Safety and Environment)**
5	**Critical**	• Multiple fatalities or permanent, life changing injuries. • Permanent loss or damage beyond remediation of an important and publicly high-profile natural resource, area or species. • Multiple incidents causing a major environmental impact.
4	**Severe**	• A single death or multiple life-threatening injuries. • Severe damage over a wide area and/or on a prolonged basis to a natural resource, including controlled waters, or geography requiring multi-year remediation. • Single incident causing a major environmental effect or multiple incidents causing significant effect.
3	**Major**	• Single life changing injury or multiple injuries which have a short-term impact on normal way of or quality of life. • Moderate damage to an extended area and/or area with moderate environmental sensitivity (scarce/ valuable) requiring months of remediation. • Single incident causing significant environmental impact.
2	**Moderate**	• Multiple injuries requiring first aid. • Moderate damage to an area, and that can be remedied internally. • Multiple incidents causing minor environmental effect.
1	**Minor**	• An Injury requiring first aid • Limited short-term damage to an area of low environmental significance/ sensitivity • Incidents causing minor environmental impacts

• following an accident or near miss.
• following significant changes to the task, process, procedure, equipment, personnel or management.
• following the introduction of more vulnerable personnel (e.g. persons under 18 or pregnant persons).

Risk Management		
Risk Rating	**Authorisation**	**How Risk should be managed**
1 – 3 (Very Low)	**OC**	**Review periodically** to ensure conditions have not changed and working within ALARP and risk appetite.
4 – 9 (Low)	**CO**	
10 – 12 (Medium)	**OF5 / 1* Bde HQ**	**Good risk mitigations** to ensure that the impact remains ALARP and tolerable. Re-assess frequently to ensure conditions remain the same.
15 – 16 (Medium to High)	**2* Div HQ**	**Requires active management** – review of desired outcome with additional resources or change to output requirements.
20 (High)	**3* – HQ HC & FA**	**Contingency plans** may suffice together with limited risk mitigations to achieve risk ALARP and tolerable.
25 (Very High)	**4* – CGS, Army HQ**	**Operational capability** where the required outcome impacts on defined military capability.

Wind chill. Wind chill is often referred to as the ‘feels like’ temperature and is the temperature felt, instead of the actual air temperature shown on weather forecasts. Wind chill factor takes into account wind speeds and humidity to assess how the human body actually feels temperature. Wind speed is measured using an anemometer or where unavailable estimated using the Beaufort scale15. Table 2, Wind Chill Chart16, also provides the risk of freezing injury on bare skin. Travel in open vehicles will have the same chilling effect as exposure to the wind.

(1) Minus 30°C Wind Chill Index: all training should be avoided, and shelter should be sought
JSP 375 Vol 1 Ch 42 (V1.0 Oct 20)

Table 2, Wind Chill Chart

WINDCHILL FACTOR - the risk of freezing injury on bare skin													
Wind strength			**Air temperature (°C)**										
Beaufort scale	**Wind description**	**MPH**	+10	+5	-1	-7	-12	-18	-23	-29	-34	-40	-46	-51
0	Calm	**0**	10	5	-1	-7	-12	-18	-23	-29	-34	-40	-46	-51
2	Light	**4.2**	9	3	-3	-9	-15	-21	-26	-32	-38	-44	-50	-56
3	Gentle	**8.8**	5	-2	-9	-16	-23	-30	-36	-43	-50	-57	-64	-71
4	Moderate	**13**	2	-6	-14	-21	-29	-36	-43	-50	-58	-65	-73	-80
4	Moderate	**17.3**	0	-8	-16	-24	-32	-40	-47	-55	-63	-71	-79	-87
5	Fresh	**22.3**	-1	-9	-18	-26	-34	-42	-51	-59	-67	-76	-84	-92
6	Strong	**26**	-2	-11	-19	-28	-36	-44	-53	-61	-70	-79	-87	-96
6	Strong	**30.3**	-3	-12	-20	-29	-37	-45	-54	-63	-72	-81	-90	-98
7	Moderate gale	**34.7**	-3	-12	-21	-30	-38	-46	-55	-64	-73	-82	-91	-100
			Low risk of Freezing Injury				**High risk of Freezing Injury**			**Very high risk of Freezing Injury**				
Wind chill accounts for loss of heat when warm air around a body is replaced with colder air. Wind chill is an indication of the effect of the combination of air temperature and wind speed on human comfort and safety.														

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Acrobat Document