

RISK ASSESSMENT OF: Extrication challenge - Movement of vehicles and pit preparation

PREMISES
EQUIPMENT

✓

VEHICLE

✓

SYSTEM OF WORK

✓

RISK ASSESSMENT BY: H Crampton

DATE COMPLETED: 26/6/2024

DISCIPLINE LEAD SIGN OFF: Ian Taylor

DATE FOR REVIEW: after competition

Notes:

See separate risk assessment for Logistics vehicle preparation and Extrication Competition

Control of public/spectators is covered by a separate risk assessment.

TASK	HAZARDS IDENTIFIED	WHO MAY BE HARMED AND HOW?	EXISTING CONTROLS	IS THE RISK ADEQUATELY CONTROLLED? (YES / NO)	ADDITIONAL CONTROL MEASURES & COMMENTS	SECTION / PERSON RESPONSIBLE
Movement of vehicles from storage area to Pit area	Distance from storage area to Pit, heavy plant has to cross a public highway Movement of vehicle against strops or on forks	Drivers of heavy plant, public road users, pedestrians, volunteers Vehicle/pedestrian/road user collisions, impact injuries, crush from vehicles falling from forks	Heavy plant drivers are qualified and experienced, and authorised to drive. Vehicles picked up from storage area and secured onto heavy plant- lifting plan in place, lifting and transportation of vehicles is planned and most appropriate vehicle for the lift used, and most appropriate ways of securing vehicle safely used.		Briefing of traffic management company by Logistic team lead and communication system identified	

			<p>Professional traffic management company selected by Hants&IW and briefed. Highway will be closed for plant movements.</p> <p>Barrier in use to segregate pedestrians when plant moving along with marshalling. Marshalling conducted by volunteers (Briefing and communication system controlled by Hants&IW)</p>		<p>Hants&IW looking at paid stewards to supplement volunteers for risk areas. Clear lines of communications will be set up.</p> <p>Circular area at Pits can be used for storing some vehicles to ease number of vehicle movements</p>	
	<p>Heavy plant brings vehicles into area where there is an interface with public</p>	<p>Drivers of heavy plant, pedestrians, volunteers</p> <p>Vehicle/pedestrian collisions, impact injuries, crush from vehicles falling from forks</p>	<p>Barriers in place and marshals controlling access of pedestrians when vehicle movements being made</p>		<p>Clear communication system to be in place between driver/logistics and marshals</p>	
<p>Movement of vehicles from storage area to Pit area</p>	<p>Narrow pinch point</p>	<p>Pedestrians, volunteers</p> <p>Collision, impacts with heavy plant, crush</p>	<p>Barrier to be used to close off pinch point when plant ready to move through.</p> <p>Marshals in place to supervise</p>			

<p>Vehicles being removed from Pit area back to car park for disposal</p>	<p>Debris dropping from vehicle onto public highway or pavement</p>	<p>Pedestrians, volunteers,</p> <p>Falling debris, impact, dust, oil/fluids causing slip hazard</p> <p>drivers - vehicle damage, debris on highway causing puncture, fluids causing slippery surface</p>	<p>Security of debris considered when being put back into vehicle. Skips to be available for larger pieces of debris. Experienced logistics team will identify parts of vehicle that are likely to be insecure and manage this.</p> <p>Heavy plant will be segregated from pedestrians and area is marshalled whilst movements being conducted. Traffic management company will close highway for vehicle movements.</p> <p>Marshals will observe vehicle and alert logistics team of any debris falling onto pavement or highway. Debris will be cleared before pavement or highway opened.</p>		<p>Briefing for volunteers to include looking out for debris and alerting logistics team</p>	
<p>Preparing Pit area/Setting up for next team</p>	<p>Movement of heavy plant/FLT in pit area</p>	<p>Drivers, participants, Volunteers UKRO assessors</p> <p>Vehicle/pedestrian collisions. Impact injuries, crush from vehicles</p>	<p>Drivers are qualified, experienced, and authorised to drive.</p> <p>Familiarisation for any driver who requires it prior to using the vehicle.</p>	<p>Yes</p>		

			<p>Speed limit in place</p> <p>Area for manoeuvring is appropriate for the task and with physical barrier to segregate public. Vehicle marshals in hiviz to ensure area is free from pedestrians when vehicles are moving</p> <p>Safety briefing for Pit crew</p> <p>Pits being prepared are segregated from pits being used for challenge. Minimum size of pits is specified to host and allows for manoeuvring</p> <p>Safety brief for volunteers prior to start. Pit crew volunteers are competent operational staff working alongside UKRO logistic team</p> <p>Driver is aware of what is around them and uses vehicle marshalling (UKRO volunteers used or competent operational staff)</p> <p>Time table is known and allows for time to set up and clear down to reduce human factor of rushing.</p>	Yes		
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			Four vehicles/telehandlers to be used.			
Preparing Pit area/Setting up for next team	<p>Instability of vehicles being manoeuvred</p> <p>Movement of vehicle against strops or on forks</p>	<p>Drivers</p> <p>Participants</p> <p>Volunteers</p> <p>Serious injuries from vehicles sliding from FLT/plant or dropping from stops causing traps, impact injuries causing FLT/plant to turn over</p>	<p>Plant checked to ensure it is suitable for the loads and work required. Plant size is specified to host Service</p> <p>Information from UKRO teams on scenarios in advance so lifting plans can be put in place by Logistics team. Vehicles numbered and stored in order of use, and brought to pit area in time for set up.</p> <p>Safe working load, forks required length, and attachments required within lifting plan. Security of load designed as part of plan.</p> <p>Lifting plans in place to ensure all drivers are aware of the requirement for specific vehicle positions and how this is carried out safely</p> <p>Competent supervision in place where considered appropriate for lifting operations.</p>	Yes	<p>Ensure host sends PPE requirements to volunteers and check made that manual handling training is recent/in date for volunteers..</p> <p>Briefing includes manual handling techniques, lightening loads, breaks and rotation if work hard, and weather warm or inclement</p>	

<p>Preparing Pit area/Setting up for next team</p>			<p>Logistic team are experienced and competent at preparing and moving vehicles for the competition</p> <p>Driver's vision is clear</p>			
	<p>Instability of FLT/plant due to incorrect loading</p>	<p>Drivers/logistic team Participants Volunteers/pit crew Overturning of heavy plant leading to crush injuries</p>	<p>FLT/plant driven by authorised drivers.</p> <p>Only UKRO logistic team will position vehicles for scenarios. Logistic team supervised by competent slingers</p>	<p>Yes</p>		
<p>Preparing Pit area/Setting up for next team</p>	<p>Load on FLT/plant instability of vehicles being moved into positions</p>	<p>UKRO logistic team participants Volunteers/pit crew spectators Vehicles could move, slide, bounce or roll uncontrollably leading to serious crush injuries</p>	<p>Competent person to supervise lifts</p> <p>Lifting plan</p> <p>Logistic team are experienced at moving vehicles into positions</p> <p>Lifting plan. When vehicle has to be placed on side or roof, care will be taken to avoid the vehicle rolling or bouncing. Use of strops rather than forks to give more control</p>	<p>Yes</p>		

			Spectators are at distance deemed safe from pits, with barriers in use			
	Accessing vehicles for specific scenario and returning vehicle	<p>Logistic team</p> <p>Pit crew volunteers</p> <p>spectators</p> <p>Vehicle/pedestrian interface leading to crush injuries</p> <p>Vehicles moving during transit or whilst being stropped</p>	<p>Storage area by Pits for vehicles not accessible to public and only to authorised UKRO logistics team</p> <p>Logistic team are competent and supervised by competent/experienced slinger</p> <p>Vehicles are stored in order and numbered so that they are easily accessible for scenario</p> <p>Vehicle's position is known so that most appropriate lifting technique can be planned</p> <p>Vehicles are removed from pit after rotation and placed in storage area ready for transporting back to car park. Use of strops or forks depending on position and</p>	Yes		

			<p>condition of vehicle being moved</p> <p>Competent slinger supervises lift</p>			
	<p>Weight and size of props</p>	<p>Volunteers/pit crew</p> <p>Logistic team</p> <p>Participants</p> <p>Handing injuries</p> <p>Bumps, nips, lacerations</p> <p>Props unstable resulting in crush, impact injuries</p>	<p>Large loads lifted with plant. Suitable method of lifting is planned and supervised</p> <p>Loads are divided into smaller manageable weights where possible</p> <p>PPE worn includes, eye protection, grip gloves, toe protection - boots, or shoes.</p> <p>Props are checked for stability. Use of pre-scenario check</p>	<p>Yes</p>	<p>Ensure host sends PPE requirements to volunteers and check made that manual handling training is recent/in date.</p> <p>Briefing includes manual handling techniques, lightening loads, breaks and rotation if work hard, and weather warm or inclement</p>	

<p>Clearing Pit area</p>	<p>Cleaning of Pit area, dust, glass and metal debris</p>	<p>Logistic team Volunteers in Pit Area</p> <p>Dust and particulates leading to eye injuries, manual handling injuries, lacerations, injuries to hands and feet using brush and glass sweeper, respiratory issues due to particulates and dust</p>	<p>Brushes and glass sweeper, shovels and bins available, Skip for debris in disposal area.</p> <p>Large loads lifted with plant. Loads are divided into smaller manageable weights where possible</p> <p>Suitable method of lifting is planned and supervised</p> <p>PPE worn includes eye protection, grip gloves, toe protection - boots, or shoes, head protection Personal RPE</p>	<p>Yes</p>	<p>Ensure host sends PPE requirements to volunteers and check made that manual handling training is recent/in date.</p> <p>Briefing includes manual handling techniques, lightening loads, breaks and rotation if work hard, and weather warm or inclement</p>	
<p>Inclement weather</p>	<p>Significant rainfall and/or lightening</p> <p>Gusty wind</p>	<p>Logistics team Volunteers in Pit Area Participants</p> <p>Spectators</p> <p>Localised flooding, slippery surfaces and difficulties handling vehicles leading to crush injuries, impact</p>	<p>Assessment made on weather conditions and if safe to continue - via Silver Command</p> <p>Logistic team are competent at handling plant</p> <p>Safety team will monitor the weather and UKRO will determine contingencies.</p>	<p>Yes</p>		

		<p>Lightening with the potential to strike depending on close proximity</p> <p>Wind gusty, blowing dust and particulates into eyes</p>	<p>PPE including eye protection. Volunteers bring wet weather gear</p>			
<p>Use of live casualties/internal assessor</p> <p>Pit preparation</p>	<p>Casualties/assessors being positioned into vehicle</p>	<p>Assessor acting as casualty</p> <p>lacerations, eye injury, crush</p>	<p>Full PPE - protection for body, head, eyes, feet, hands, 'boiler suit' tucked into socks to prevent trouser legs from raising. All internal casualties/assessors attend safety briefing.</p> <p>Oxygen mask used for respiratory protection where required</p> <p>Sharps removed from vehicle cabin prior to casualty put in place or covered by protective tape or sheets when getting in or exiting vehicle.</p> <p>Vehicles are stabilised prior to casualty put in place</p>	<p>Yes</p>	<p>Volunteer information to explain role of internal; casualty/assessor.</p> <p>Volunteers must be given information of appropriate PPE required</p>	

<p>Use of live casualties/internal assessor</p> <p>Pit preparation</p>	<p>Casualties/assessors being positioned into vehicle</p>	<p>Panic/claustrophobia</p>	<p>Hard and soft protection in use</p> <p>Individuals are assisted into vehicle and asked if they are comfortable prior to rotation starting.</p> <p>Pre-scenario check is completed</p>	<p>Yes</p>		
<p>Welfare</p>	<p>Weather conditions inclement weather, lack of drinks and food due to working pressures</p>	<p>Logistic team</p> <p>Pit crew</p> <p>Fatigue from lack of opportunity to rest and have drinks and food leading to poor judgement</p> <p>Wet and cold increasing risks of poor judgement and accidents</p>	<p>Lunch and drinks provided</p> <p>Volunteers used to ensure drinks and food are available</p> <p>Shelter provided for between rotations</p> <p>PPE including wet weather gear</p>	<p>Yes</p>		