



Operational Safety

“Putting People First”

Dropped Objects

Competency Module

Vision: “Happy people in a safe work environment”





Dropped Objects

- Primary objectives:
 - To eliminate dropped objects through:
 - Identification and understanding of potential workplace dropped objects hazards
 - Creation of a dropped objects work group
 - Understanding the various levels of protection that are available to prevent dropped objects
 - Selecting and supplying the right level of mitigation
 - Raising the overall awareness of dropped objects





What is a Dropped Object?

- A dropped object is any object, with the potential to cause death, injury or equipment/environmental damage, that falls from its previous static position under its own weight.”
- When referring to dropped objects, consider:
 - Hand tools being used at heights
 - Hand tools/equipment left behind after working at height
 - Operations conducted at height
 - Equipment mounted at a height that, following contact, vibration or environmental conditions, could fall, i.e., piping, lights, cameras, rigging gear, etc.
 - Temporary equipment at height
 - Where personnel are working on a level directly below the work site
 - Lifting operations





Dropped Objects

- Dropped objects are regularly the principal causes of incidents in the oil and gas industry and contribute to the total risk level for offshore and onshore facilities.
- The consequences of a falling object include:
 - Personal injury/death
 - Structural damage
 - Damage to equipment
 - Release of hydrocarbons/fire
- What are the effects of dropped objects?
 - Even a small object falling from a height can cause serious damage or fatal injuries.





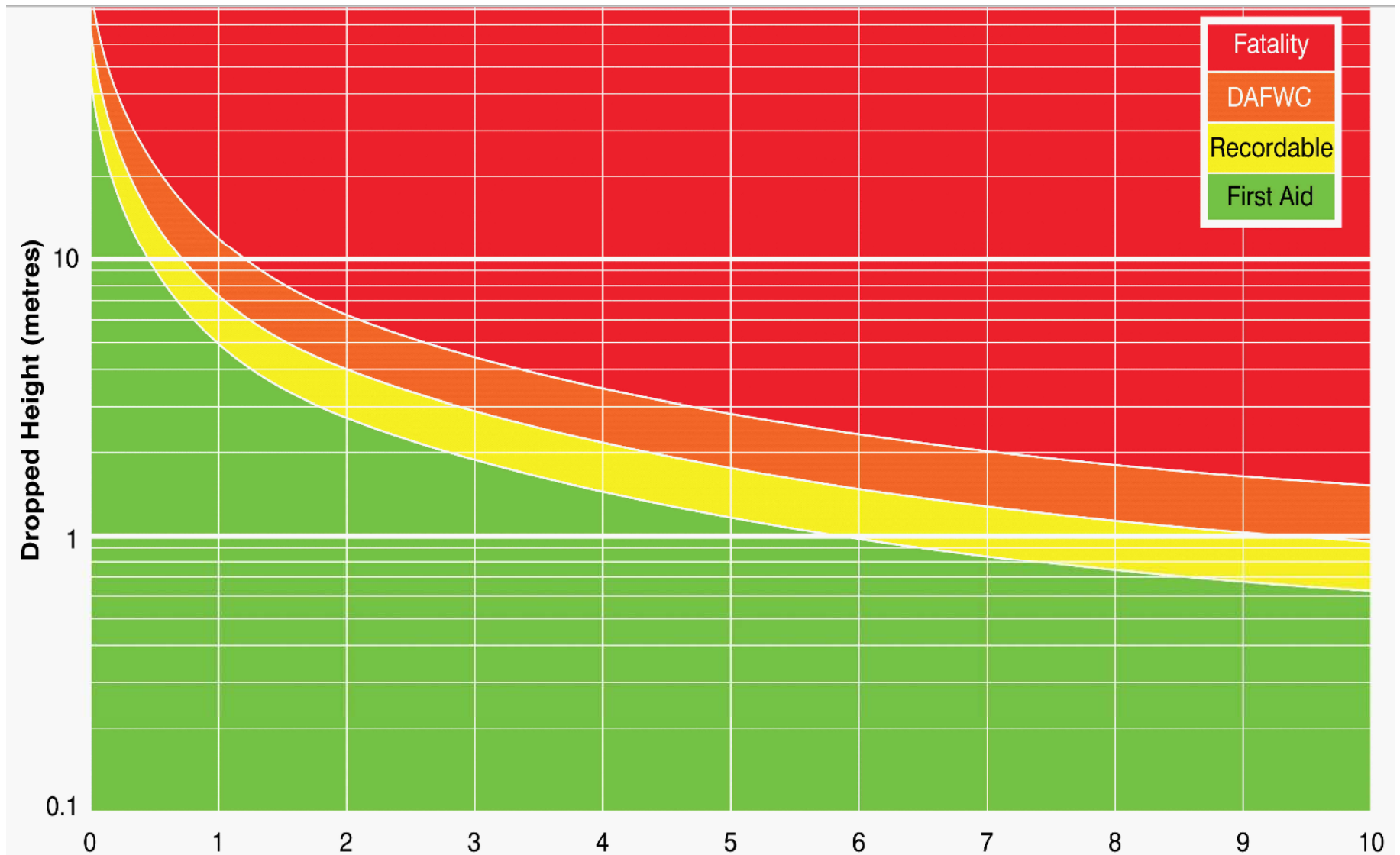
Dropped Objects

- The potential harm to the individual has been determined using the Dropped Objects Calculator.
- The Dropped Objects Calculator was developed with a mathematical model based upon the mass of the object and the height from which it falls.





Dropped Objects Calculator





Dropped Objects Calculator

- 1 Meter:
 - 10lbs < = Days away from work
 - 5-9lbs = Recordable
 - 1-4lbs = First Aid
- 5 Meters:
 - 3lbs < = Fatality
 - 2lbs = Days away from work
 - 1lb = First Aid or Recordable
- 10 Meters:
 - 2lbs < = Fatality
 - 1lb = First Aid, Recordable or DAFW





Dropped Objects

- What creates Dropped Objects?
 - Poor housekeeping
 - Scrap and debris left aloft
 - Weather
 - No SSD
 - No planning
 - Carrying equipment while at height
 - Failure to secure equipment or tools taken aloft
 - Becoming blind to changes in activity (dynamic risk assessment)
 - Lack of risk assessment
 - Load miscalculation
 - No lanyards on tools used at height
 - Improperly secured or inappropriate loads
 - No regular inspection procedures



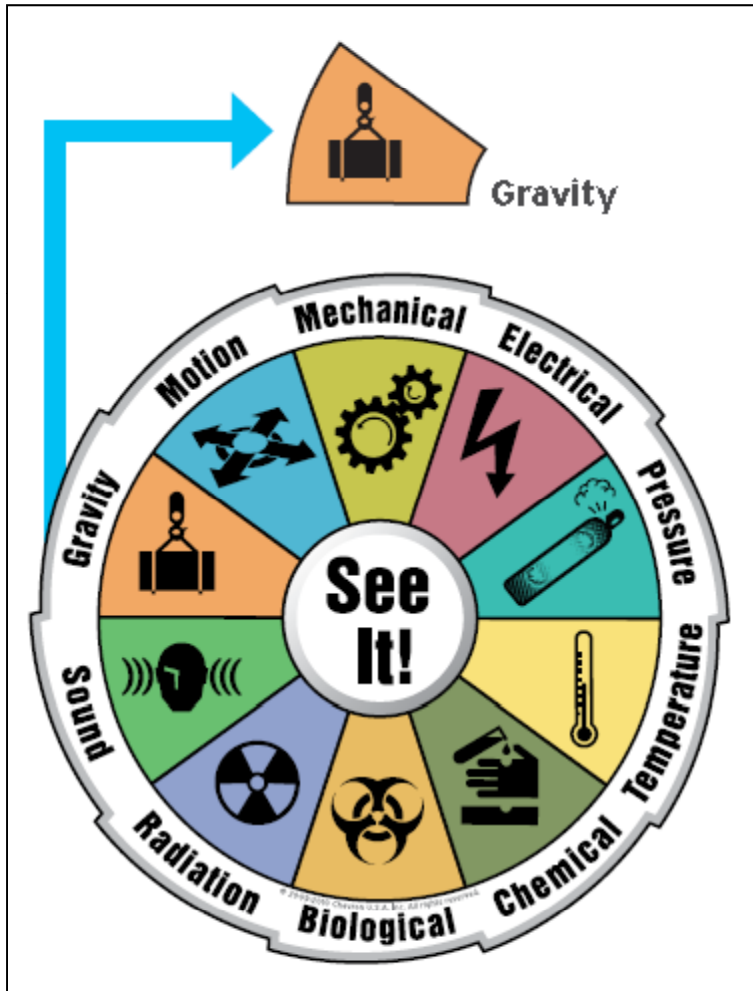
Dropped Objects

- How can I actively prevent dropped objects?
 - Take responsibility for my actions.
 - Look after my co-worker.
 - Maintain good housekeeping.
 - Stop unsafe activities by using my SWA.
 - Review and follow procedures.
 - Consider dropped objects in all Toolbox Talks.
 - Utilize the Dropped Objects Checklist to formulate the WP/SEA.
 - Check areas after all work is completed, even if it is permit controlled.
 - Participate in Hazard Hunts.
 - Secure all tools and equipment when working at height.





Hazardous Energy Sources




- The Hazard Identification Tool has been designed as either a stand-alone resource or to augment existing processes such as safe work practices, WP/SEA and PTW.
- It is important to understand that this is not a process to implement. It's a tool that can enhance our existing processes by strengthening our ability to recognize hazards.



Dropped Objects

- When gravity is considered an energy source, we must utilize the dropped objects checklist!!



	<h2>Dropped Objects Checklist</h2>		Issue Date 10/15/11
			Rev. Date 07/25/12
Job/Task: _____	Date: _____	WCC#: _____	
Control of Work – Pre Job Planning	OK	N/A	Explanation <small>(If N/A or more instructions needed)</small>
When planning work with the potential for dropped objects, WPSEA shall address the control of objects with the potential to fall.	<input type="checkbox"/>	<input type="checkbox"/>	
Before starting work the area shall be visually inspected for loose items (fasteners, bolts, covers, etc.) and debris.	<input type="checkbox"/>	<input type="checkbox"/>	
Areas below any elevated work with the potential for dropped objects shall be secured with red barricade tape and warning tags identifying the hazard.	<input type="checkbox"/>	<input type="checkbox"/>	
Consider using the crane vs. planning multiple trips on the stairways for moving tools, equipment & materials.	<input type="checkbox"/>	<input type="checkbox"/>	
Loose items shall be identified in wet ink on the WPSEA and checked once back on the deck to assure all items are accounted for.	<input type="checkbox"/>	<input type="checkbox"/>	
Working Near Handrails	OK	N/A	Explanation
When working within six feet of a handrail, tarps or other suitable protection shall be used to prevent items from falling to the level below.	<input type="checkbox"/>	<input type="checkbox"/>	
Items (tools, materials, debris, etc.) shall not be stacked against or near handrails where there is a potential for these items to fall to a lower level.	<input type="checkbox"/>	<input type="checkbox"/>	
Working with small items over grating or near deck penetrations	OK	N/A	Explanation
When working with small items over grating or near deck penetrations; mats, tarps, plywood, etc. Shall be used to prevent items from falling to a lower level.	<input type="checkbox"/>	<input type="checkbox"/>	
Scaffolding/Hard Barricade Construction & Use	OK	N/A	Explanation
During erection/dismantling/manual transfer of scaffold, a secure method shall be used to raise and lower scaffold poles (i.e. hand, rope, bag, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	
Toe boards shall be installed around the perimeter of all scaffolds and hard barricades protection open holes.	<input type="checkbox"/>	<input type="checkbox"/>	
Before and after use, all scaffolding material without end caps shall be inspected for loose items.	<input type="checkbox"/>	<input type="checkbox"/>	
Unsecured Tools, Parts, Equipment & Material	OK	N/A	Explanation
Hand tools shall have a secondary means of attachment, such as lanyards, which must be attached to the employee or a fixed point on the work platform.	<input type="checkbox"/>	<input type="checkbox"/>	
Tools shall not be modified to accept the attachment of the lanyard	<input type="checkbox"/>	<input type="checkbox"/>	
Tools and equipment shall be raised to the work platform and returned to the deck using a tool bag, bucket, or other means such as a rope to keep them from falling.	<input type="checkbox"/>	<input type="checkbox"/>	
Loose tools, parts, nuts, bolts, etc. shall be kept in the tool bag/ bucket, until needed.	<input type="checkbox"/>	<input type="checkbox"/>	
Unsecured Lighting & PA Equipment Fixtures	OK	N/A	Explanation
All lighting, PA equipment, and other similar items secured above the work area, shall have a secondary means of retention.	<input type="checkbox"/>	<input type="checkbox"/>	
Worksites Being Left in Unsafe Condition	OK	N/A	Explanation
All scrap, debris, and loose items shall be kept secure throughout the duration of the task and removed upon completion.	<input type="checkbox"/>	<input type="checkbox"/>	
Before leaving the work area, the tops of containers, I-beams, channel iron, etc. shall be checked for loose items.	<input type="checkbox"/>	<input type="checkbox"/>	
Inspector Name: _____		Inspector Signature: _____	



Questions???

Thank You!!

