Situational Awareness: Personal Safety & Accountability

Joyce Ryel, Superior Energy Services
David Bates, Area Director OSHA
SimOPS –

Simultaneous Operations is defined as performing 2 or more operations concurrently.
It is critical to the safety of those on a shared location that potential conflicts, risks and hazards are identified and assessed prior to performing two or more concurrent activities at or near the same work area.

One of the keys to working safely is Situational Awareness.
Two fatalities occurred in Oklahoma recently involving wheel loaders being used on a well site location.

**Incident 1** – A worker was riding on an entry step during movement of the loader. The employee fell from the step and was ran over.
**Incident 2** – A wheel loader was being used during rig up and rig down by a contractor for a drilling company. A worker was walking near the loader. The loader turned and the worker was run over by the equipment.
Regulatory issues:

The Wheel loader is not covered by 1910.178 Powered Industrial Truck Standards which requires significant training (both classroom and practical) and a certification by a competent person. Appropriate training resources are limited.

The swing and struck-by hazards are created by their design. The unit pivots in the center and has a significant swing radius when turned so control of the equipment travel and foot traffic is essential.
Situational Awareness is Key

Being aware of one’s surroundings and identifying potential threats and dangerous situations is more of a mindset than a hard skill.

Situational Awareness can be exercised by anyone with the will and discipline to do so. The first step is to recognize that hazards exist.

The second step is to understand the need to take responsibility for one’s own safety and that of others on the worksite.
Situational Awareness is Key
People typically operate on 5 levels of awareness:

1. Tuned Out – Like when you are driving and have no idea when you passed through the last town.
2. Relaxed Awareness – Like when you are driving and relaxed, but conscious of potential hazards such as an approaching car from a side road.
3. Focused Awareness – Is like driving in intense fog conditions like I did last weekend. It is very stressful and tiring; worrying about what might be coming up.
Situational Awareness is Key

4. High Alert – Like when a deer runs in front of you, but you manage to miss hitting it.

5. Senseless – When you are either unable to react or asleep. Your brain has stopped processing information necessary to react to a hazard.
Finding the Right Level

- Most of the time the level of Relaxed Awareness is the most optimal.
- It is not tiring, and can be maintained indefinitely without the stress associated with Focused Awareness or High Alert.
- While in a level of Relaxed Awareness, work can be performed normally. However, if something out of the ordinary occurs, the level can quickly escalate to Focused Awareness.
- At that level, the situation can be evaluated by taking a careful look at the hazard.
Finding the Right Level

• If the hazard does not present a risk, the situation can go back to Relaxed Awareness.
• If the hazard appears to present a risk, steps can be taken to avoid injury or damage and you may not have to escalate to High Alert since you mitigated the hazard before the risk became real.
• If there are times on the job that have an increased risk level, Focused Alert is the correct level to maintain.
• When the chance of a hazard has decreased, then you can go back to Relaxed Awareness.
Look Out for Yourself

• Situational Awareness is especially important in the oil and gas industry where work hazards can be quite high and poor decisions may lead to serious consequences.

• People need to look out for themselves.

• The Situational Awareness mindset also includes trusting your “gut” or instinct.
Look Out for Yourself

• Practicing Situational Awareness requires discipline and is the conscious effort required to pay attention to your surroundings and gut feelings to surrounding events even while you are busy and distracted – because when you are distracted even obvious eminent dangers or hazards can go unnoticed.

• Individuals need to learn to be observant even while doing other things.
Look Out for Yourself

• Studies find that we see:
  2 observations per second
  120 observations per minute
  3200 observations per hour

• Scan: Above, Below, Behind, Inside

• If we are not deliberate in what we choose to see...our eyes and mind will see what they want to... which may not be the whole picture.
Look Out for Yourself

Here are a few drills that you can do to improve your Situational Awareness skills:

• Identify all the exits when you enter a building.
• Count the number of people in a restaurant, at the ball field or at the pool.
• Note which cars take the same turns in traffic
• Take a look at the people around you and attempt to figure out their stories.
Your Safety, and that of Your Co-Workers is in Your Hands

Working on SimOPS locations requires a high level of awareness because of:

• The high number of moving equipment
• The high number of people in small work areas
• The lack of communication and consistent training for specific jobs or equipment.
Your Safety, and that of Your Co-Workers is in Your Hands

- Situational Awareness is the most important skill set when it comes to your safety.
- By practicing Situational Awareness, you can avoid being in hazardous situations.
- Situational Awareness is simply the ability to take information about those around you and your surroundings, interpret that information, and act accordingly.
At the end of the day....