What is RADAR?

A hazard assessment process that can be used to help safely address upset conditions and prevent incidents from occurring.

Note: The RADAR process is not a new safety program. It is a useful resource that will assist workers in managing one of the primary causes of injury - upset conditions.

What is an Upset Condition?

- Upset conditions are interruptions in the regular running of the work process or other planned activity.
- Any distraction or break in the normal work routine is considered an Upset Condition.

Upset Condition = Unplanned Event

Examples of Upset Conditions are:
- Unscheduled maintenance
- A previously unidentified hazard is encountered
- Mechanical breakdown
- Anything that distracts your thinking from the task at hand
Introduction to RADAR

Why do we need to Recognize Upset Conditions?

- Upset conditions greatly increase the risk of harm or injury while doing forestry work.
- Incident reviews suggest that workers are up to 35 times more likely to be injured while working during an upset condition than during normal operating conditions.

RADAR - The Process

R - Recognize the risk
A - Assess the situation – stop to think
D - Develop a safe solution
A - Act safely to fix the problem
R - Report and record the upset condition
When to use RADAR?

When you notice you will be facing an unplanned event such as:

- The use of unplanned force
- The use of a tool not designed for the task
- Anything unexpectedly jammed, stuck or hung up
- Before performing maintenance
- Anytime lockout is required
- “Jury rigging” or “macgyvering” to make stuff work
- When you feel pressured to rush

Recognize the Risk

If you find yourself saying any of the following:

• This will be a quicker way to do it…
• It looks like it will hold (I’m sure it’s strong enough)….  
• This tool, equipment is not performing the way it should…
• I am getting tired of dealing with this over and over again!
• I know I could use some help but don’t want to ask for it…
• This will only take a second. I think I can get it done without getting caught…
• You are feeling any level of frustration or anxiety..

…then you need to say to yourself – “RADAR!” – Stop and listen to the “little voice” in your head.
**Assess the Situation – Stop to Think**

*Visually imagine the hazards you are facing.* Ten steps or questions you must ask yourself when using RADAR during an upset condition:

1. **Surroundings:** What's in the ten foot circle of danger?
2. **Tools:** Do I have the right tool for the job?
3. **Other people:** Is anyone in the line of fire?
4. **Breaks free:** Where does it go if it lets go?
5. **Weight:** Do I need to seek help?
6. **Position:** Could I strain myself?
7. **PPE:** Do I have the correct PPE for the task?
8. **Lockout:** Is there Zero Energy – guaranteed?
9. **Trained:** Am I trained to do the task?
10. **Help:** Do I need extra eyes or hands?

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**Assessing the situation**

1. **Surroundings?**

   - **What are the hazards, To me To others?**
   - **What are you seeing and hearing above, behind, below and side to side?**
   - **Can the tool I am using strike me?**
   - **Where are the line-of-fire issues; am I in the bight?**
   - **Is there a potential to be hit by something?**

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Assessing the situation

2. **Tools?**
   - Do I have the right tool for the job?
   - Do I know how to use it safely?
   - Is the tool in good shape, including guards & cords if applicable?
   - Is the tool sharp if necessary?
   - What are the hazards associated with using the tool?

Assessing the situation

3. **Other people?**
   - Is anyone in the line-of-fire?
   - Are people alert to what I am doing?
   - Is there good communication - have we talked it over together?
   - Is the area guarded/barricaded if necessary?
4. **Breaks free?**
- Do I know where my fingers, hands, arms and feet are?
- Where does the force go – if it lets go?
- What happens when it comes loose?
- Will I fall if I lose my balance, traction or grip?

5. **Weight?**
- Am I lifting properly?
- What’s my body position?
- What do I gain by straining to lift something myself?
- Is there a tool or device I can use to assist with the lifting?
- Can the object fall on me or my foot?
- Do I need to seek help?
6. **Position?**

- Is my position, posture, stance correct?
- Is it possible I could strain myself with this task?
- Am I in a congested area?
- What am I doing that may be putting me at risk?

7. **PPE?**

- Do I have the **right** PPE for the job?
- Does the PPE **fit** me?
- Is the PPE in **good** **condition**?
Assessing the situation

8. **Lockout?**

- Electrical
- Pneumatic
- Hydraulic
- Chemical
- Gravity
- Pressure
- Thermal
- Stored energy

*Processing head correctly de-energized for maintenance*

**Have I tested the system?**  **Have I achieved zero energy?**

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9. **Trained?**

- Have I been trained for what I am about to do?
- Have the people helping me been trained?
- Am I certified and qualified to perform the function I am about to do?
- Am I familiar with the Safe Work Procedure for this task?
Assessing the situation

10. Help?

- Get a second set of eyes involved. A second opinion on your assessment

- Call for certified and qualified assistance. You know what needs to be done but you are not certified and qualified

- You can’t see a safe solution – STOP and ask for help

- Asking for help is a sign of strength, trust and leadership. Two minds together can accomplish far more than two minds individually

Develop a safe solution

Based on 10 step assessment, develop a safe solution.

- Think through the 10 steps thoroughly and develop a plan to complete the task

- Ask yourself, “If I follow my plan, can I deal with the Upset Condition safely”?

- If the answer is “yes”, proceed to Act safely to fix the problem

- If the answer is “no” STOP and call for assistance

- If the answer is “I think so” STOP and call for assistance
Act safely to fix the problem

Execute the plan as you have developed it

- Take the time to re-examine your situation if it appears you will have to change your plan

- If anything unexpected happens while executing your plan, STOP

- Do not carry on with the plan until you know you can “Act safely to fix the problem”

Report and Record the Upset Condition

- By using the existing close call, near miss or hazard reporting process at your operation or a more formal system like a RADAR recording notebook

- Report in to the supervisor to explain the issue and discuss a permanent solution........WHY?

Given the right conditions and time, an unreported Upset Condition is one that will be repeated – and could hurt you.
Why use RADAR?

For all the things that are important to you...

Test your knowledge

Quick Quiz: Choose the best answer

1. What is RADAR used for?

   a) A process used by any worker to safely address Upset Conditions and prevent injuries from occurring

   b) A technical term used by managers to assess contracts

   c) A process to eliminate the need for all the planning that takes place in the first place

   d) A measure of a person’s ability to think in stressful situations
Quick Quiz: The best answer is in green.

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2. The first “R” in RADAR stands for “Recognize the Risk”. What might indicate that the risk is high and a RADAR assessment should be done.
   a) You find yourself saying “I think it’s strong enough”
   b) You find yourself saying “I know a faster way to do this”
   c) You find yourself saying “I know I need help, but I don’t want to ask for it”
   d) All of the above
2. The first “R” in RADAR stands for “Recognize the Risk”. What might indicate that the risk is high and a RADAR assessment should be done.

a) You find yourself saying “I think it’s strong enough”

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c) You find yourself saying “I know I need help, but I don’t want to ask for it”

d) All of the above

3. Incident reviews show that you are up to ______ times more likely to be injured while working during an upset condition than during normal operating conditions.

a) 2

b) 10

c) 35

d) 90
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4. Given the right conditions and time, an unreported Upset Condition is one that will be repeated.

True    False
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   True    False

   And the more the Upset Condition is repeated, the more likely there will be an injury that results.

5. I must STOP and NOT proceed with my task if I am unable to come up with a safe solution.

   True    False
5. I must STOP and NOT proceed with my task if I am unable to come up with a safe solution.

True    False