

A large, stylized image of a building with a dome, likely a university building, set against a vibrant sunset or sunrise sky. The sun is low on the horizon, creating a bright lens flare effect. The sky transitions from a deep orange near the sun to a darker red at the top. The building is silhouetted against the bright sky, with some windows glowing from within. The overall mood is warm and dramatic.

SITUATIONAL AWARENESS

**Defensive Driving Skills
Applied to Everyday Life**



UNIVERSITY OF NEBRASKA-LINCOLN

Situational Awareness Definitions

- Aviation Industry Definition
 - “Continuous extraction of environmental information, integration of this information with previous knowledge to form a coherent mental picture, and the use of that picture in directing further perception and anticipating future events”
(Dominguez, 1994)
- Simple Definition
 - Knowing what is going on around you



Levels of Situational Awareness

1. Awareness of information

- Using your human senses to make direct and indirect observations
- Communicating (verbally and nonverbally)
- Making the distinction between relevant and irrelevant information

2. Comprehension of its meaning

3. Anticipation



Awareness

- Scan for information
- Think about what you are seeing
 - You see new things all the time
- Make anticipatory decisions
 - Defensive driving applied to everyday life



Scanning Strategy

- Highest priority object first
- Use your peripheral vision (wide focus tracking) for tracking identified objects
 - Keep object(s) in focus as you scan other areas
- Use your concentrated focus to identify new objects
 - Think about what you are looking for
 - Think about what you are seeing



Comprehension

- Keep thinking during an incident
 - Use your senses
 - What is going on around you?
- Constantly identify options
 - Pro and cons
 - Compare as many possible variables
- Think about what you see in terms of safety and threats



Know Your Surroundings

- Always know where you are, inside and outside
 - Avenues of escape
 - Places of shelter
 - Potential hazards
- Memorize
 - Recognize sights and sounds foreign to your environment
- Visualize



Factors Affecting Loss of Awareness

- Tunnel vision
 - Not scanning
- Fixation or preoccupation
 - Work
 - Headphones
 - Cell phones
 - Texting
- Dynamic Situations
 - Inflexible response to fluid situation



Out

- **Figure it Out**
- **Get Out**
- **Hide Out**
- **Call Out**
- **Keep Out**
- **Spread Out**
- **Take Out**
- **Help Out**

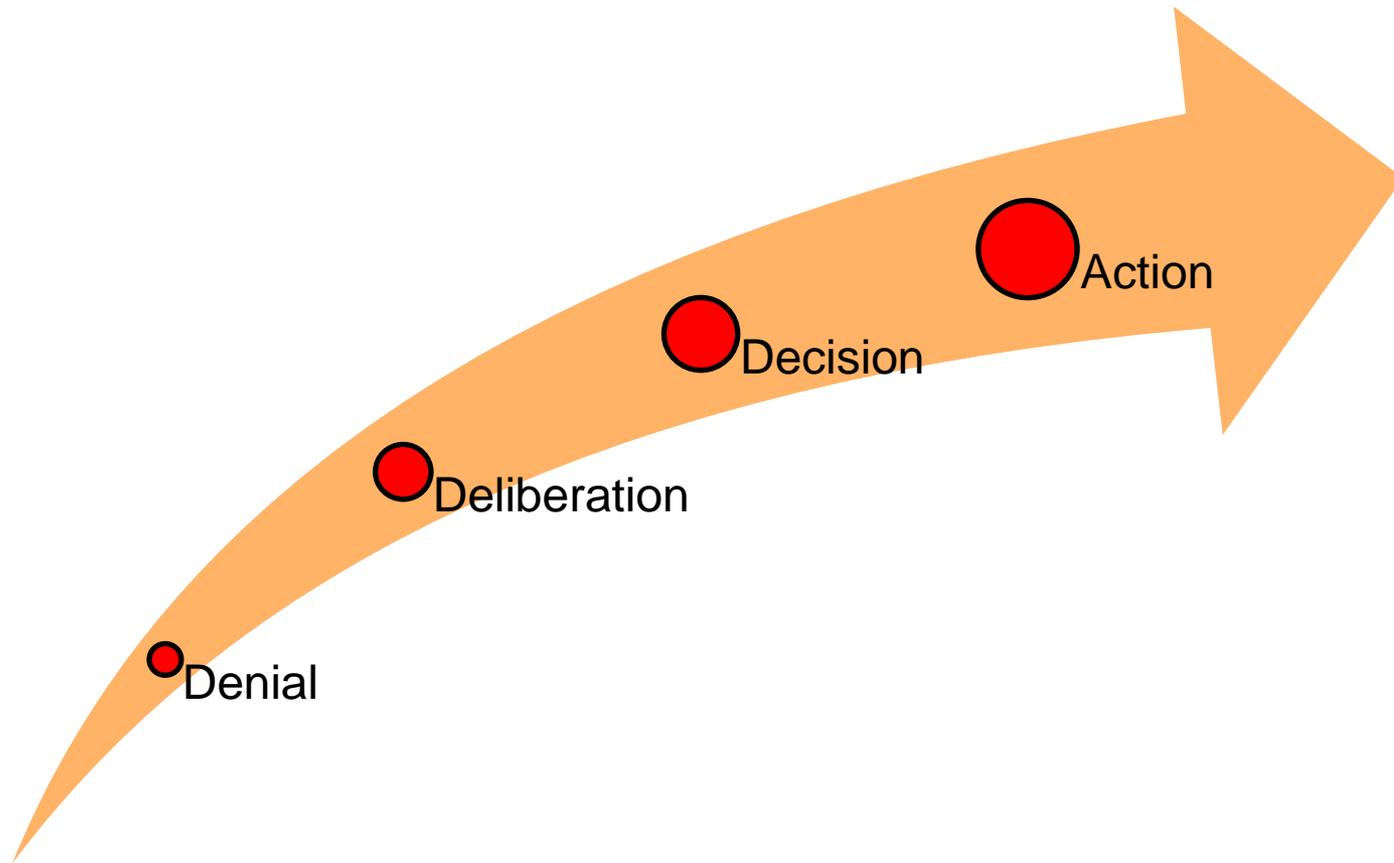


Emergency Notification System

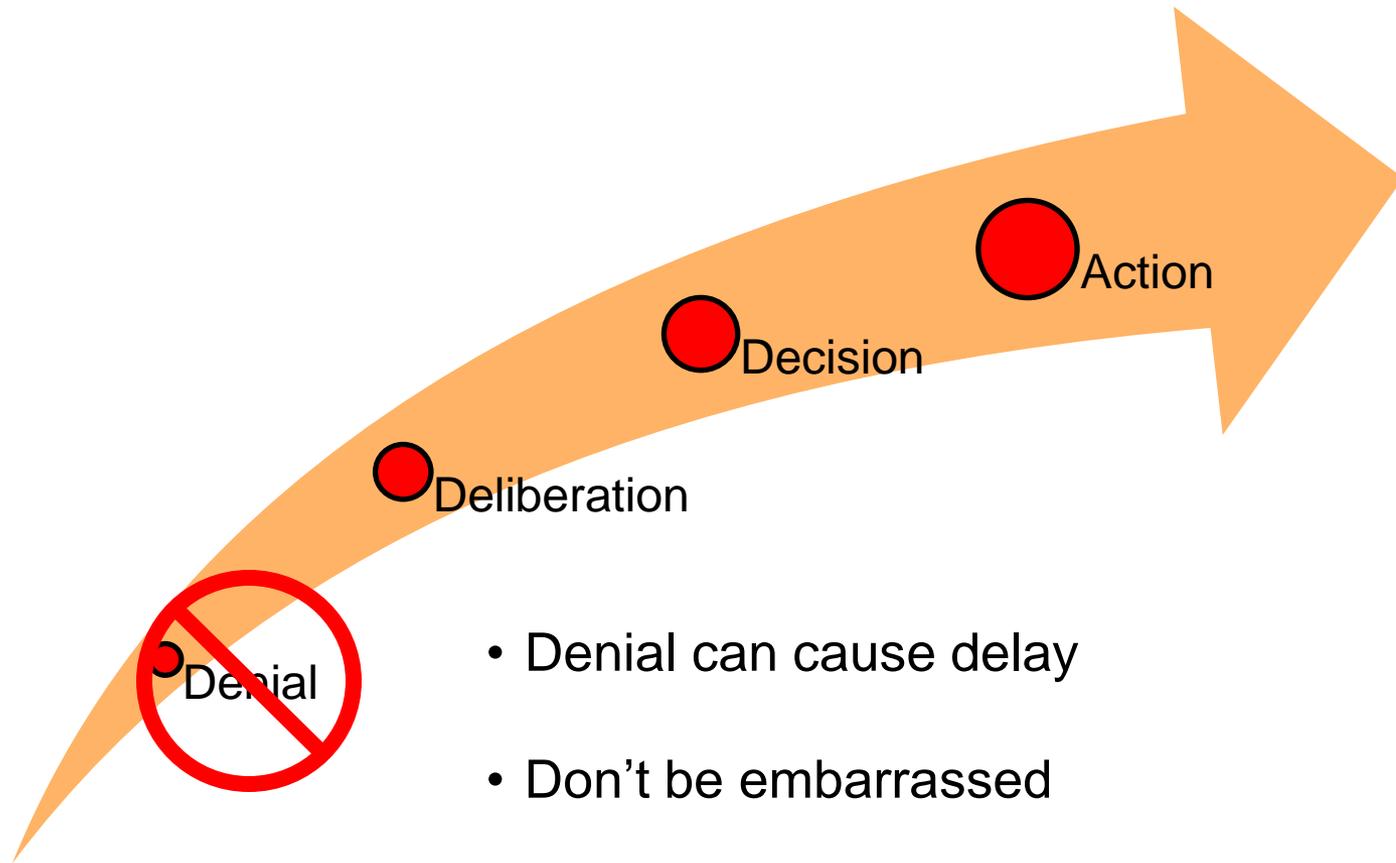
- Components
 - Your Senses
 - Your Intuition
 - Your Instinct



Survival Sequence



Survival Sequence



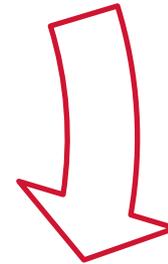
- Denial can cause delay
- Don't be embarrassed
- We need to quickly move to deliberation

Controlled Breathing

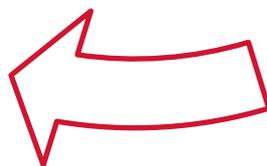
Hold
4 Seconds



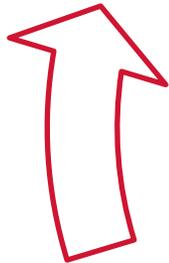
Inhale
4 Seconds



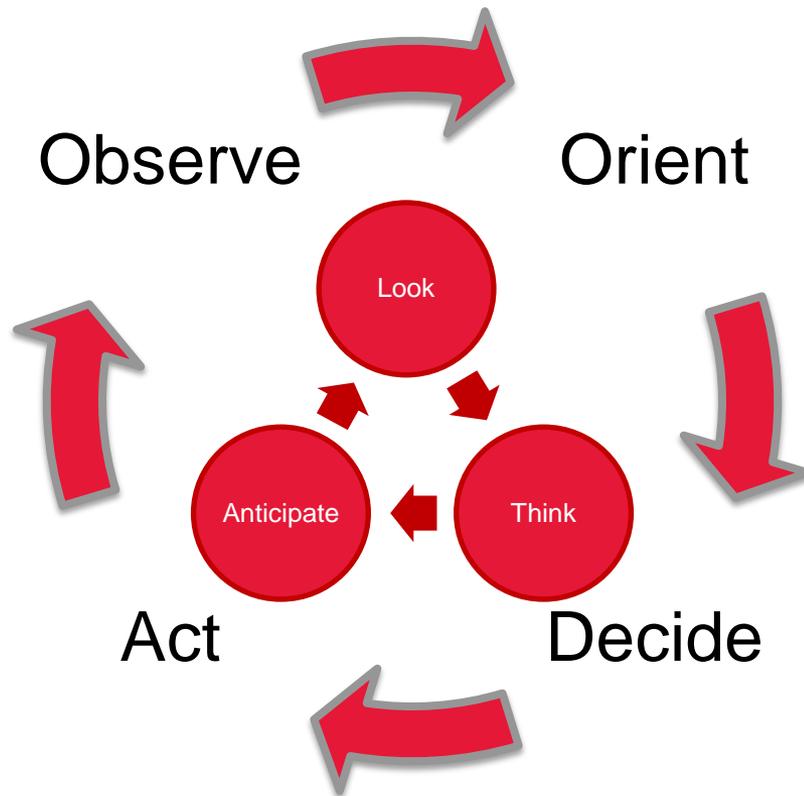
Exhale
4 Seconds



Hold
4 Seconds



OODA Loop



- **Observe**
 - Scan your environment to gather information
- **Orient**
 - Synthesize data into information
 - Comprehend
- **Decide**
 - Consider options
 - Hypothesis
- **Act**
 - Test
 - Evaluate action



Figure it Out

- What is happening
 - Who
 - What
 - When
 - Where
 - How
- Why comes later
- Use your senses
- What are your options
- Don't deny



Get Out

- If can get out to a safe area, do so
 - Get out fast
 - Don't wait for others to validate your decision
 - Leave your belongings behind
- The best way to survive an active shooter situation
 - Don't be where the threat is
 - Don't go where you can be seen



Get Out

- When
 - Directed to Evacuate
 - Can Do So Safely
 - Violent Threat
 - HazMat Release Inside
 - Fire Alarm



Hide Out

- If you can't get out, then find a place to hide out
 - Hidden from the shooter's view
 - Protection should the shooter fire in your direction
- If possible, avoid places that might trap you or restrict your options of movement



Hide Out

- When
 - Cannot Safely Get Out
 - Directed to Shelter-in-Place
 - HazMat Release Outside
 - Tornado
 - Lightning



Call Out

- When you get out, immediately call out
 - Do not assume that someone else has called
 - Dial 911
 - Calmly and quickly tell them where you are and what's occurring
 - Include the name of the shooter(s), if known
 - Number of shooter(s)
 - Description of the shooter(s)
 - Location of the shooter(s)
 - Number and types of weapons carried by the shooter(s)
 - Be persistent when calling since the phone lines may be jammed with other calls



Keep Out

- Keep out the shooter
 - A room that can be locked with plenty of things to hide behind is best
 - Blockade the door with heavy furniture (even if the door can be locked)
 - If the shooter is nearby, just lock door and be silent
 - Turn out the lights
 - Turn off any radios or other noise-producing sources
 - Silence your cell phone or pager
- As soon as you have the opportunity, and without attracting the shooter's attention, call 911



Spread Out

- Spreading out will give you options and make it harder for the shooter if he does get into your hiding place
- Quietly talk about what you'll do if the shooter enters
- Keep calm
 - You can have an effect on others



Take Out

- No other options
- Do whatever is necessary to stop the threat
 - Distract
 - Swarm
 - Use a hard object as a weapon, the bigger the object the better
- Only you can decide the right thing to do
- There is risk in any decision



Help Out

- Whatever action you're taking, whether it's get out or hide out and keep out, you should help out where you can
 - Help others escape as you go
 - Help prevent others from entering the danger zone
- Help injured, if possible
- Help set tone by remaining calm
 - Demonstrating calmness can have a contagious effect on others; it will help them to remain focused on survival



Look For

- Doors
 - Lockable from inside
 - No glass around door
- Rooms
 - Objects suitable for barricades
 - Objects suitable for cover
 - Windows for exiting
 - Objects for breaking windows
- Upper floors
 - Height above ground
 - Fire escapes
 - Multiple interior stairways
- Tools for defense



Panic

- The term “panic” is often used when discussing evacuation and shelter-in-place movements
- Post-event research has shown that in most cases people do not panic, and, instead, will try to help others
- Most people will behave normally and make rational decisions during the incident
- People will look to each other for information, validation, guidance, and assistance
- Communication is KEY!



Group Behavior

- Group characteristics that are a concern when evacuating or sheltering-in-place are:
 - Context of group
 - Age
 - Physical Agility
 - Mental Agility
 - Physical Size
 - Relationships among group members



Group Behavior

- Advantage: groups tend to move in blocks, which can impose order on movement
- Disadvantage: large group movements can cause obstructions at choke points
- The larger the group, the more difficult it is to make a decision on whether to evacuate in response to a threat
- Once a group decides on a course of action, members of the group will try to convince other groups to engage in the same course of action
- Groups will try to move together, which could result in intergroup competition as faster groups try to move around slower groups



Group Behavior

- In the past, social ties help us survive emergencies
- We are shifting to technology reliance, which only works some of the time (Ripley, 2008)



Group Behavior

- Reality

- Generally, no panic
- Quiet
- Submissive
- Obedient
- Considerate

- Dangers

- Groupthink
- Peer pressure
- Corroboration
- Slow to react
- Too little, too late



Verbal Commands

D E E R

Direct (“Keep Moving”)

Encourage (“You’re doing well”/ “Help your neighbor”)

Example (Lead by example and Demeanor)

Redirect (Safest or open route—Keep Moving)



Risk Formula

- Rational Formula

Risk = Probability X Consequence



Risk Formula

- Realistic Formula

Risk = Probability X Consequence X Dread/Optimism



Dread Formula

- Ripley, 2008

Dread = Uncontrollability + Unfamiliarity +
Imaginability + Suffering +
Scale of Destruction + Unfairness



Probable Threats

- Fire
- Weather
- Auto accident
- Trip/fall



Resources

- Emergency Management Institute
 - IS-907 Active Shooter What You Can Do
 - <http://training.fema.gov/EMIWeb/IS/is907.asp>
- UNL Emergency Management
 - Shots Fired on Campus: When Lightning Strikes
 - <http://emergency.unl.edu/shotsfired/>



References

2pass. (n.d.). *Situation Awareness*. Retrieved January 11, 2011, from 2PASS.CO.UK:
<http://www.2pass.co.uk/awareness.htm#SAdefinition>

Endsley, M. R. (2001, May). *Training for Situational Awareness*. Retrieved January 11, 2011, from Royal Aeronautical Society: <http://www.raes-hfg.com/reports/22may01-SitAssessment/220501-endsley.pdf>

Irani, F. S. (2008). *The Relationships Among Personality, Stress, and Situational Awareness: The Effect of Situation Awareness Training*. Auburn, AL: Auburn University.

Ripley, Amanda. *The Unthinkable*. New York: Three Rivers Press, 2008.

Royal Aeronautical Society. (n.d.). *Human Factors Group: Royal Aeronautical Society*. Retrieved January 11, 2011, from Royal Aeronautical Society: <http://www.raes-hfg.com/crm/reports/sa-defns.pdf>

Team Coordination Training: United States Coast Guard. (n.d.). Retrieved January 11, 2011, from United States Coast Guard: <http://www.uscg.mil/auxiliary/training/tct/chap5.pdf>

Toner, E. S. (n.d.). *Creating Situational Awareness: A Systems Approach*. Retrieved January 11, 2011, from Institute of Medicine of the National Academies:

Williams, John, Deputy Sheriff. *Active Shooter Response Tactics*. Los Angeles County Sheriff's Department: PowerPoint Presentation, 2008.



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