



# ASQ CRE Prep course

Lesson V. A. 1. b.

Reliability Test Strategies

Human Factors Testing

# Sight Capabilities

- **Normal line of sight**
- **Critical elements with 15% of line of sight**
- **Color perception**
- **Color blindness**



# Touch (Kinesthetic) Capabilities

- **Placement of controls**
- **On is up (consistent?)**
- **Size, texture, shape, color.**
- **Height, weight, resistance, grasp**





# Audio Capabilities

- **Simple**
- **Loudness**
- **Tone Perception**
- **Background noise**
- **Range**



# Thermal Tolerance Capabilities

- **Human tolerance**
- **Clothing & Gear**
- **Protective Gear**
- **Transitions**
- **Cycling frequency**



# Vibration Capabilities

- **Shock load & angle**
- **Vibration load**
- **Motion sickness**
- **Fatigue (human)**





# Human Factor Development Testing

- **Verify the effectiveness of the design for use by people**



# Human Factor Acceptance Testing

- **By customer to identify deficiencies in the design**





What about  
human error?



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Lesson V. A. 2.

Test Environment