



ASQ CRE Prep course

Lesson V. A. 1. b.

Reliability Test Strategies

Human Factors Testing

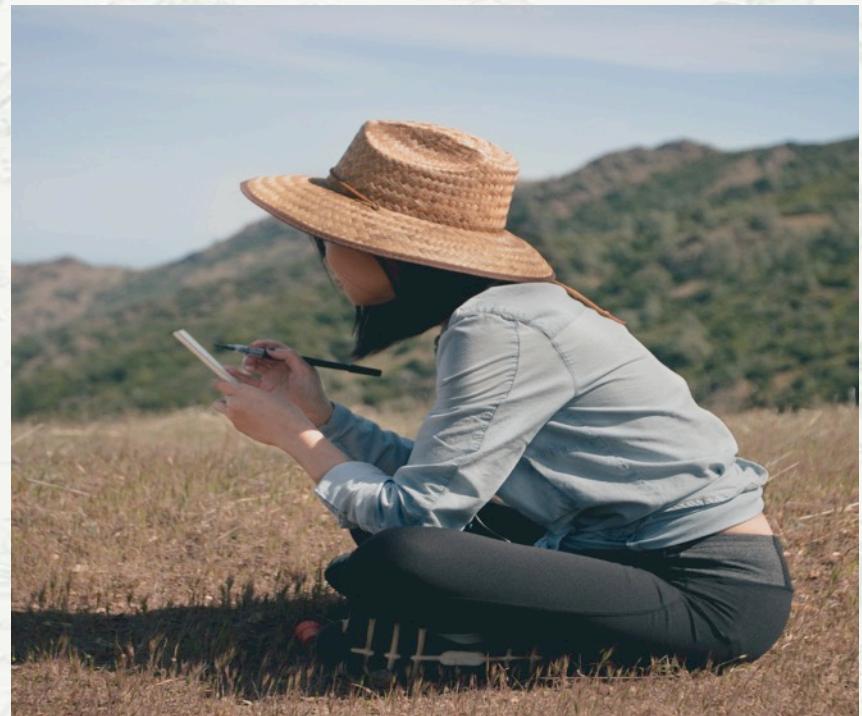
Sight Capabilities

- **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