

Human Factors and Ergonomics in Engineering Design

In the case study of Julie Thao

- After reading the linked articles in the “Web Resources for Human Factors and Ergonomics” describing the Thao case, as well as the opinion article by Bob Wachter, have students recount the three types of human behavior that lead to human error and then classify the actions of Julie Thao within this context, specifically those actions that bypassed existing safety protocols.
- The Wisconsin State Journal article “A Common Medical Mistake” suggests a design change to hospital tubing. Would such a change prevent this type of mistake from ever occurring again? What other safety procedures might prevent some or all potential risk behaviors in this situation?

In your own design

- Consider carefully how the device your team is designing interfaces with human beings. Is there potential for mistakes or misuse? What features can you incorporate into your design to minimize the three types of human behavior leading to errors?
- What other design factors do you need to include for ease-of-use considerations?