

# Topic: Engineering judgement

## Questions to consider

- Q1. What is your definition of EJ?
- Q2. Where and when is EJ necessary in your field? Is that formalised?
- Q3. Where and when is EJ necessary in your field? Is that formalised?
- Q4. Were you given guidance? Can you point others to guidance or education?
- Q5. What are the pitfalls?
- Q6. What do you think Hf's position on EJ should be if we were to have one?

## Discussion points

- Engineering is not a complete science - expertise is crucial in making judgments due to the uncertainty involved in predicting performance.
- Experience, peer review, and the ability to work from first principles in engineering underpin EJ.
- Pitfalls can be group bias and leaders who do not encourage open listening and consideration of all aspects.
- Non-technical skills (NTS) e.g. effective communication and influencing skills enable engineers to effectively communicate their judgments. Lack of education in these areas.

## Participant Key Takeaways

- Real-world experience and observation play a significant role in developing EJ. Look beyond the calculations.
- Reflect, practice and refine your EJ.
- Consider development of NTS.

## Useful links

[Engineering Judgment and Education: An Arendtian Account](#)

[Philosophy and Engineering: Exploring Boundaries, Expanding Connections | SpringerLink](#)

<https://history.nasa.gov/rogersrep/genindex.htm>