Safety in Engineering Designs

What **Engineering** <u>designs must work</u> and they must comply with established codes and regulations. <u>Above all, they must be safe.</u>

Comprehensive QA/QC systems provide the checks and balances. But this does not replace the **right people doing the right things at the right time**.

Problems arise when:

- We do things in a rush. Being too schedule driven.
- We do not do the proper checks or have the proper resources to do the checks.
- People are not qualified, experienced, nor trained to do the assigned work.
- Late changes are made without proper due diligence.
- We don't get or use the latest information in our designs.
- We get too complacent. Forgetting to respect the inherent "risks".
- We expect the "system" to take care of itself. Or someone else to fix it.
- Disciplines do not talk to each other to coordinate the designs affecting them.
- Wrong decisions are made that are not recognized, nor corrected.
- We apply the wrong interpretations of code or regulatory requirements.
- We think we know it all, even though we know that everyone makes mistakes.

Results can be catastrophic! Be diligent. Be careful!

