Configuration Management:
It’s not just a necessary evil!

Carmen L. Prater
What is CM?

- People sitting in cubicles who want nothing more than to be a thorn in my side.

- The list that says how the vehicle is configured for the test. I think it’s verified by QC.

- Another mystical process that the Air Force makes us use that no one really understands.

- It’s the way documents get released.

- Oh, those are the people who manage the configuration of the vehicle.
CM is Much More Than Physical

- DoD first defined CM in the 1950’s

- IEEE 610.12-1990 definition:
  
  “...a discipline applying technical and administrative direction and surveillance...” in order to:
CM Intent

- **ID & document** the *functional requirements & physical characteristics* of the vehicle & associated support equipment.
- **Audit** the *functional requirements & physical characteristics* to verify conformance to intended design.
- **Control changes** to the *functional requirements & physical characteristics* & related documentation.
- **Capture and report** information necessary to effectively manage *functional requirements & physical characteristics* to include status & implementation information for changes to the intended design.
Flight Testers are Consumers & Owners:

The ‘auditors’ that ensure that the ‘identified and documented’ functional requirements & physical characteristics work as intended.

The ‘capture & reporting’ function that results in substantiating the design, or identifying changes necessary.

CM is really our business.
CM: WIKIPEDIA OF FLIGHT TEST

- Not always 100% accurate, but an excellent place to start for reference.
- Can be modified by anyone willing to use the system.
- The more input given, the more accurate it becomes.
## Technical Manuals

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A few examples:

Test Plans & TOPs define clear test points.

FOL & Flight Manuals contribute to Go/No-Go criteria.

Control/Firing Room Ops gives clear expectations on team while conducting testing.
Summary

- CM requires input from flight testers to be effective.
  - Put yourself in the customer role & make your needs known.
  - Be the owner by ensuring that you perform your part in contributing to the success of the system.