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# Design for Certification from an SNL Surveillance Perspective

(Just a couple slides to get the conversation going)

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# **Transforming Surveillance = Transforming Certification**

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- **Transforming how we design, qualify, surveil, and certify weapons**
- **New Development (LEPs) weapon systems are embracing the idea of building in Design for Surveillance**
  - **Testable/modular/disassemble-able design**
  - **Designed with surveillance and critical data needs in mind**
  - **Built in instrumentation, self test capability**
  - **Base line data obtained during production**
    - **Correlation between development, production, & surv data**
  - **Surveillance requirements documented in the same way that weapon functional requirements are**
    - **Perform and document tradeoffs**





# Transforming our Certification Strategy

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- **Focusing on what we don't know**
  - Critical Performance Parameters (CPPs)
  - Knowledge Gaps (KGs)
  - Focusing on margin via QMU
  - Priority driven by knowledge gaps/inadequate margin
    - Priority = budget decisions
- **Repeating Qualification Testing on Stock Rtns**
- **More emphasis on Component & Material Analysis**
- **Leverage production, qualification, surveillance testing & failure analysis data & lessons learned**
- **Improving test realism & test variation capability**

Focus testing and material analysis on obtaining all of the data that is required to enable us to be able to confidently certify the stockpile.

