

EVALUATION OF STRESS RELAXATION BY CREEP IN LEAD

Gwelen Paliaga
SCIPP
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- Steady State Creep
- Power law behavior
- Experimental data from Vulcan Lead
- Extrapolated to various stresses
- Room temperature (creep rate grows exponentially with temp.)

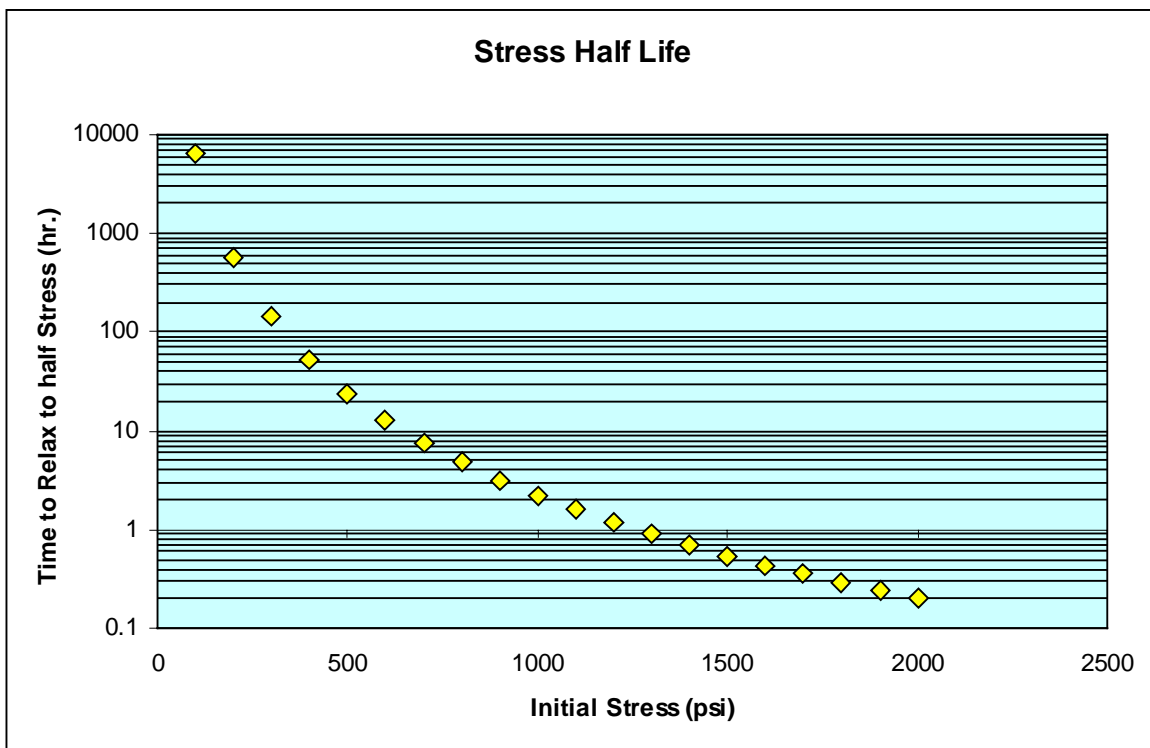


Figure: *If lead is stretched to a fixed length (strain) and then held there, the stress in the lead will decrease due to creep. Plotted above is the theoretical time it would take for the initial stress to decrease by 50%.*

QUESTIONS:

- Effect on engineering of lead/carbon laminate (stability of CTE match)
- Stress levels vs. time scale
- Hysteresis?
- Is lead the proper material for superGLAST? (Tungsten?)