

No Single Platform can be Expected to Meet All Science Requirements and it is Important to Factor that into Facility Requests

How Heavy?

How Severe?

How High?



Flight Profiles Affect Life Cycle of Airframe

- **Using statistics for Citation Jet Aircraft effect of flying different flight profiles analyzed**
- **New aircraft are designed for specific flight; older aircraft had much larger flight window because engineering was not as fine tuned**
- **Recommended Service Life Increase/Decrease**
- **Develop Fleet Management Plan With Options & Alternatives**
 - > **Route Change**
 - > **Modification To Mission Profiles**
 - > **Fatigue Tracking Program**



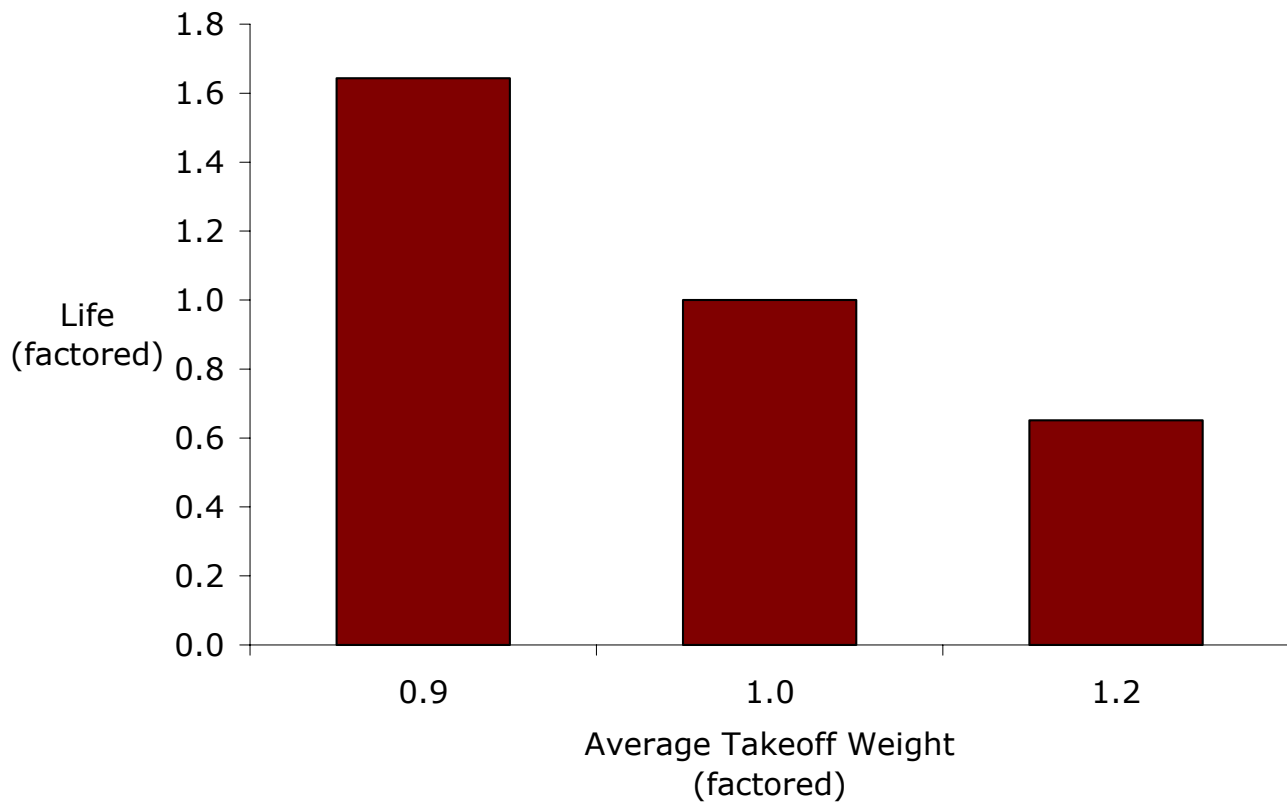
Comparative Analysis

- **Analyze for crack growth life (inspections)**
- **What happens if:**
 - > **Average Cruise Altitude changes?**
 - > **Gross Weight is changed?**
 - > **Usage (maneuvers) changes?**



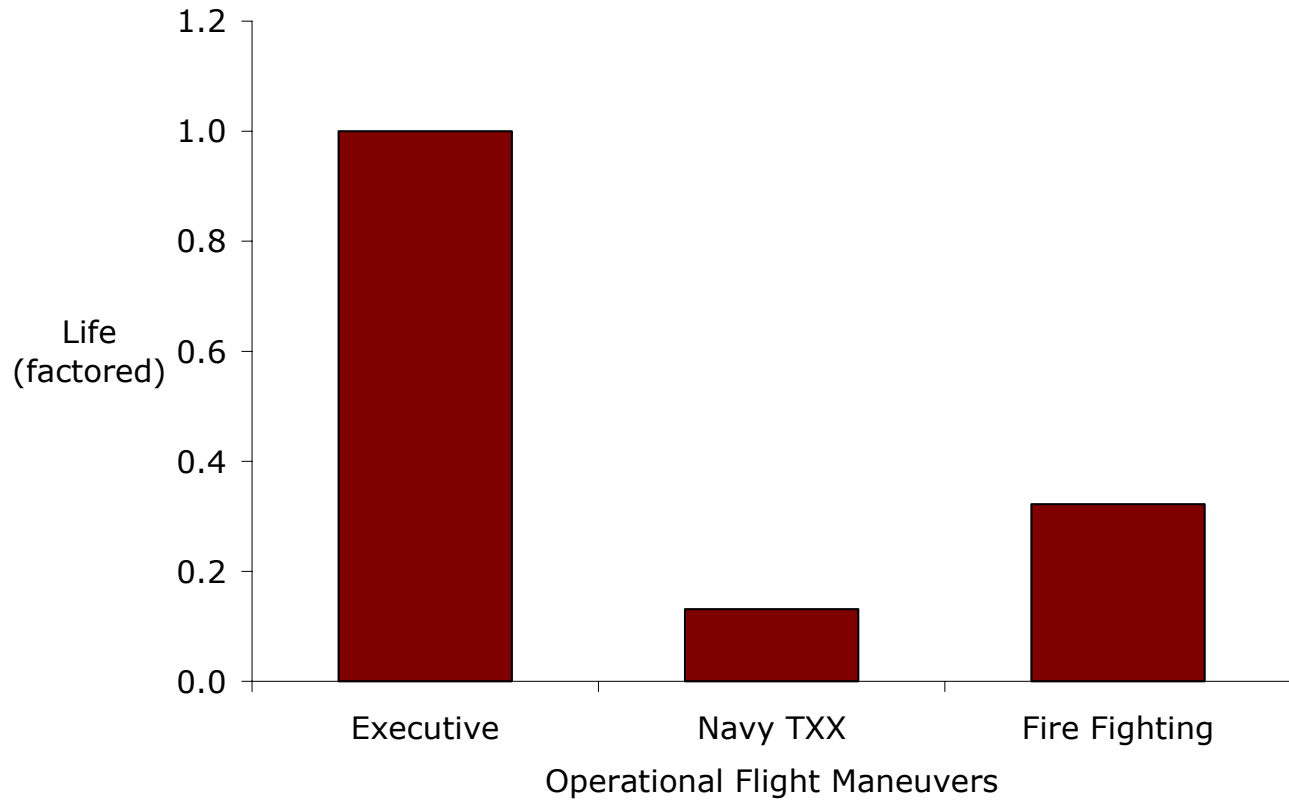


Weight





Maneuvers





Altitude

