



# Welcome to GSAW2004!

**Steve Burrin**

Vice President, Space Program Operations

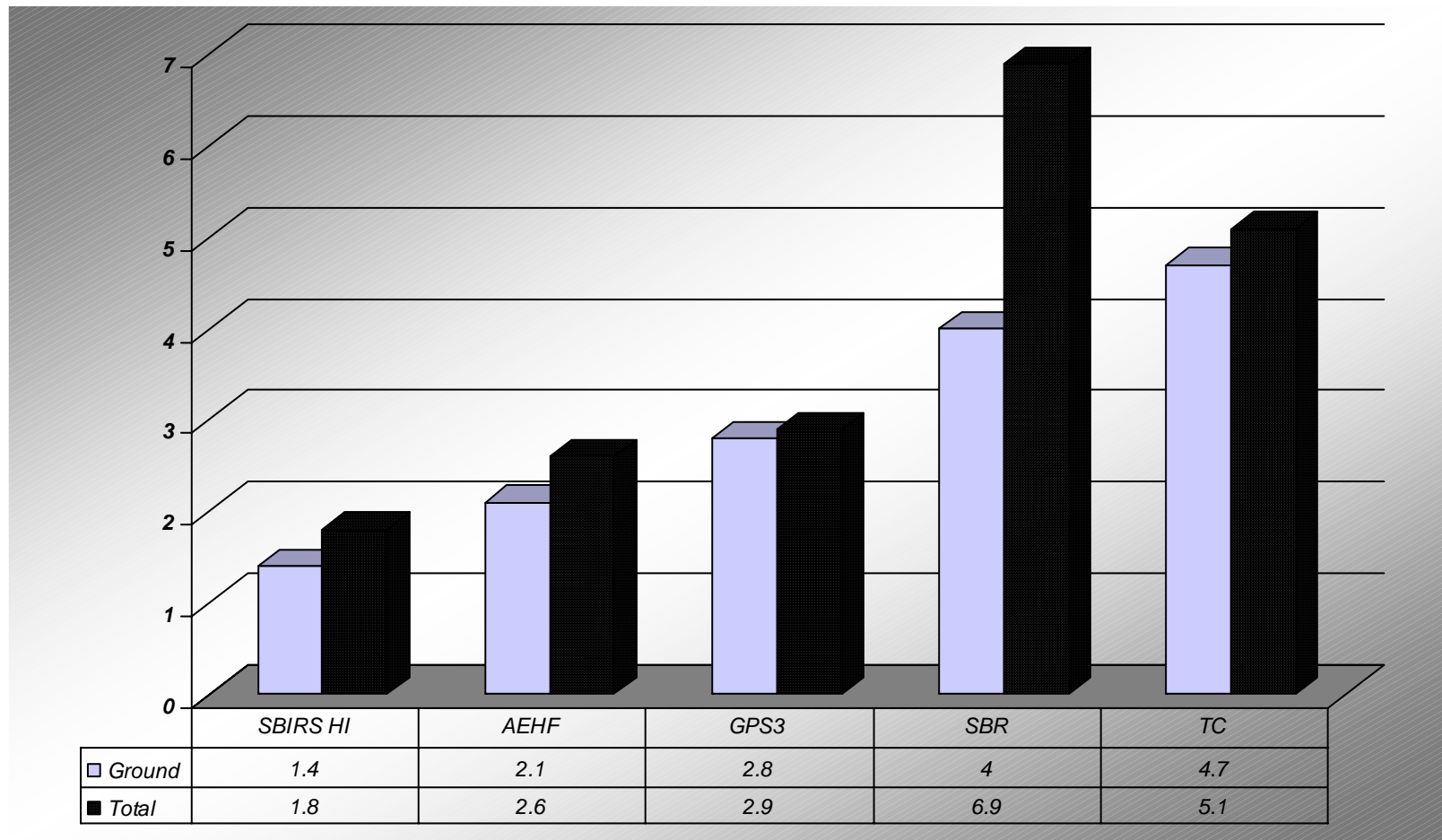
The Aerospace Corporation

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# Ground – Space System Software

- **Large** software-intensive systems
  - SLOC order of magnitude
    - $10^6 - 10^7$  on the ground
    - $10^5$  onboard
- **Complex and Critical**
  - Unprecedented / low technology readiness
  - Multiple ground elements, frequently worldwide
  - Multi-satellite constellations
  - Combinations of hardware and software
  - External and internal interfaces
  - High reliability and integrity requirements

# Software Growth in Space Systems Current and Projected



ESLOC (M) - Equivalent Source Lines of Code (Millions)