

# Documentation Overview

**Ian Pain**



## SPIRE BSM Design Description

- **Last released 3.4. This review - Version 4.0 release**
- **Main Body**
- **Appendices**

- 1 MECHANICAL DESIGN DRAWING PACK
- 2 ELECTRONIC DESIGN DRAWING PACK
- 3 FEA RESULTS
- 4 MECHANISM FMEA
- 5 ELECTRONICS FMEA
- 6 THERMAL ANALYSIS
- 7 CONTROLS ANALYSIS
- 8 THERMAL TEST REPORTS
- 9 ELECTRONICS TEST REPORTS
- 10 DECLARED LISTS
- 11 COMPLIANCE REPORT

**Doc Pack Sec.2**

**Doc Pack Sec.3**

**Doc Pack Sec.4**

**Doc Pack Sec.5**

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## Documentation Overview

- **Annexes (Annex A-H) - ICD's**
  - A. MASTER ASSEMBLY ICD 3D MODEL AND 2D VIEWS (blank)
  - B. STRUCTURE, THERMOMETRY **Doc Pack Sec.6**
  - C. PCAL **Doc Pack Sec.6**
  - D. LAUNCH LATCH **Doc Pack Sec.6**
  - E. OPTICS (blank)
  - F. CRYO-HARNESS **Doc Pack Sec.6**
  - G. MCU **Doc Pack Sec.6**
  - H. FPU SIMULATOR (blank)
  - I. INSTRUMENT SIMULATOR (blank)
- **Key Applicable Documents**
  - **BSM Sub-system Specification** **Doc Pack Sec.7**
    - Last released 2.0 This review - Version 3.2 (release)
  - **ATC BSM Product Assurance Plan** **Doc Pack Sec.8**
    - This review - Version 1.0
  - **BSM Sub-system Development Plan** **Doc Pack Sec.9**
    - Last released 4.0 This review - Version 5.0



## **Supplements & Errata**

- **Supplements**
  - **Updated mechanical drawing pack**
  - **Power Dissipation calculations p49-54**
    - external copies had formula but not results
  - **Reliability discussion p67-68**
    - missing in at least one doc pack
  - **Appendix 6 & 7**
    - printed single sided
- **substantive typos**
  - p21, line 2 : type -600 & -800 pivots transposed
  - p42, 9.2 line 1: RD1 should read RD7