



 THE AEROSPACE
CORPORATION

GUVI

Global Ultraviolet Imager
Critical Design Review



Software System Overview

Bernard S. Ogorzalek

JHU/APL

phone: 301-953-6000 x8460

bernie.ogorzalek@jhuapl.edu



**THE AEROSPACE
CORPORATION**

GUVI

Global Ultraviolet Imager

Critical Design Review



GUVI Software Segments

- **Flight Software**
 - **Telemetry Processor Software**
 - **Detector Processor Software**
- **Payload Operations Center (POC) Software**
 - **Engineering POC Software**
 - **Data Processing POC Software**



**THE AEROSPACE
CORPORATION**

GUVI

Global Ultraviolet Imager

Critical Design Review



Flight Software Components

- **Telemetry Processor Software**
 - Provides instrument control and telemetry functions
 - Controls spectrograph and detector subsystems
 - Collects and formats instrument data
 - Executes commands
- **Detector Processor Software**
 - Processes detector photon events
 - Computes event position
 - Bins events into focal plane image



**THE AEROSPACE
CORPORATION**

GUVI

Global Ultraviolet Imager

Critical Design Review

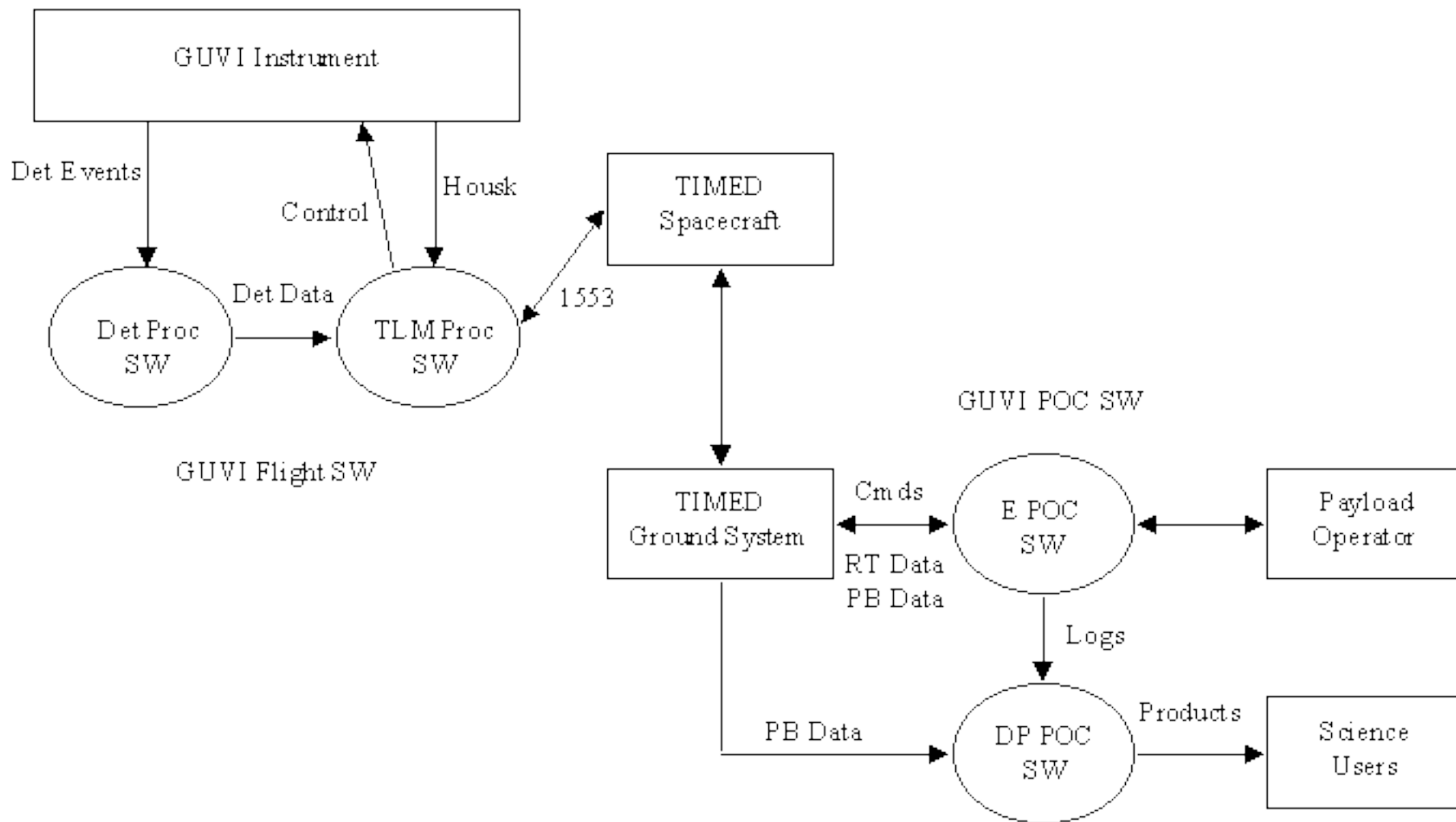


POC Software Components

- **Engineering POC Software**
 - **Generate instrument commands**
 - **Monitor instrument health and status**
 - **Alarm generation**
 - **Trending function**
- **Data Processing POC Software**
 - **Generate data products**
 - **Data access and distribution**
 - **Web server capability**

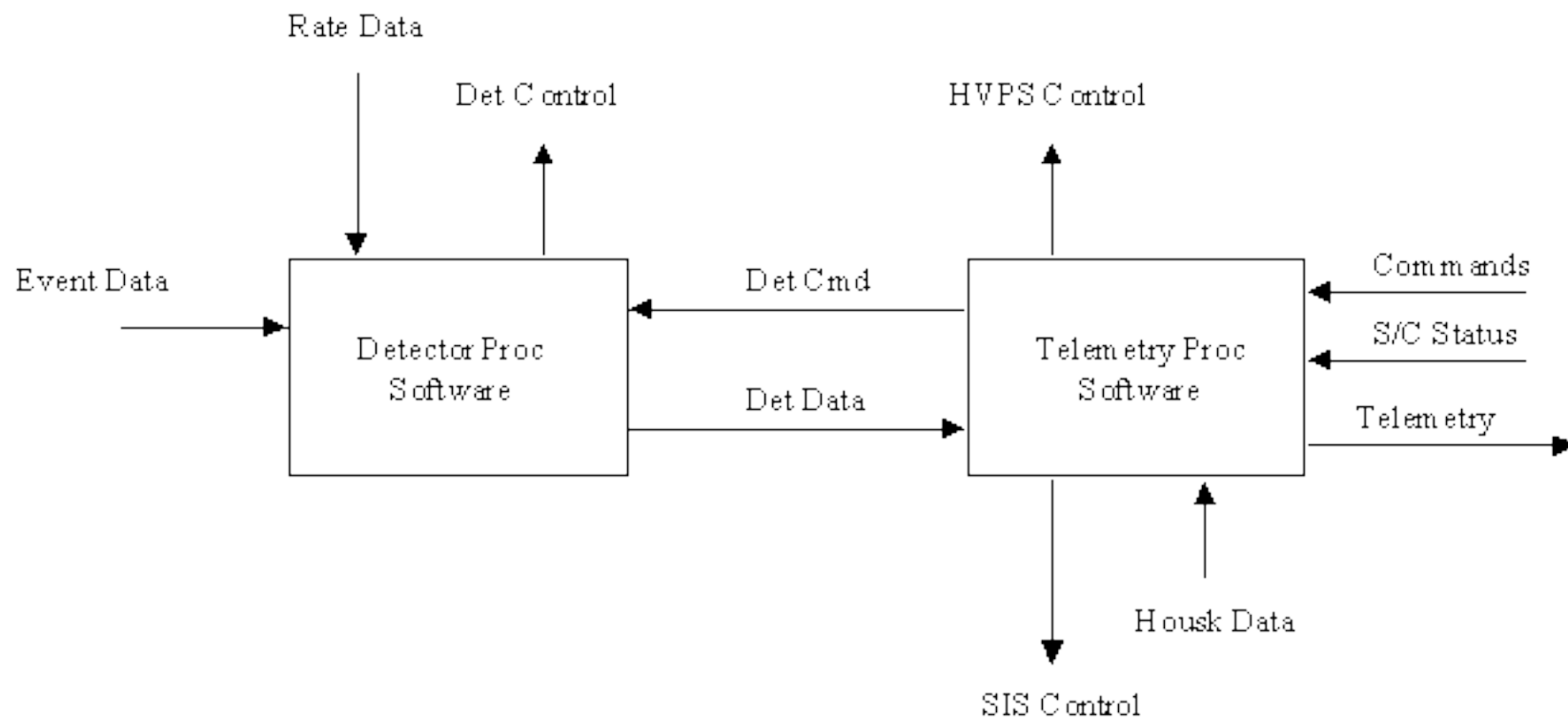


GUVI Software Context Diagram





GUVI Flight Software





THE AEROSPACE CORPORATION

GUVI

Global Ultraviolet Imager
Critical Design Review



GUVI POC Software

