ELV Payload
Objectives Hierarchy
Top-Level Objective: NASA personnel, public population, and high value assets are safe from potential hazards encountered during payload testing, processing, integration, launch, and recovery operations

Strategy: Identify all potential hazards

Objective: All hazards associated with payload, interfaces, ground support equipment and related operations are known

(1)

Strategy: Ensure a complete understanding of all operational states encountered during payload processing/integration activities

(1.A)

Strategy: Perform system safety engineering and ensure a complete understanding of potential hazards (stored energy and hazardous situations) within the system

(1.B)

Strategy: Perform system safety engineering and ensure a complete understanding of potential hazards (stored energy and hazardous situations) within the system

(1.B)

Strategy: Eliminate hazards through design and operational procedures

Objective: Faults, defects, or other issues have been found and resolved as part of the development process

(1.B.1)

Strategy: Avoid the presence of stored energy in payload design, processing, integration, launch and any recovery to the extent that is reasonably practicable

(2.A)

Strategy: Design operational plans and procedures to eliminate the presence of hazardous situations in payload design, processing, integration, launch and any recovery

(2.B)

Strategy: Mitigate hazards to the greatest extent possible through design and operational procedures

Objective: Software V&V assures confidence in the end product

(1.C.1)

Strategy: Apply engineering controls, administrative controls, and personal protective equipment to mitigate and control hazards ensuring compliance with safety requirements

(3.A)