



Swift Launch Readiness Review



November 16, 2004



Swift (Not An Acronym)



Program Explorers

MIDEX

Principal Investigator Neil Gehrels NASA/GSFC

Science Theme Structure and Evolution of the Universe (SEU)

Launch Date November 16, 2004

Launch Vehicle Delta 7320 Mission Class MIDEX (Class C Equivalent)

GSFC Project Manager Joseph Dezio NASA/GSFC

Major Partners

Penn State University Spectrum Astro / General Dynamics Los Alamos National Lab Sonoma State University University of Leicester Mullard Space Science Lab Observatario Astronomica di Brera Agenzia Spaziale Italiana (ASI)

Science Objective

The Primary Objective Of The Swift Mission Is To Determine The Origin Of Gamma Ray Bursts And To Use Them To Probe The Early Universe.



Major Swift Components





- Instruments
 - Burst Alert Telescope (BAT)
 - New CdZnTe Detectors
 - Arcminute GRB Positions (20 sec)
 - X-Ray Telescope (XRT)
 - Arcsecond GRB Positions (100 sec)
 - CCD Spectroscopy
 - UV/Optical Telescope (UVOT)
 - Sub-arcsec Imaging
 - Grism Spectroscopy
 - 24th Mag Sensitivity
 - Finding Chart (270 sec)
- Spacecraft Bus
 - Autonomous re-pointing, 20 75 sec
 - Onboard and ground triggers

Swift Mission





Launch Site Flow







• No Open Issues From FRR





- Since FRR
 - Daily Battery Trickle Charge
 - Completed Mission Dress Rehearsal
- Open Work
 - L-1: Final Closeouts Through Fairing Doors:
 - Relay Box Connector Saver
 - Star Tracker And XRT Inner Contamination Cover
 - XRT White Vent Plug
 - Battery Completion Cable
- All Work Will Be Completed By 16 November -1700 Hrs.





- Swift Will Meet All Mission Requirements!
- Swift Observatory Has Been Thoroughly Tested Since Integration Started At GSFC On September 9, 2002
- All Ground Elements Are Ready To Support Launch
- All Residual Risks Are Understood And Accepted
- Received Headquarters Approval To Proceed To Launch At Mission Readiness Briefing On October 27, 2004

Swift Is Ready To Proceed To Launch