



SORCE Mission Status

Launch Date Update –

The SORCE launch date is delayed due to a potential problem with the actuators used for steering the Pegasus wings and motors. As a precaution, Orbital Sciences Corporation is in the process of refurbishing all of the Pegasus and Taurus launch vehicle actuators. The new SORCE launch date is tentatively set for January 25 at KSC, weather permitting. Although disappointing, in the broader picture of the SORCE mission, the launch delay is minor. The important research goals remain the same and the instruments are ready for this 5-year mission. On the bright side, no one's holiday traditions will be disturbed this season!

Orbital Sciences Activity –

Parallel to the fluctuating launch date, the preparations



Orbital employees are loading the sealed container with the spacecraft onto the moving truck. The ground support equipment was loaded in separate packages.



for transporting SORCE to KSC continued. As planned, after concluding all integration and testing at Orbital, the Pre-Ship Review occurred on October 21. This review examined the overall test program performance to ensure that all necessary tests had been successfully run on the instruments and the spacecraft. The review panel decided the team, instruments, and spacecraft were fully qualified to proceed to the KSC launch site. The review also covered plans for the SORCE launch integration and test procedures at KSC.

Immediately after the review, the Orbital/LASP team began packaging the SORCE spacecraft and the necessary Ground Support Equipment (GSE) for shipment to KSC. With miles of bubble wrap and specially made custom containers, the meticulous packers spent days making sure everything was flawlessly protected. With a ceremonial SORCE sticker applied to the chartered truck back door, the shipment left Orbital as scheduled on October 25, with LASP and Orbital personnel closely monitoring from a separate chase vehicle.

Countdown to Launch -- January 25, 2003
(as of November 25, 2002)

61 Days



The packing and loading crew in front of the SORCE shipment. Front row, left to right: Truck Drivers, Jack "Wizard" Boyd and Myron "Andy" Anderson, Zach Castleman, Phil Schipani, Dennis Baker, Sherry McGlochlin, Back row, left to right: James Burgess, Mike Anfinson, Corky Philyaw, Heather Reed-Withnell, and the Lift Operator, Jeff Ingream.

Kennedy Space Center Activity –

The truck carrying SORCE arrived at Kennedy Space Center (KSC) on Saturday, October 26. The truck was directed into the payload processing facility and the SORCE post-ship checkout process commenced. The spacecraft was unloaded and secured first, followed by the support equipment. As the support equipment was setup and checked out, the spacecraft was lifted onto its test cradle, moved into the clean tent, unbagged, and thoroughly inspected. After a functional checkout, limited performance tests (LPTs) and analysis were then run, along with dry runs of the flight readiness test (FRT).

When the launch date was moved into January, the spacecraft was bagged, the purge line set to provide a clean positive pressure environment for the spacecraft, and the clean room door was closed and locked. In early December when the new launch date is within sight, the doors will be opened and the testing will continue, with additional dry-run flight readiness testing, inspections, and meetings to review the system integrations, upcoming mates, and data handling.



The SORCE shipment and chase vehicle arrive at KSC, 10/26/02.

Tentative Dates for Upcoming Events:

- 12/17/02 Pegasus Ferry to KSC
- 1/5/03 Spacecraft/Pegasus Mate
- 1/15/03 Fairing Installation
- 1/20/03 Launch Rehearsal (KSC)
- 1/21/03 Flight Readiness Review (KSC)
- 1/24/03 Launch Readiness Reviews (GSFC/KSC)
- 1/25/03 SORCE Launch (KSC)

The L1011 aircraft with the Pegasus attached will arrive at KSC in mid December. The Pegasus will be removed from the aircraft and transported via a large trailer to the High Bay integration area, where testing will begin. In early January the SORCE spacecraft will be bolted to the Pegasus launch vehicle and more testing will occur.

Then next milestone event is when the fairing is installed, covering the payload. This is scheduled to begin on January 15. It will be the last opportunity to see or handle SORCE. For the launch, the Pegasus will be transported by trailer back out to the hot pad, and the L1011 will be lowered onto the Pegasus and secured.

LASP Activity –

Even though the launch has been delayed, the SORCE activity level at LASP is running high in every area.

The Mission Readiness Review took place on November 6 at Goddard Space Flight Center. This critical review covered the status of all SORCE activities related to the launch, from the Mission Operations Center's ability to operate the spacecraft and instruments to science data collection and processing. The review went very well regarding the SORCE instruments and spacecraft.

There has been a series of Kennedy Space Center training sessions conducted for anyone from LASP who might be going to KSC. The training examines the KSC layout, integration and processing facilities, and standard safety procedures. As expected, the launching business truly has countless hazards.

A representative from NASA recently visited LASP to conduct media training for those people anticipating being in the spotlight near launch time. It was a combination of how to get the science message out effectively and charm school. All participants had an opportunity to role play and see themselves on video.

You can check out the new exciting SORCE web page at – <http://lasp.colorado.edu/sorce>. It has a whole new colorful look and much more information. It is easy to maneuver, and meets the needs of the solar expert, non-technical person, and public educators teaching at many