

LASP's NASA Supplier Assessment Experience

NASA Supply Chain 2010 Conference

LABORATORY FOR ATMOSPHERIC AND SPACE PHYSICS
A RESEARCH INSTITUTE OF THE UNIVERSITY OF COLORADO
BOULDER, COLORADO

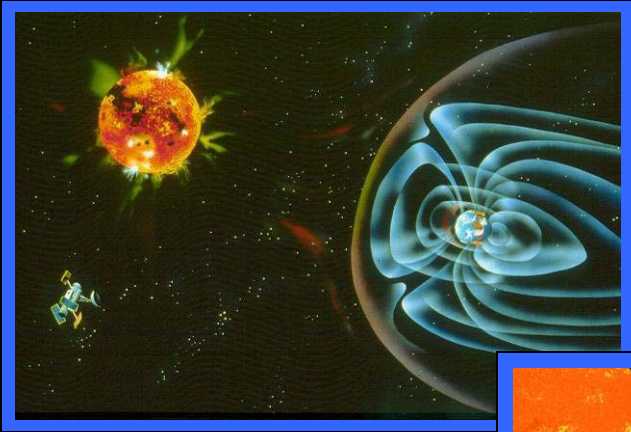


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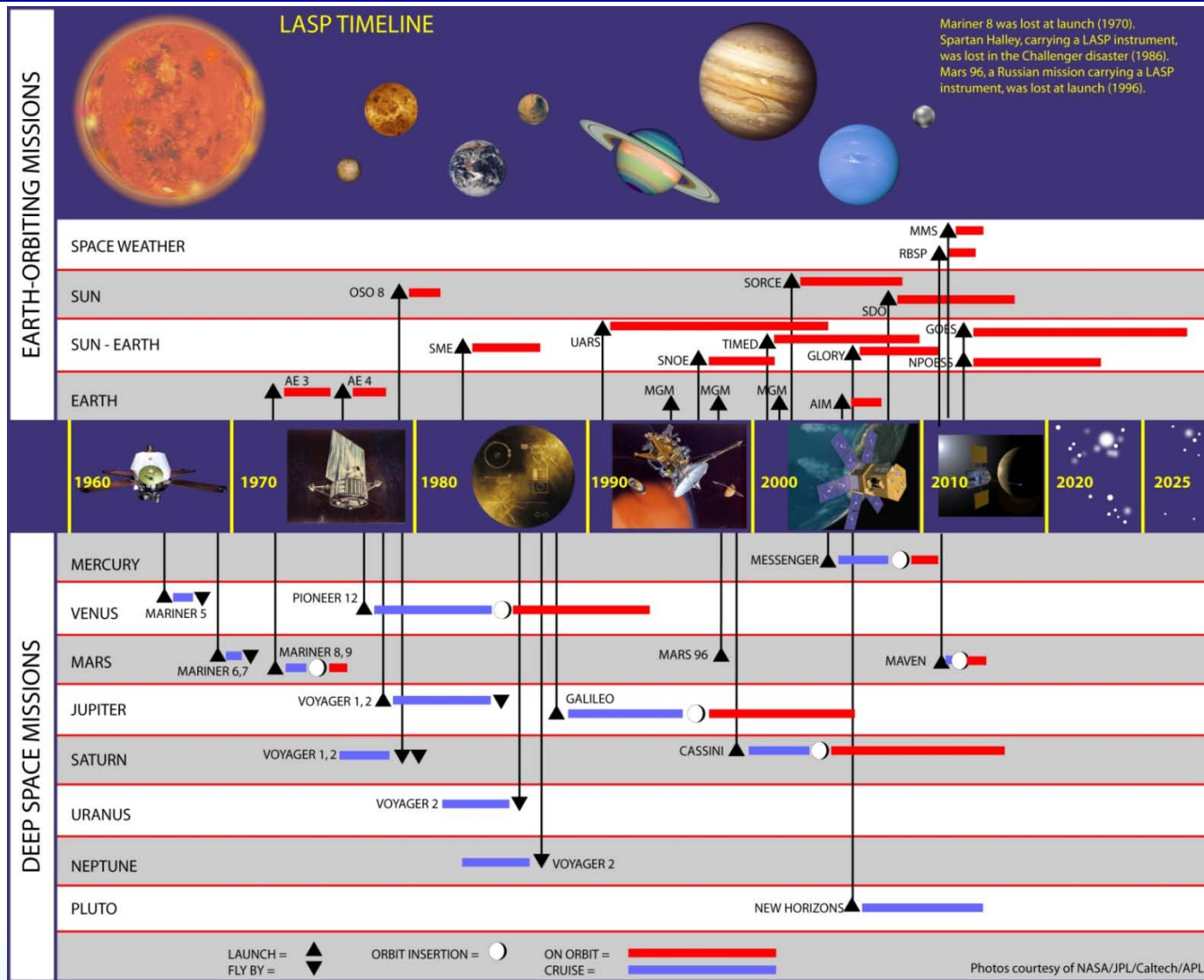
LASP conducts theoretical and experimental research in...

- Planetary Physics
- Solar Influences
- Atmospheric Sciences
- Space Physics



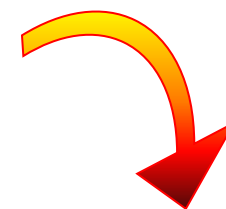
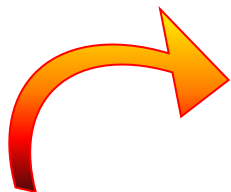
LASP has successfully developed scientific instrumentation for...

- 12 Deep Space Missions
- 14 Earth-Orbiting Missions
- 220 Sub-Orbital Rocket Experiments



Mariner 8 was lost at launch (1970).
 Spartan Halley, carrying a LASP instrument,
 was lost in the Challenger disaster (1986).
 Mars 96, a Russian mission carrying a LASP
 instrument, was lost at launch (1996).

LASP has sent instruments to every planet in the solar system and beyond (Voyager)





Class 10,000 Clean Room



Instrument Shop



Environmental Test



Mission Operations Center

- **Gap Audit for ISO/AS9100 - 2003**
 - Implemented a Database for Record Archiving
- **First NASA Supplier Assessment - 2004**
- **Configuration Management Uniformity Across Programs - 2005**
 - *AGILE*™ Database for Review, Signoff, and Release
- **LASP Takes Steps Toward ISO Compliance - 2007**
 - Cavendish Scott Consultants for ISO System Implementation
 - QMS Content Input
 - Ongoing system support on request
 - PROVIT (PROcess Value & Integrity Team)
 - LASP-Centric Focus on Current Processes
 - All Departments Represented
 - Process Owners Assigned
- **Quality Management System Implementation Ongoing**



- **NASA Contract Assurance Services (NCAS) facilitated provision of professional resources to assist with industrial safety program development**
- **Performed pre-assessment evaluation in preparation for 2008 NCAS assessment**
- **Supporting LASP's QMS development efforts**

NCAS wants to see us succeed!

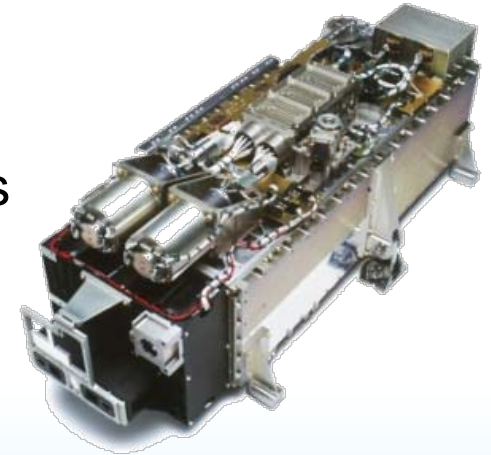
- **Involve personnel at every level**
- **Hold audit prep “fish bowl” meetings**
 - Make them casual and fun
 - Help to dispel anxiety about the audit
- **Perform facility walk-through a few weeks in advance**
 - Assign actions
 - Follow-up in time for final adjustments prior to assessment
- **Make a schedule of personnel availability for interviews**
 - Helps auditors make the most efficient use of time
- **Assign escorts for auditors and points of contact for observers**
- **Have “runners” available to assist**



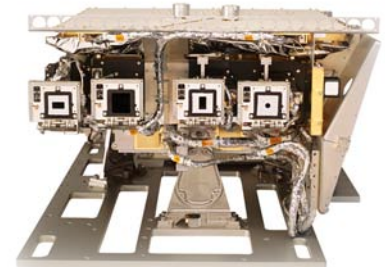
- **Alert the lead auditor, well in advance, of any previous assessment findings that will not be ready for verification**
- **Provide appropriate work space for the assessment team**
- **Have contracts and procedures organized and available**
- **Give the assessment team a thorough in-briefing**
 - Status progress from previous assessments
 - Identify any known gaps
 - Introduce escorts
- **Invite employees to briefings**
 - Everyone wants to do well, so keep them involved
- **Give NCAS feedback on their Supplier's Assessment Process Evaluation form**
 - Give all participants the opportunity to provide input
 - A single evaluation from the management representative may give a narrow point of view



- **Provides opportunity to present our organization at its best, and to display our capabilities**
- **Eliminates need for multiple assessments by individual programs**
 - Gives programs visibility into how our organization is handling the projects
- **Motivates personnel to action**
 - Periodic assessments help us to set our goals
- **Promotes continual improvement**



- **Lots of time, planning and preparation required**
- **Limited university resources add to the challenge**
- **The quality manager has a significant amount of responsibility in the process**
- **We disagree with some findings**
- **The process is exhausting, but rewarding**



- **Controlled, documented processes allow for effective training as the lab grows**
- **Process consistency helps everyone**
- **Periodic audits provide a way for us to measure our abilities**
- **Organizational cohesiveness around quality and safety is emerging at LASP**
- **Continual improvement is becoming embedded in the LASP culture**

