

JPL Technologies and the Future

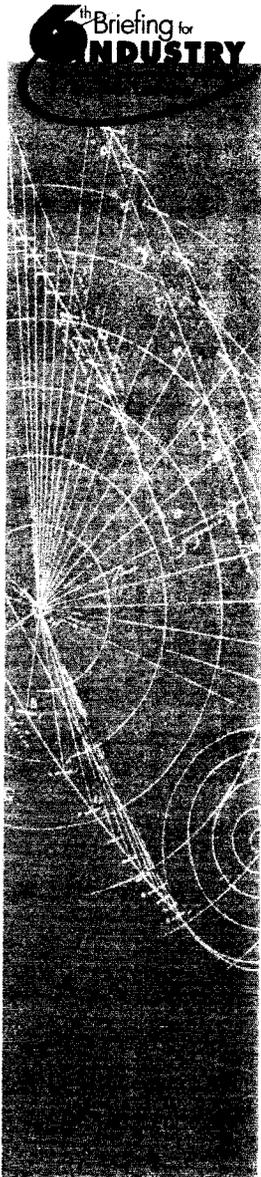
Opportunities for Collaboration

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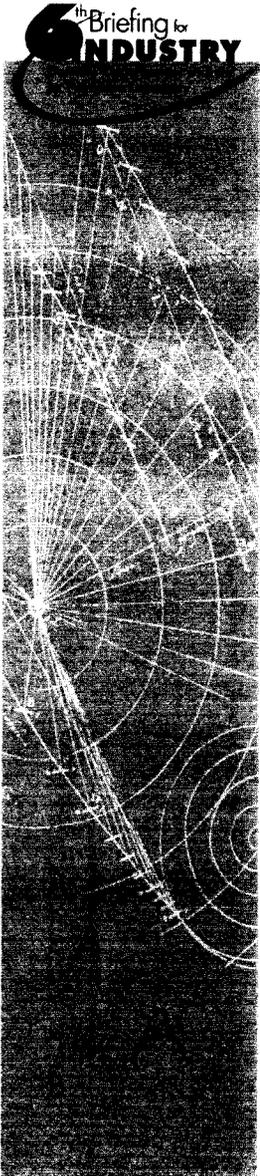
June 13, 2002

Goal of Technology Collaborations at JPL

**Strengthen JPL's
technological future
and funding by
teaming with Industry.**

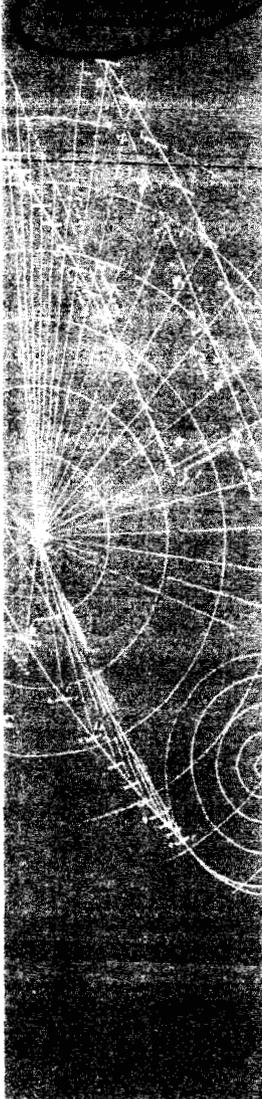


JPL Technology Needs and Opportunities



- What drives JPL?
- What technologies are important to JPL's future?
- How can industry partner with JPL?

JPL "Leadership" Technology



Technologies to enable:

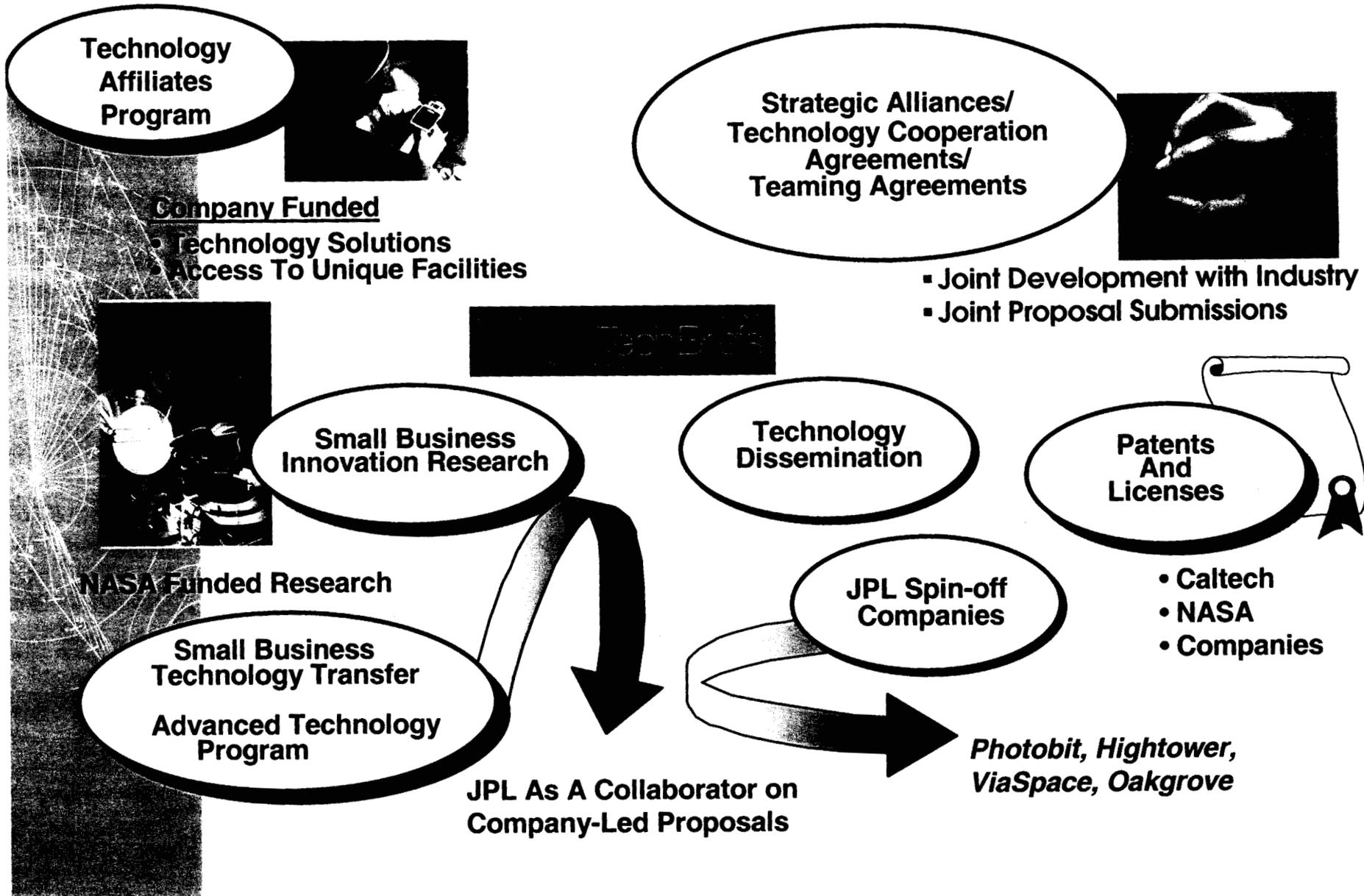
*Solar System
& Mars*

*Astronomy
& Physics*

*Earth
Science*

	<i>Solar System & Mars</i>	<i>Astronomy & Physics</i>	<i>Earth Science</i>
• Autonomous regional mobility (surface and atmosphere) and safe landing	●		
• Deep space communications and interplanetary network	●		
• Deep space navigation and highly stable clocks	●	●	
• Extreme precision formation flying for science observations and rendezvous	●	●	●
• High precision space-borne systems in optical to sub millimeter domain including interferometry		●	●
• Specialized active sensors for mapping and positioning (SAR, altimeters, GPS, ...)	●		●

Industry Partnership Strategies



JPL As Your Technology Partner

6th Briefing for
INDUSTRY

- Broad range of technological expertise
 - Less than 10% of the NASA budget
 - More than 30% of NASA's new technologies
- Extensive intellectual property portfolio
- Strong link with Caltech and top universities
 - Agreements with Stanford Univ., Univ. Of Michigan, Univ. of Arizona, Arizona State Univ.
- Exceptional team of R&D personnel
- Diverse facilities for R&D functions
- Proven ability to work collaboratively with industry