8TH BRIEFING FOR INDUSTRY

JPL Non-NASA Programs

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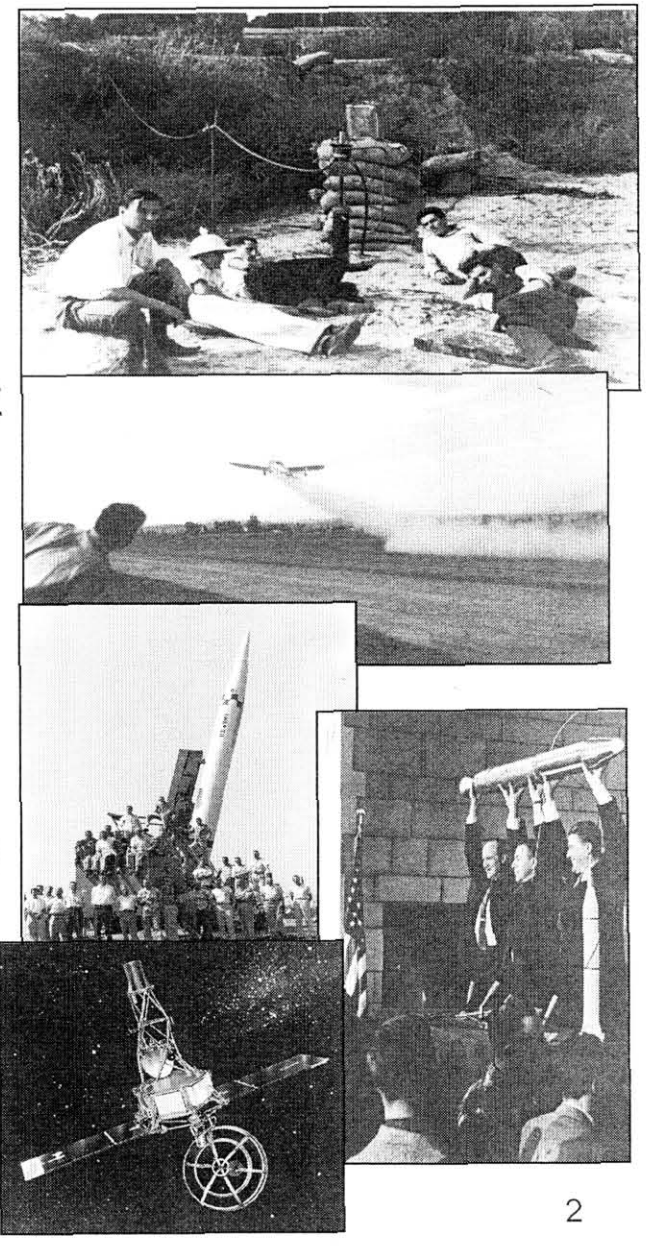
Jet Propulsion Laboratory
California Institute of Technology

Explore the Possibilities

JPL/Caltech: National Security Heritage

- JPL founded in 1936 by Professor von Kármán
  - Established the AF SAB, authored seminal AF S&T report *Toward New Horizons* in 1945
    - Rockets, atomics, space based weapons, supersonic flight, and missile defenses
- von Kármán, Malina and Parson's founded Aerojet Engineering Corp in 1942
- JPL, ABMA and Sperry, built first US ballistic missiles: Corporal and Sergeant
- JPL's Explorer 1, first US satellite launched on an Army Jupiter C in 1958
- Completed ASAS for Army
- SDIO funded e-beam installation of MDL in 1990's
- SRTM in '01 and '02
- Directors and Deputy Directors senior officers



Explore the Possibilities

Organization and Portfolio

National Space Technology Applications (NSTA)
B. Cox

AFRL
M. Gerhlein

Defense & Intelligence
R. Odle

Defense
D. Kurtz
R. Stirbl
R. Liang

AF & Aerospace
USA, USN, USMC
DARPA
DIA
DISA
DoD Agencies

Intel
(D. Tratt)
AD

NRO
NGA
CIA
NSA

Civil & Commercial
A. Gerber

Civil
D. Tralli
E. Corduan

NOAA
DHS
NIH, NSF, USGS
DOE, DOT, et al

Commercial
K. Wolfenbarger
D. Wiberg
K. Edmonds
W. Schober

Innovative Partnership Program
SBIR
Intellectual Property

Explore the Possibilities

Synergistic Areas of Interest

– DoD Space Sector

- Space Based Radar
- Optics & Imagery
- Lasercom
- Terrain Elevation/Mapping

Space Control
New phenomenology
Miniature sensors
Autonomous/Cognitive Systems

– Intelligence Space Sector

- Large Optics & LW structures
- Imagery Processing tools
- Sub-surface detection

Integrated Microsystems
Information superiority
Magnetics and vibration

– Civil Space Sector (including Homeland Security)

- Advanced Communications
- Space-based global sampling
- Robotics, in-situ

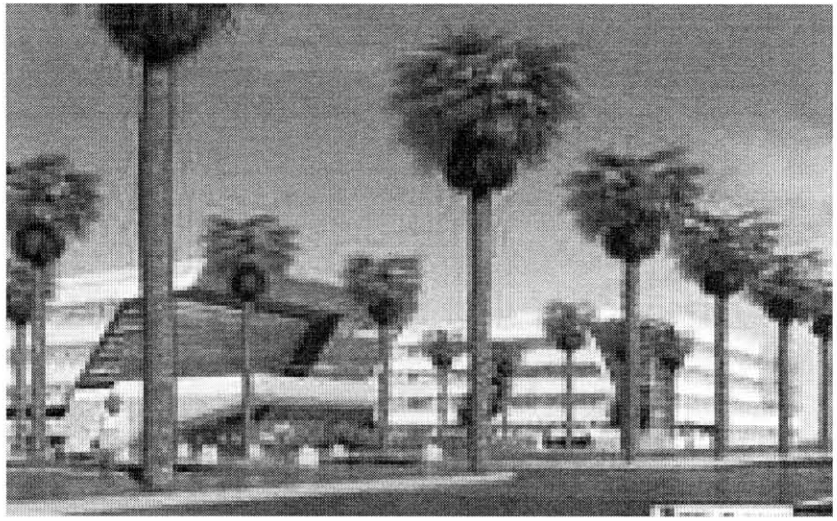
Bio sensors & detectors
Remote sensing

– Commercial Space Sector

- Sensors, antennas, structures, electronics, propulsion

Explore *the* Possibilities

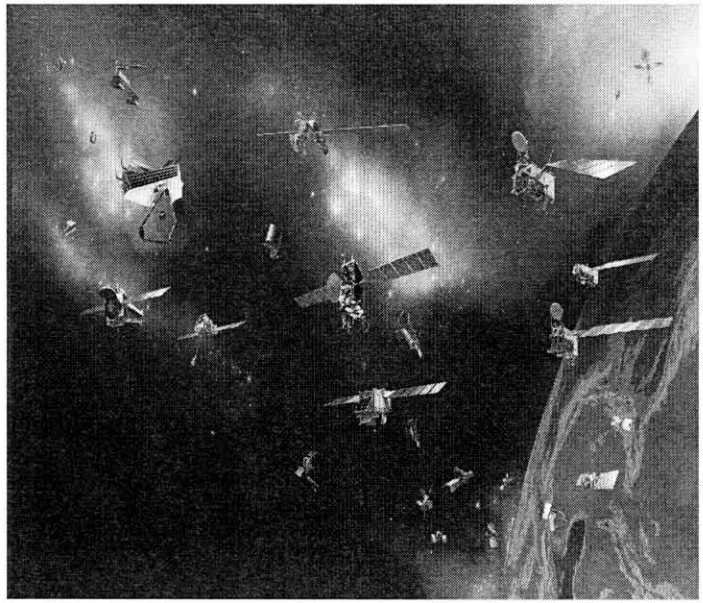
Business Environment



AF Space
FY'07 PB
$9.8B

IC Space
FY'07 PB
$$$

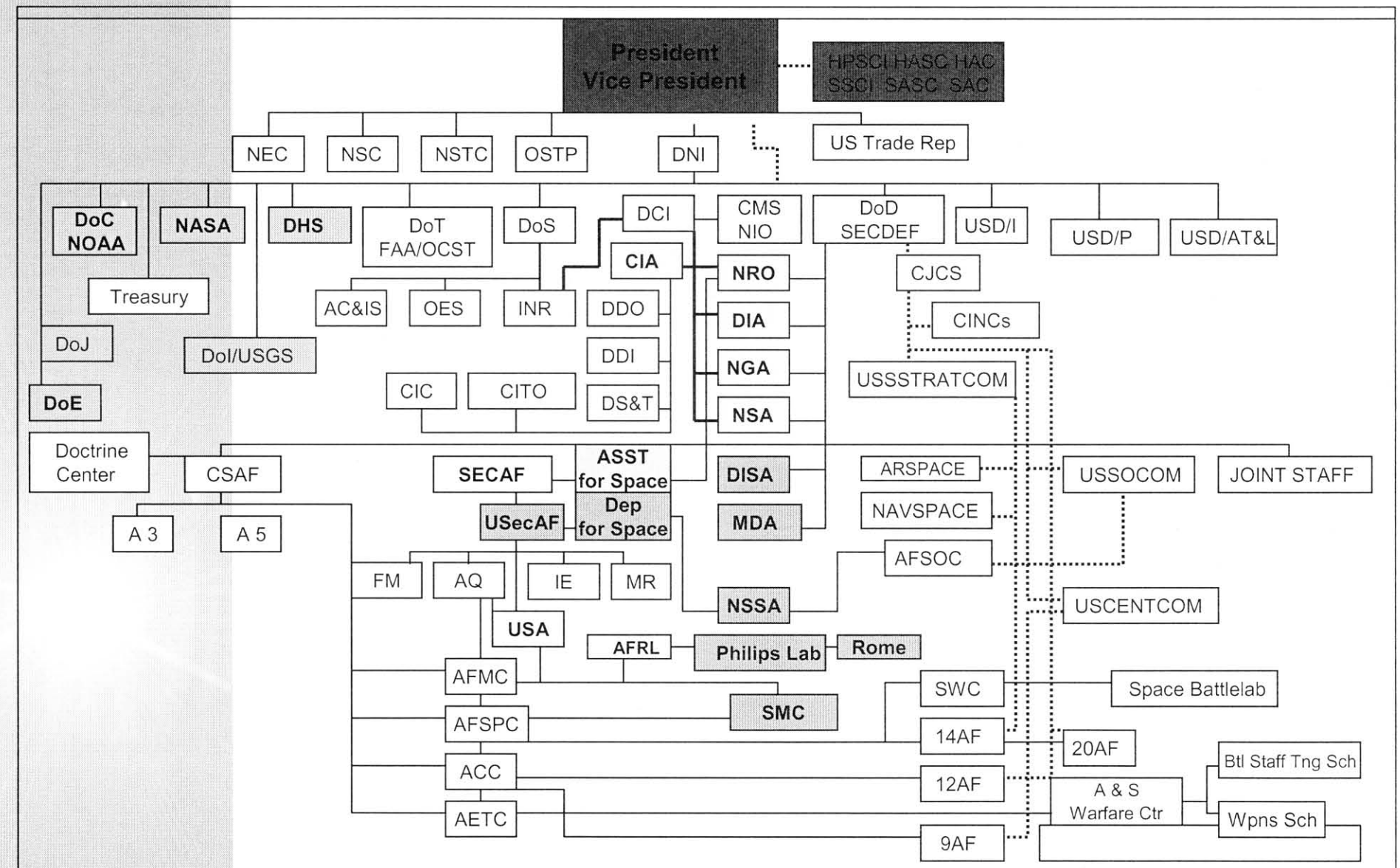
Non-NASA
Civil Space
FY'07 PB
$4.5B



Commercial
Space
$94B

Explore the Possibilities

National Space Community



8TH BRIEFING
FOR INDUSTRY

New Business Environment

- The current protocol…
  - Industry seeks opportunities at JPL
- New Paradigm…
  - USecAF "back to basics" acquisition approach
  - Involves FFRDCs/Labs in risk reduction phase
    - Technology Development TRL 2-4
    - Systems Development TRL 4-6
- NSTA's technology transfer obligation…
  - Public policy & NASA Space Act
  - Opportunities to partner with industry

Technology Transfer Techniques

- PRDA's…
- BAA's…AF space programs, et al
- RFP's…As appropriate
  - As a minority teammate
  - Level playing field
  - Unique or special competency contribution

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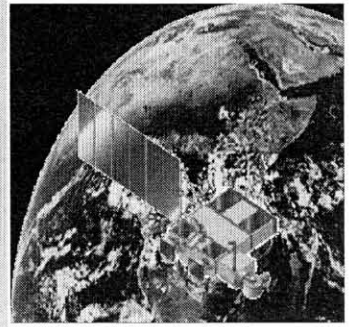
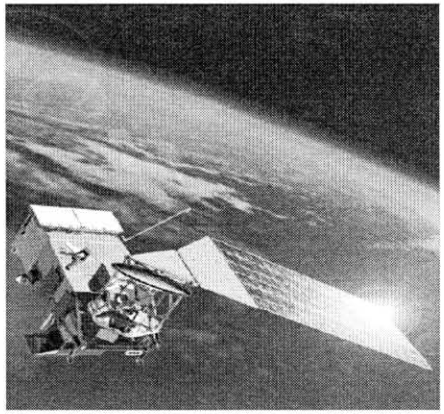
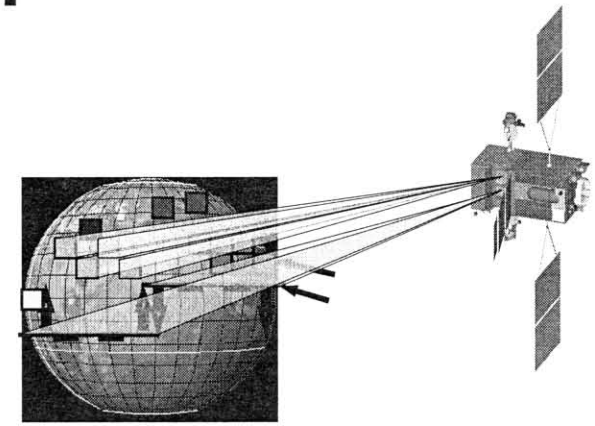
JPL Can Apply its Expertise to….



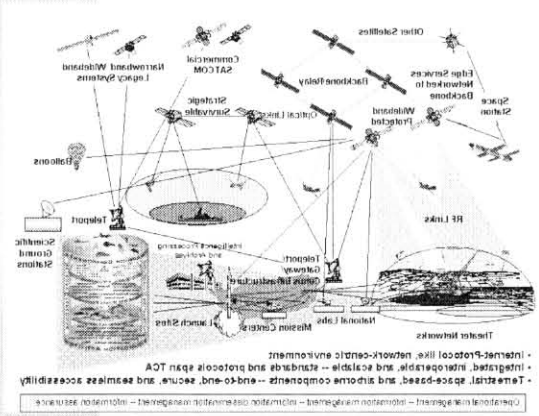
SBSS



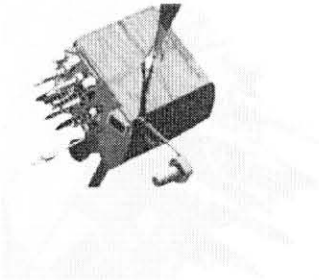
NPOESS/GOES



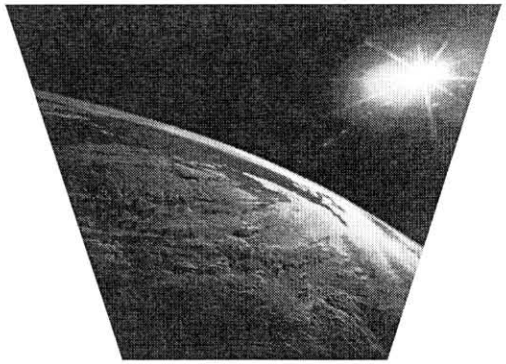
AIRSS



TSAT



GPS – II/R & M
GPS III P/L
GPS III OCX



Space Radar

Explore the Possibilities

Innovative Partnership Program (IPP)

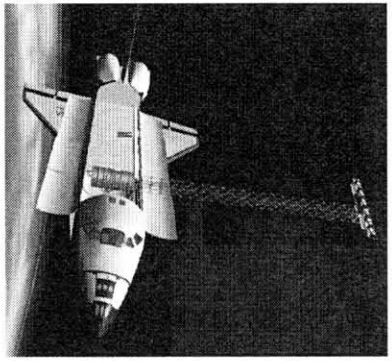
Omnibus Contracts

Name	Status/Background
DHS Eagle	DHS IT services procurement contract (including S&T) Award expected in May, 2006 Expected Value: $6B / Year
DISA Encore II	Second phase of the DISA GIG Omnibus contract Expected Value: $13B for 5 years
GSA Alliant	GSA Information Technology and communication services Expected Value: $65B over 10 years

Explore *the* Possibilities

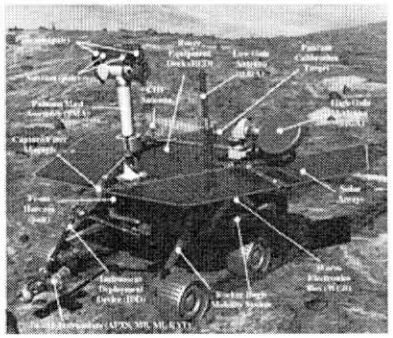
JPL's Track Record

Recent Projects



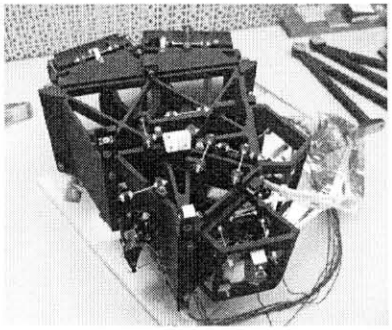
Shuttle Radar Topography Mission (SRTM)

44 months Dev – Launch



2 Mars Exploration Rovers (MERs)

36 months Dev - Launch

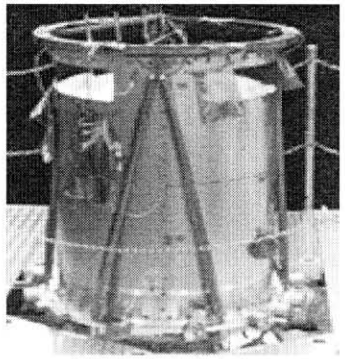


Mapping reflected energy Remote Spectrometer (MaRS); airborne sensor

24 months Dev - Flight

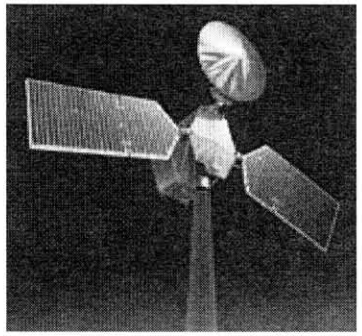
Explore *the* Possibilities

JPL's Track Record (Cont'd)

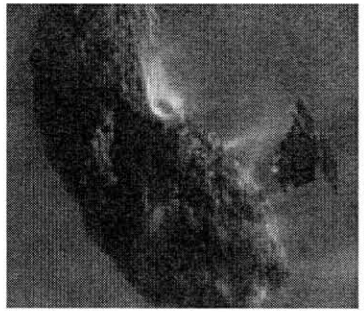


Recent Projects (Cont'd)

Advanced Mirror Telescope
26 months Dev – Delivery



Mars Reconnaissance Orbiter (MRO)
48 months Dev – Launch



Deep Impact
36 months Dev – Launch

Explore the Possibilities

Points of Contact

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  - Phone: 818-354-3821

Summary

- One-of-a-kind, technical space systems and missions organization
- Develop and transfer technologies for use across the national space community
  - Civil
  - Commercial
  - National Security
- Expand relationships with industry and government agencies throughout space community

Questions?