

# NASA

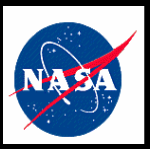
southeast regional technology transfer center

CARE 3<sup>rd</sup> Annual Conference

May 10, 2005



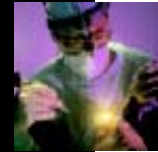
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technology  
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# Exploration Systems



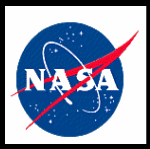
- Mission
  - Crew Exploration Vehicle 2008
  - Space Station Complete 2010
  - Heavy Lift Vehicle 2014
  - Manned Moon Missions 2015
  - Manned Mars Missions 2020



[http://www.nasa.gov/missions/solarsystem/explore\\_main.html](http://www.nasa.gov/missions/solarsystem/explore_main.html)

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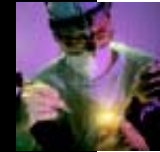


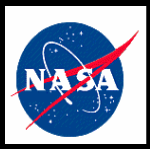


# Exploration Systems



- Hurdles
  - R&D Funding
    - In 1960's percent of GDP - \$94 Billion
    - \$9 billion versus \$210 billion
    - *Spin-in*
  - Public Support
    - Benefit to our lives
    - NASA #1 mission “Improve Life Here on Earth”
    - *Spin-out*



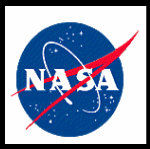


# SERTTC

- Background
  - Six regional centers around country
  - Cover nine states in Southeast
  - Serve Marshall, Kennedy, and Stennis



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# SeRTTC

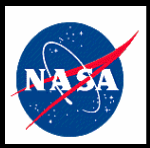
- Mission
  - License NASA Intellectual Property (*Spin-out*)
    - Image Enhancement Software
    - Personal Cabin Pressure Monitor
  - Other NASA innovations
    - Shuttle pump to artificial heart
    - Lunar rover to hand-held vacuum
    - Moon photo enhancement to CATScan and MRIs
    - Planet temperatures to infrared thermometer
    - Shuttle tanks to golf ball designs

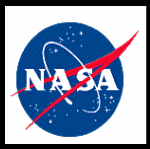


# SeRTTC



- Mission (cont.)
  - Small Business Innovation Research (*Spin-in*)
    - Grants for Small Business (up to \$670,000)
    - Developing commercial product from basic research
    - Assisted over 60 companies who have won awards





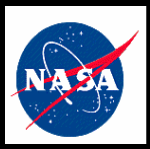
# SeRTTC

- Mission (cont.)
  - Co-develop technology (*Spin-in*)
    - XRF Technology
    - Long Penetration Mode Plasma Engine
    - Florida Department of Citrus



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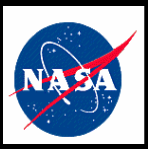


# SeRTTC



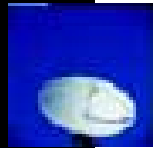
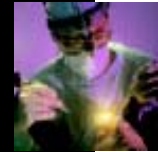
- Mission (cont.)
  - Commercial collaboration (*Spin-out*)
    - XRF technology





# XRF Collaboration

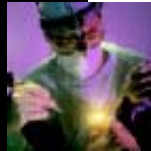
- Activities to date
  - PR Article
    - Wrote brief article
    - Benefit to Life: Indoor Air Quality
    - Promoted partnership between NASA, KeyMaster, PTL and CRI
    - Over 800 Google hits
    - Translated into German





# XRF Collaboration

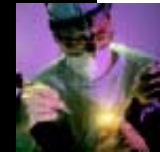
- Activities to date
  - Worked with vacuum mfrs.
    - Beam Industries and ProTeam
    - Establish NASA standards for communicating involvement
    - Tricky: Only state facts of relationship and can't endorse a single company





# XRF Collaboration

- Activities to date
  - ISSA Interclean
    - Brought article to show
    - Provided brief presentation on how important this innovation is to NASA
      - Leverage R&D
      - Benefit to Life on Earth





# XRF Collaboration



- Activities to date
  - Space Foundation
    - Certify commercialized space innovations
    - NASA's agent (substitute for logo)
    - KeyMaster and CRI have received certification
    - Tie-in with Green Label program





# XRF Collaboration

- Activities to date
  - American Lung Association
    - Relationship with ProTeam
    - ProTeam management approached ALA concerning XRF
    - Interested in collaborative arrangement





# XRF Collaboration

- Activities to date
  - EPA
    - Demonstration at PTL
    - Very interested in technology and indoor air quality implications
    - MOU with Marshall Space Flight Center
  - Environmental Technology Verification
    - Work-in-process





# XRF Collaboration

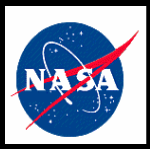
Expert • Independent • Nonprofit  
**ConsumerReports.org**<sup>®</sup>

- Activities to date
  - Consumer Reports
    - Approached concerning XRF capability
    - Submitted technical paper for review
    - Conversations underway

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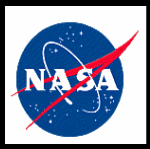
Georgia Institute  
of Technology



# XRF Collaboration

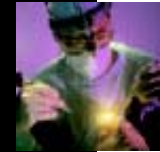
- Activities to date
  - SBIR
    - Meetings with PTL and KeyMaster
    - NSF and Homeland Security
    - Learning will benefit applications for CRI

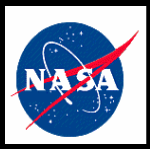




# XRF Collaboration

- Activities to date
  - Ogilvy
    - Atlanta meeting
    - Agreed to support larger media plan
    - Forbes, Fortune, WSJ

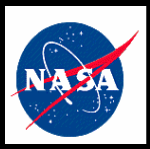




# XRF Collaboration

- Activities to date
  - Above Low Earth Orbit (ALEO)
    - Unsolicited proposal by CRI to NASA
    - Materials and cleaning protocols for in-situ utilization





# XRF Collaboration

- What is next?
  - Continue participation with Ogilvy
    - Spokesperson
    - NASA pubs and Web site
    - E-mail blast
    - Article by-line



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