



The Concept



Leveraging NASA SBIR/STTR Outcomes

The 2009 SBIR/STTR solicitation brought in many new and promising innovations addressing

NASA technology needs. NASA continues to not only focus on collaborating and partnering with Small Business Concerns and Research Institutions, but also to **support the infusion of technologies that have come out of SBIR/STTR into NASA core programs.**

The Program recognizes the obstacles in technology infusion and has identified some of the challenges in this process. We will highlight different solutions and approaches in this issue and future newsletter issues.

The goal is to **enable you to utilize the assets in place as well as provide you with the mechanisms to aid you in infusing your technology into NASA;** these include Technology Infusion Managers, the National Technology Transfer Center, and the SBIR/STTR Technology Database,

which are all easily accessible via our website and are valuable resources for helping to distribute SBIR technologies, STTR research results and information out to the commercial sector.

The steps we take together to build strong foundations will facilitate the ease of innovations into NASA and ultimately, the community and the world.

-Carl G. Ray
NASA SBIR/STTR
Program Executive

Highlights

- Ask our Technology Infusion Managers at upcoming events
- New Partnerships through NTTC
- Tracking Infusion with NVision Solutions and Lake Shore Cryotronics
- Finding a Balance When Partnering With SBIR

Find Yourself in NASA

[NASA SBIR Success Story Gateway](#)

Web site enabling small businesses to achieve success in their endeavors by highlighting successful projects.

[TechSource](#)

Information on current and recently completed SBIR/STTR Phase II projects. Facilitates the transition of resulting technologies into further development, investment, and utilization for NASA.

[SBIR/STTR Hallmarks & Success Videos](#)

A collection of short videos about successful companies that have participated in the SBIR and STTR programs.

[Tech Briefs](#)

Featuring exclusive reports of innovations developed by NASA and its industry partners/contractors that can be applied to develop new/improved products and solve engineering or manufacturing problems.

[Technology Innovation](#)

Providing information about NASA's technology needs and opportunities, as well as interesting facts and feature articles about our successes.

[Spinoff](#)

Providing NASA's premier annual publication of successful commercial and industrial applications of NASA sponsored technology.

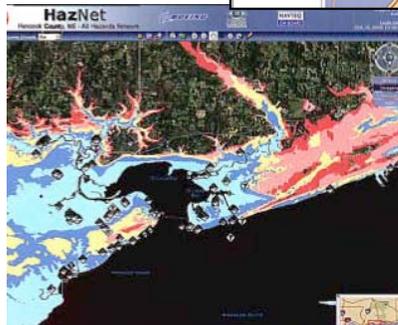
executive corner

Infusing Technologies into NASA: Success Stories

Emergency Management System Aids NASA in Visualizing and Managing Hazardous Situations

[NVision Solutions Inc.](#), is upgrading, enhancing and customizing the HazNet EMS for use at NASA's Stennis Space Center (SSC). Integrating an intuitive large-format multi-user interactive touch-table display device, this new capability will enable collaborative problem-solving and decision-making and aid in conducting preparedness exercises.

HazNet will provide the NASA Emergency Operations Center staff with a seamless system for accessing information from SCC's institutional GIS and weather station array, NASA's CCTV cameras and soon-to-be installed automated mass notification system.

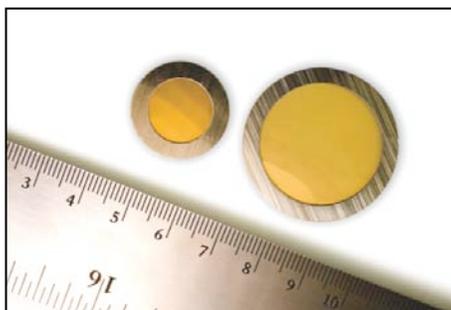


Above: Haznet Application, Basemap data layers, active incidents from Hurricane Ike, and details of two active incidents.

Left: The 'All Hazards Network' HazNet application shows the maximum potential storm surge during Hurricane Ike, along with the active incidents affected by the surge.

Far Infrared Filters on the SOFIA Airborne Telescope

[Lake Shore Cryotronics, Inc.](#) Under a JPL-managed 2002 Phase II SBIR contract Lake Shore's far infrared band pass filters have been selected for the FORCAST camera that will fly on the Stratospheric Observatory for Infrared Astronomy (SOFIA) mission. FORCAST is a mid/far infrared camera for the SOFIA airborne observatory. Cornell University's Dr. Terry Herter is FORCAST's PI and Dr Joe Adams is the Project Scientist involved with the filters. Dr Adams stated "We utilize Lake Shore's filters on account of their high transmission and higher reliability during thermal cycling when compared to competing far infrared filter technologies" (Lake Shore press release, March 23, 2009). In addition, these filters are to be used at Goddard Space Flight Center (GSFC) for instrument development work that may lead to their use in future NASA balloon based studies.



Above: Far-infrared silicon-based filters for the FORCAST camera.



Above: NASA's SOFIA aircraft on which the FORCAST camera will fly.

Connections to NASA

NASA SBIR/STTR
www.sbir.nasa.gov

Innovation Partnerships Program
www.ipp.nasa.gov

Small Business Administration
www.sba.gov

National Technology Transfer Center (NTTC) www.nttc.edu

NTTC/NASA Small Business Innovative Partnerships Program (SBIPP)
www.sbipp.com/technologyportfolios

NASA Technology Needs
[Tech Needs](#)

technology infusion

TIMs' Tips on Success

Technology Infusion Manager: Carol Lewis (JPL)

- Take the initiative to be knowledgeable about specific and evolving applications of your technology. Seek information from your NASA points of contact, especially including your COTR or Technical Monitor.
- Horizontal scope (several potential applications) significantly strengthens the case for your technology. Should NASA mission priorities change, or should commercial market needs change your technology will still be relevant.
- It is never too early to be thinking about future applications of your technology. Don't wait until the end of Phase 2- Actively market your developing technology to prospective NASA as well as commercial users.
- Consider establishing business relationships with appropriate large industry primes; this may facilitate your technology being incorporated into NASA applications.

Partners' Experiences

David Klein, Consultant with Lake Shore Crytronics Inc.

One large overriding issue is the balance for companies seeking multiple SBIR grants. The initial grant money provides the impetus for further developing a technology and getting a small company started. But, some companies overly rely on grants to grow as opposed to focusing on select technologies and spending more efforts on commercializing them, thereby forfeiting the opportunity for increased revenue from commercial markets.

It is in a company's best interest to develop their strategy and business plans first, based on traditional market dynamics. After which, if an SBIR solicitation falls within that strategy, complements or augments it, then it behooves the company to submit a proposal. We have found that we have a higher chance for success when we target SBIR subjects that logically fall within our areas of expertise - either technically, market knowledge, or preferably both.

Who's Who at the Centers

Level II Technology Infusion Manager
Ryszard Pisarski
email: Ryszard.L.Pisarski@nasa.gov

Technology Infusion Managers

Ames Research Center (ARC)
Kim Hines
email: Kimberly.K.Hines@nasa.gov

Dryden Flight Research Center (DFRC)
Ronald Young
email: Ronald.M.Young@nasa.gov

Glenn Research Center (GRC)
James Stegeman
SOMD
email: James.D.Stegeman@grc.nasa.gov
Marla E. Perez-Davis
ARMD
email: Marla.E.Perez-Davis@nasa.gov
Dean Bitler
SMD, ESMD
email: Dean.W.Bitler@grc.nasa.gov

Goddard Space Flight Center (GSFC)
E. James Chern
email: Engimin.J.Chern@nasa.gov

Jet Propulsion Laboratory (JPL)
Carol Lewis
email: Carol.R.Lewis@jpl.nasa.gov

Johnson Space Center (JSC)
Kathryn Packard
ESMD (Human Systems)
email: Kathryn.B.Packard@nasa.gov
John Saiz
ESMD (Vehicle Systems), SOMD
email: John.R.Saiz@nasa.gov

Kennedy Space Center (KSC)
Joni Richards
email: Joni.M.Richards@nasa.gov

Langley Research Center (LaRc)
Kimberly Graupner
email: Kimberly.E.Graupner@nasa.gov

Marshall Space Flight Center (MSFC)
Lynn Garrison
email: Virginia.B.Garrison@nasa.gov

Stennis Space Center (SSC)
Ray Bryant
email: Ray.Bryant-1@nasa.gov

[More Program Contacts](#)

Please send comments and suggestions to:
arc-sbirpmo@mail.nasa.gov

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