



Accomplishments for NASA



Accomplishments
June 2007 to June 2010



NASA Photo: A hidden, massive star cluster awash with red supergiants taken by the Spitzer Space Telescope for the Galactic Legacy Infrared Mid-Plane Survey Extraordinaire (GLIMPSE) Legacy project.



About Fuentek, LLC

Fuentek provides intellectual property (IP) and technology management consulting services. A small, woman- and minority-owned business headquartered in North Carolina and with consultants across the country, Fuentek specializes in technology commercialization (spin-out) as well as technology sourcing/infusion (spin-in). In fact, Fuentek is the industry leader in ***Symbiotic Innovation***—that is, the proactive and concerted operation of spin-out and spin-in, recognizing that these are interdependent technology transfer activities.

Our unique combination of ***technical and business expertise*** allows us to identify promising technologies and assist clients in converting their ideas and innovations into marketable products. Our client roster includes government agencies, commercial companies, and major research universities.

Our nationally recognized, ***award-winning staff*** also provide strategic consulting, training workshops, and Web sites to help our clients effectively manage their IP and form collaborative research and development (R&D) partnerships.

Our high-quality work has yielded many ***benefits for our clients***. This report presents just a few of our recent accomplishments for NASA.

For more information, please visit our Web site at www.fuentek.com or call (919) 249-0327.

About Our Work for NASA

Fuentek has been supporting the National Aeronautics and Space Administration's (NASA's) Innovative Partnerships Program (IPP) via a Headquarters-based contract since June 2007.

IPP awarded this contract on the basis of Fuentek's many years of high-quality technology transfer support to the government as well as services to major research universities and corporate clients since 2001.

As part of the contract, NASA tasked Fuentek with supporting IPP as a program—both at the Headquarters level and at the 10 field centers—by providing services related to:

- Intellectual Property (IP) Management
- Collaborative R&D
- Communications

This report summarizes Fuentek's accomplishments for NASA in these areas during the 3-year period from June 2007 to June 2010.

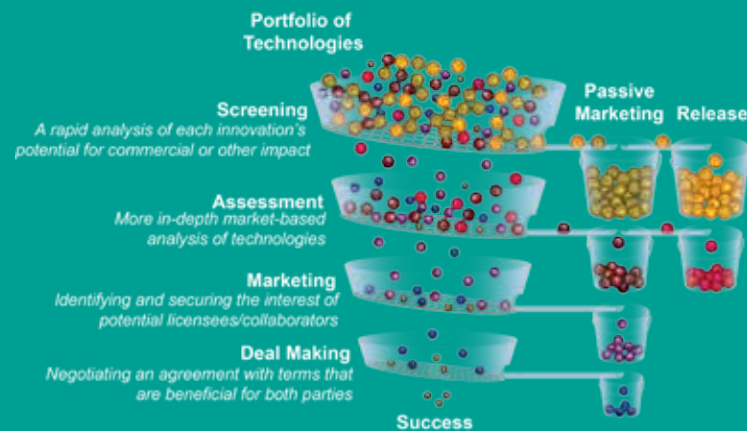
Fuentek's Proactive, Phased Approach to IP Management

Making NASA technologies, capabilities, facilities, and other IP available outside the agency is a key goal for our client, the Innovative Partnerships Program. Fuentek has helped IPP achieve this goal *effectively* and *cost-efficiently*.

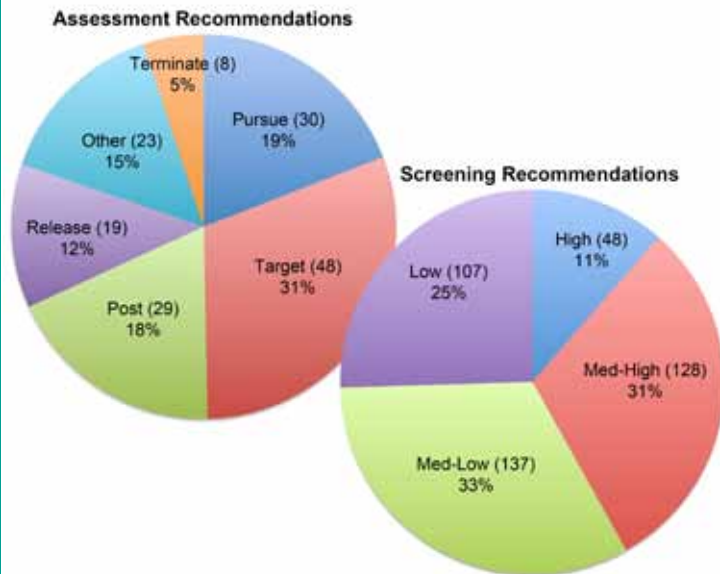
Fuentek uses a highly successful phased approach to proactively, efficiently, and effectively manage IP:

- **Phase 1: Screening** – A rapid analysis of innovations' potential for commercial or other impact
- **Phase 2: Assessment** – More in-depth market-based analysis of technologies that pass through the screening
- **Phase 3: Marketing** – Identifying and securing the interest of potential licensees/collaborators for the technologies that pass through the assessment
- **Phase 4: Deal-Making** – Negotiating an agreement with terms that are beneficial for both parties

Many of the technologies that do not pass through the phases are made available to the public via low-cost passive marketing efforts, referred to as Listings, while some technologies are “released” with no further investment of resources, which can represent a significant cost savings.



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“We have seen strong interest in [our] technologies, thanks to the exceptional efforts of our Fuentek partners.” – IPP staff

Evaluating NASA Technologies

Fuentek's efficient, effective methods for evaluating innovations enabled NASA to make sound, well-informed decisions regarding which technologies should be commercialized.

- Fuentek performed **420 technology screenings** and **157 in-depth assessments**, providing informed ratings of innovations' commercial potential (see pie charts above)
- Our assessments provided nearly **340 qualified leads** for licensing or other agreements, jump-starting active, targeted, and passive marketing efforts.
- Fuentek rated 19 assessments as “Release,” which represents a **potential savings of at least \$380,000**.
- Screenings rated “Low” and assessments rated “Terminate” represent **additional cost savings** for NASA.



Fuentek used print materials, posters, Web sites, meetings, social media tools, and much more to market NASA technology commercialization opportunities and successes.

Fuentek helped NASA license a solar-powered refrigeration technology for use in off-grid storage of vaccines.

“This [white paper about my technology] is brilliant.... Can I present this at a conference?” – NASA innovator

“Thanks so much for all you have done to help us on this. I think this [agreement] is an excellent piece of work all the way around.” – IPP staff

Marketing and Licensing NASA Technologies

NASA tasked Fuentek with leading **37 active marketing projects**, several of which involved multiple related technologies—sometimes from different NASA centers—resulting in important **cost savings**. For these innovations, as well as other technologies selected by NASA for passive marketing, Fuentek prepared more than **260 technology-specific marketing publications**. (For more about our communications services, see pages 6–7.)

As part of the active marketing efforts, Fuentek contacted nearly 900 leads and **secured the interest of more than 120 potential licensees or collaborative R&D partners**, achieving the following results as of June 10, 2010:

- 36 signed **nondisclosure agreements** as part of in-depth discussions with potential licensees
- 13 **submitted** licensing applications
- 19 **in-development** licensing applications
- 5 **signed agreements** for licenses or collaborations

Example: NASA’s Solar Refrigeration Technology

Fuentek’s assessment of a solar-powered refrigeration technology recommended that NASA proceed with a targeted marketing campaign to help ensure that potentially significant humanitarian benefits be achieved. Leveraging the assessment research, Fuentek assembled a vetted list of high-potential industry prospects and prepared a Web page of marketing collateral. Fuentek’s marketing campaign involved e-mails, phone calls, and follow-up on NASA’s lead recommendations.

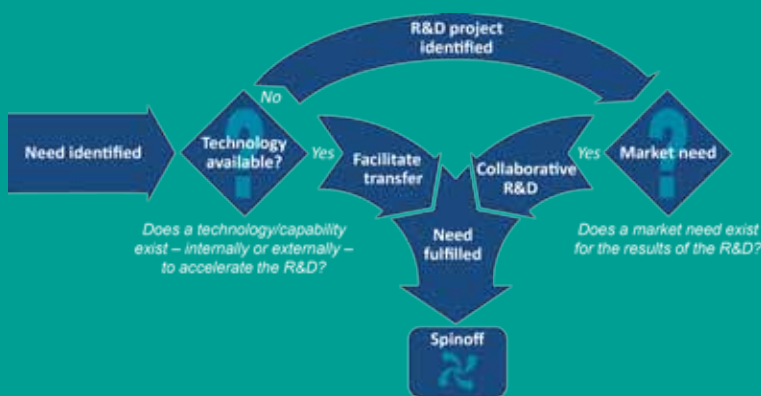
Fuentek and NASA personnel collaborated on qualifying and guiding prospects through the licensing process. The result was two nonexclusive licenses: one for using the technology for off-grid refrigeration of vaccines and perishable foods and one for use in new green-energy products. These small-business licensees benefitted from the mentoring provided by Fuentek, and our collaborative approach to license negotiations helped secure win-win deals for NASA and the licensees. **This project showcases how Fuentek helps NASA spin-out its technology to benefit the economy and humanity.**

Using Tech Transfer Principles to Guide Research and Development

To achieve mission goals quickly and cost-effectively, NASA often uses “Open Innovation” to infuse external technologies, capabilities, and expertise into programs and projects. Fuentek helped make NASA’s “need fulfillment” practice more *proactive, efficient, and effective*.

Fuentek provided a variety of infusion-related services to NASA’s Innovative Partnerships Program:

- Interviewing project managers to identify technical needs that would be well-suited to infusion partnerships
- Conducting market research to identify potential infusion partners as well as future industry R&D trends
- Contacting potential partners to build their interest in the NASA opportunity
- Assisting in information exchanges between NASA project personnel and potential partners
- Providing due diligence and other support during negotiations
- Preparing success stories about IPP’s infusion achievements
- Providing strategic, programmatic support to the Partnership Seed Fund (see page 5) and other IPP programs



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Adapted from “Investigate before Investing: Using Technology Transfer Principles to Guide R&D,” presented by Fuentek’s Laura A. Schoppe at the 2005 International Astronautical Congress



“I was able to get internal funding for my research on the strength of the proposal you helped me create. Thank you!” – NASA researcher

Infusion Partnership Projects

In addition to several research and strategic guidance projects, NASA tasked Fuentek with **18 projects** intended to find external organizations with technologies or expertise to infuse into NASA through collaborative R&D. After working with NASA personnel to identify their “need,” Fuentek developed and implemented a marketing strategy to secure the interest of qualified potential partners.

As part of these marketing efforts, Fuentek contacted more than **200 qualified leads**, securing the interest of **81 potential partners**, who requested a meeting with NASA personnel to discuss the infusion opportunity further or submitted a proposal for collaborative R&D.

Some of these infusion projects emerged out of Fuentek’s IP management support for NASA (see pages 2–3), illustrating Fuentek’s “symbiotic” approach to this work. Indeed, **Fuentek is making Symbiotic Innovation a reality for NASA.**

Fuentek's most significant infusion project for NASA to date has been for the Massively Multiplayer Online (MMO) Learning Game. For this effort, Fuentek:

- Developed print and online materials
- Led marketing efforts at various industry conferences to solicit participation from the gaming industry
- Provided pre-, during-, and post-event support for an MMO Workshop, which included more than 130 attendees vying to participate in the project

Fuentek's efforts helped lead to a joint Space Act Agreement with three partners—the lead company in the partnership was brought to NASA by Fuentek.



“The report will provide us a baseline for proposal work... and provides very good info that we didn't previously have.” – NASA researcher

“[The report] is a fantastic summary [of the work] at many of the top companies and research facilities.” – NASA researcher

Strategic and Program Support for the IPP Partnership Seed Fund

Designed to enhance NASA's ability to meet mission technology goals, this IPP program provides seed funding to address barriers and initiate cost-shared, joint-development partnerships. IPP's Seed Fund facilitates the forming of collaborative R&D partnerships through a solicitation process across all 10 NASA field centers. Proposed projects, which include an external organization committing financial or in-kind contributions, are selected based on established criteria.

For the 2007 Seed Fund program year, IPP provided less than \$10 million in funding, which helped leverage more than **\$12 million in industry contributions** plus an equivalent contribution from NASA missions.

IPP relied upon Fuentek for extensive support during the 2007 Seed Fund, with many NASA personnel acknowledging this support as invaluable.

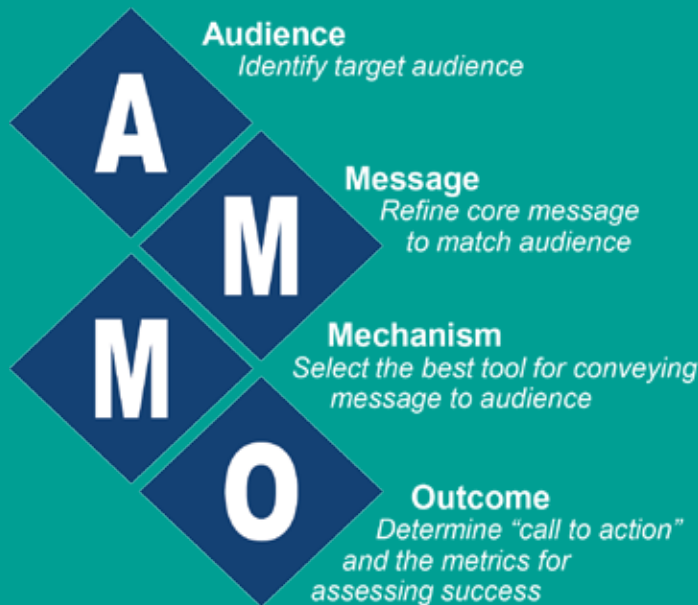
Fuentek's support during the 2007 Seed Fund included:

- Planning, designing, and implementing an effective **online proposal submission system**, which successfully received and processed an unprecedented 74 submissions
- Developing **processes, procedures, and templates**, which improved the submission and evaluation process
- Providing additional support to the field centers as they **vetted and developed** their proposals
- Preparing a variety of publications, including promotional materials, the **2006 final report**, and the award-winning **IPP Seed Fund Success brochure**
- Preparing a briefing package for NASA management to deliver to the **Augustine Commission**—the independent committee reviewing human space flight activities, as requested by President Obama

Fuentek's Communication Strategy: Loading Your AMMO

Effective communication is crucial to the success of technology transfer programs. At Fuentek, we are proud of our easy-to-read, visually appealing, and cost-efficient publications. In the first 3 years of the NASA contract, Fuentek developed **650+ communications deliverables** for IPP, averaging 215 pieces per year or 18 per month.

Fuentek's communications support to IPP has included **outreach**—connecting with potential partners, licensees, legislative stakeholders, and the general public—as well as **inreach**—connecting with the NASA innovators and managers whose participation in IPP activities is essential to the success of the program. Fuentek also facilitated a strategy meeting of IPP communications representatives from across the 10 field centers and developed the overall **communications strategy** identified at that meeting.



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"Thanks for taking the time to do a very professional job [on the article]."
– NASA patent counsel

Fuentek's Communications Support to NASA

- More than **260 announcements of technology commercialization and infusion opportunities and successes** (more about this work appears on pages 2–3 and pages 4–5)
- More than **90 posters, displays, booth designs, and other conference materials**, including materials for NASA booths at two MODSIM World Conferences—5 8x10-foot booths, 18 single-panel displays, and 6 handouts promoting NASA technologies and expertise in modeling and simulation
- Slide shows, speeches, and logistical support—including securing keynote speakers—for more than **50 events and seminars**


 Research and Technology
Accomplishments


by NASA Dryden Flight Research Center

2008-2009

summary


 Highlights from the
 Science Directorate


NEWS

partnership


 Goddard
 Innovative Partnerships
 Program Office

 Strategically Promoting NASA Goddard as a
 Technology Partner of Choice

 2007
 accomplishments

“Thank you for your efforts and the outstanding support.... Several people from the [MODSIM] conference planning team complimented NASA on the booth.” – IPP staff

“It is a pleasure working with a competent, efficient, and gracious person like you.” – NASA researcher

- More than **40 applications for NASA awards** from the agency’s Inventions and Contributions Board and other internal awards, yielding more than \$175,000 for NASA innovators
- More than **30 applications for non-NASA awards**, many of which were selected for the R&D 100 Award, the World’s Best Technology Award, and the *Wall Street Journal* Technology Innovations Award
- More than **90 briefing packages, workshops, and other presentations** delivered to various audiences, including state and federal legislators and personnel in the executive branch, such as the White House’s Office of Management and Budget
- More than **60 annual reports, newsletters, brochures, and other print and online publications** delivered to NASA management, civil servant and contractor innovators, and external audiences
- More than **80 abstracts, papers, press releases, blog postings, and other article-based materials** with appearances in *NASA Tech Briefs*, *PDMA Visions*, the *International Astronautical Congress Proceedings*, and dozens of other internal and non-NASA magazines and newsletters
- More than **25 training sessions** on technology transfer best practices for nearly 160 IPP staff and colleagues as well as sessions on IPP processes and other topics delivered to nearly 370 NASA innovators

More samples of Fuentek's communications deliverables to NASA...



Spotlight on SBIR/STTR

What is the SBIR/STTR program? The Small Business Technology Transfer (STTR) program is a federal program that allows small businesses to receive federal funding for research and development. The program is designed to encourage small businesses to participate in federal research and development projects. The program is managed by the Small Business Technology Transfer (STTR) program at NASA's Langley Research Center.

R&D 100 Win for Rhombohedral Lattice-Matched SiGe

Ames Research Center has received the R&D 100 award for its work on rhombohedral lattice-matched SiGe. This technology is used in the development of high-speed, high-power electronic devices. The award recognizes the significant contributions of the research team at Ames Research Center.

IPP News

Information on the Innovative Partnerships Program (IPP) at NASA's Langley Research Center.



Technology Infusion through the Innovative Partnerships Program

Using your time and resources, building technology you need.

Report of Innovative Partnerships Program (IPP)

The IPP offers a variety of options for technology infusion. It provides a structured process for small businesses to partner with NASA's Langley Research Center. The program is designed to facilitate the transfer of technology from academia and industry to NASA's research and development efforts.

Why Technology Infusion?

- Access to NASA's facilities and resources
- Access to NASA's expertise and knowledge
- Access to NASA's funding and support
- Access to NASA's network and contacts

How to get started:

1. Identify your technology and needs
2. Contact the IPP office
3. Submit your proposal
4. Review and selection
5. Award and execution

infusion



National Aeronautics and Space Administration

Accomplishments Summary 2007

Technology Transfer and Partnership Office's Accomplishments Summary 2007 for NASA Glenn Research Center

07 summary

www.nasa.gov



Ames's Innovative Partnerships Program Office presents...

Inventor Training

March 25, 2009

Laura A. Schoppe
President
Fuentek, LLC

Ames Research Center



Working with the NASA Kennedy Space Center

How to contribute to and benefit from the space program.

partnerships

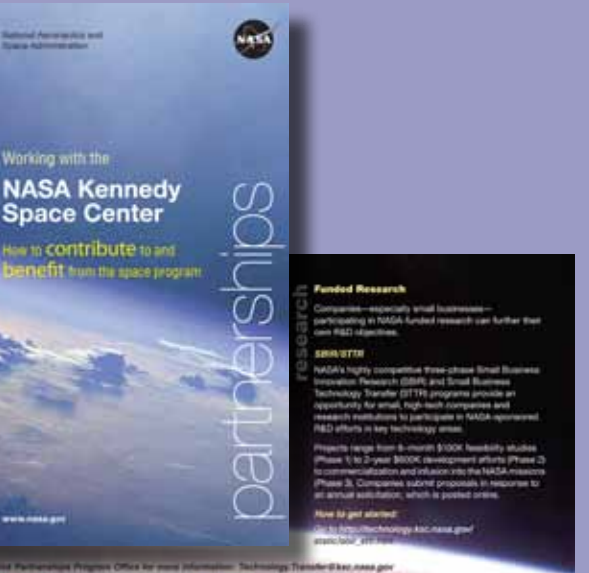
Learn our award-winning technologies. Tap into our cutting-edge capabilities. Access our state-of-the-art facilities. Work with our world-class scientists and engineers.

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Kennedy Space Center
http://www.nasa.gov/centers/kennedy/about
NASA is Home and City
http://www.nasa.gov/pdf/200807main/kscc/index.html

www.nasa.gov



partnerships

Funded Research

Companies—especially small businesses—participating in NASA-funded research can further their R&D activities.

SBIR/STTR

NASA's highly competitive three-phase Small Business Technology Transfer (STTR) and Small Business Technology Transfer (SBIR) programs provide an opportunity for small, high-tech companies and research institutions to participate in NASA-sponsored R&D efforts in key technology areas.

Phase 1: 6-month \$100K feasibility studies
Phase 2: 6-month \$200K development efforts
Phase 3: Commercialization and infusion into the NASA mission

How to get started:
http://www.technology.ksc.nasa.gov/asttr/070709.html

Contact the Innovative Partnerships Program Office for more information: TechnologyTransfer@ksc.nasa.gov

Tri-fold brochure front (above) and back (at right)



Partnership Development

NASA's Strategic Plan calls for "development of partnerships with technology and expertise available to partner with... commercial, academic, and other science sectors." At Ames the Agency's ability to identify, test, and commercialize new technology sources... and generate a better array of technologies than the Agency could develop by itself.

Technology Infusion

Technology infusion is the process of strategically linking technology to NASA's research and development efforts. The IPP provides a structured process for small businesses to partner with NASA's research and development efforts.

Partnership Development

NASA's Strategic Plan calls for "development of partnerships with technology and expertise available to partner with... commercial, academic, and other science sectors." At Ames the Agency's ability to identify, test, and commercialize new technology sources... and generate a better array of technologies than the Agency could develop by itself.

Fuentek's Core Values

We imbue everything we do with our core values:

Creativity: We continually look for opportunities to enhance our efficiency and effectiveness.

Communication: We strike a balance between keeping clients informed without inundating them with too much information—being clear yet concise.

Commitment: We work tirelessly, ethically, and with integrity, putting client interests well ahead of our own. We build relationships based on honesty and trust.

Validation: We continually “check in” with ourselves and with our client, confirming that a project is still on the right path and adjusting for unexpected opportunities and obstacles.

Innovation: We look to best practices and consider our “lessons learned” so we can achieve success faster and for a lower cost.

Value-Added: We identify what is needed to achieve success and direct our efforts accordingly, focusing on outcomes.

For more information, visit us online at www.fuentek.com

Images on front cover are NASA photos





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