



SCRA

*Applied Research and
Commercialization Services*

ANNUAL REPORT 2010

SCRA is a non-stock, tax-exempt applied research and development corporation with headquarters in South Carolina. Our dual mission is to develop and commercialize technology solutions, primarily for mission-oriented Federal agencies and over two hundred Corporations around the world, then leverage that commercialization into economic development outcomes in our operating localities. We have a thorough understanding of the challenges facing the industries and agencies we serve, and we create and lead multi-source teams that deliver high-performance technology solutions. SCRA owns and operates a system of Research Parks and Innovation Centers which include state of the art laboratories, advanced manufacturing facilities and secure areas for sensitive work. These facilities, plus seed capital funds, advance Knowledge Economy development and support local networks of early-stage companies fielding technologies relevant to our Federal and Corporate clients.



A Powerhouse for Commercialization

SCRA takes discoveries out of the lab and off of the bench. We select them, perfect them, and take them into production and wide-spread use, achieving typical transition rates of 70-80 percent.

100 National and International Programs with Over \$1.4B in Contract Value

SCRA builds and leads applied research collaborations of government, universities and hundreds of Industry organizations - ranging from Fortune 500 companies to small and emerging firms. In this role, we are the objective and trusted agent to our clients, partners and stakeholders.

Domain Expertise, Extreme Process Competence, Experienced Collaboration Management

SCRA's subject matter expertise, proven ability to create and lead multi-source collaborations and understanding of the real needs of our clients assure relevant results. We regularly improve the capabilities and lower the costs of client products and processes.

Building and Executing Flexible Business Models

We build business models for individual companies through economic development programs that help grow start-up companies. Our collaborations are virtual businesses that orchestrate the efforts of multiple organizations and deliver technology solutions to the market.

SCRA is experiencing a period of rapid acceleration in company growth, technical deliveries and economic development success.

SCRA leverages a unique blend of assets

to satisfy various client and stakeholder needs. Whether the measure of success is increased mission fitness, delivery of technological innovations, commercialization of new products, or the generation of early-stage companies - SCRA delivers.

SCRA has a dual mission:

- We deliver technology solutions, - typically through applied research collaborations - to improve the mission effectiveness of Federal agencies and the business execution of Corporations.
- We develop the Knowledge Economy by helping grow companies and create jobs.

In support of both missions, SCRA builds and manages research facilities that include wet labs, secure rooms for sensitive work and advanced, high-tech manufacturing shops.

This FY 2010 report highlights examples of how SCRA combines our own expertise, the strength of our collaborations, and our physical and digital research facilities to help people by applying new technology.



Bill Mahoney, Chief Executive Officer



We continue to integrate our business operations.

The interconnectedness of our capabilities is becoming clearer and we are offering new ways to grow and to deliver value to our clients. SCRA offers bundled solutions by studying our clients' needs and combining the right mix of people, disciplines and facilities to solve their problems.

Greg Frank, Chief Operating Officer



We achieved record revenues for 2010.

This allowed us to invest in new business lines, laboratory facilities, and domain expertise that will drive our future success. SCRA is a highly examined company and we are proud of our 27-year clean audit record. Our established systems and federally-compliant business processes form a foundation for growth.

Julia Martin, Chief Financial Officer

**Record revenues
of more than \$172M
and backlog greater than \$405M
are a reflection of the value
we deliver to our clients.**

SCRA Financial Overview

Year-end operating revenue of \$172 Million represents growth of 58% over 2009.

SCRA's double-digit growth validates that we continue to deliver value to our Federal and Corporate clients.

Multi-year contracts under SCRA management had a combined value of more than \$1.4 Billion at the end of FY 2010. SCRA's year-end backlog of \$405 Million registers strong indications of continued, steady future growth.

SCRA's affiliate, Advanced Technology International (ATI), has been able to compete for and consistently win national-level

contracts which contributed to SCRA's record year-end backlog numbers. Noteworthy outcomes include the ramp-up of its Defense Ordnance Technology Consortium contract, re-compete and win of the Center for Naval Shipbuilding Technologies program, and growth of the Marine Corps R&D Test & Evaluation Program.

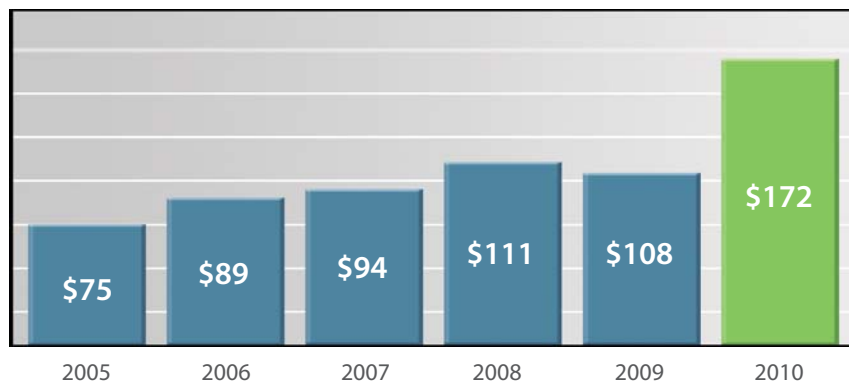
The SC Launch program, which facilitates knowledge-based economic development, has continued to assist, help form and/or land more than 230 knowledge-

based entities in South Carolina since its inception in 2006. The program has positioned its client companies to attract more than \$104 Million in add-on, private equity funding. In 2010, *Forbes* magazine recognized SC Launch as one of the top five entrepreneurial support programs in the country.

Our outlook remains positive given our strong financial position at the end of FY 2010.



Revenue (Millions)



Quick Statistics

2010 Revenues: \$172M

2010 Backlog: \$405M

Revenue

5 Year Avg Annual Growth: 20%

Total Assets

5 Year Avg Annual Growth: 19%

Contract Backlog

5 Year Avg Annual Growth: 32%

We have invested in Innovation Centers to better serve our clients and continue to accomplish our economic development mission.

SCRA built two new Innovation Centers and a third is scheduled to be completed in Spring 2011. These Centers fulfill state legislative mandates to facilitate the commercialization of new knowledge-based discoveries emerging from university research. The Centers serve SCRA's economic development mission by helping

grow new companies and create jobs for the knowledge-based economy. They serve our applied research mission by developing intellectual property into deployable technologies.

The SCRA MUSC Innovation Center in Charleston, SC, opened in late 2009. It is equipped with 11 wet labs to support bioscience

and clean energy research. The SCRA USC Innovation Center in Columbia, SC, is designed to stimulate and sustain clean, next-generation manufacturing. The Duke Energy Innovation Center in Anderson, SC, is under construction. It will focus on advanced materials applications when it opens in Spring 2011.

In the past five years, SCRA Annual Revenue has increased 130%, from \$75M to \$172M.



**Delivering Technology Solutions
to Federal and Corporate Clients**



**Commercialization Support
for Early-stage Tech Companies**



Research Parks and Innovation Centers

The whole is greater than the sum of the parts.

The diverse, interconnected operations of SCRA allow us to offer bundled solutions to our clients based upon their needs.

ATI: Delivering Technology Solutions

SCRA affiliate, ATI, delivers technology-based solutions to complex challenges - primarily for Federal agencies and over two hundred Corporations around the world. ATI combines expertise in its target markets, a robust network of trusted partners and access to state of the art research laboratories to develop technologies to improve capability and lower costs of client products and processes.

SC Launch: Advancing the Knowledge Economy

SCRA fulfills its knowledge-based economic development mission through its SC Launch affiliate. SC Launch supports start-up companies and assists in commercializing new and innovative products. This network of emerging companies provide innovations that serve our Federal and Corporate clients, while advancing the local Knowledge Economy.

Facilities to Commercialize Technology

SCRA's Research Parks and Innovation Centers are state of the art laboratories, scale-up manufacturing facilities and secure rooms where research discoveries are rapidly commercialized. They are specifically designed to enable early-stage companies to progress through market entry and to growth stages.

These facilities - designed, built and financed by SCRA - are available to qualified, emerging intellectual property providers, who may also contribute as sub-contractors to ATI contracts. Qualifying emerging start-ups is another way that SCRA delivers value to our Federal and Corporate clients, and also delivers non-dilutive revenues to our start-up clients.

SCRA delivers solutions through a unique blend of expertise, partnerships and research facilities.

ATI's Federal and Corporate clients have access to innovations through the SC Launch companies, a network of emerging IP providers. SCRA's investment in these early-stage companies - through tax-incented private donations to the SC Launch program, and follow-on private equity placements - helps position them to better serve our Federal-level clients' needs, and provides new companies and jobs in our operating localities. Through these programs, our Federal and Corporate clients benefit without major start-up costs, and our economic development stakeholders see results.

When qualified SC Launch companies gain access to Federal markets through SCRA contracts, their relationship with SCRA gives them insight into Federal client challenges, helps them better understand how they can deliver solutions, and provides them with Federally-qualified financial, regulatory and reporting infrastructure.



ATI has produced an impressive slate of outcomes for our clients by combining our own expertise with that of a robust network of technology developers.

Rick Self
ATI President



SC Launch helps grow early-stage companies. When these companies qualify as technology providers for ATI's applied research programs, they grow faster.

Dave McNamara
SCRA Executive Vice President
SC Launch Executive Director



SCRA Innovation Centers and Research Parks are state of the art facilities that house and equip scientists and researchers commercializing innovations.

John Gregg,
SCRA Executive Vice President and CIO

ADVANCED MANUFACTURING ENTERPRISE

ATI provides new developments in manufacturing technology for Federal agencies and Industry.



Manufacturing Engineering

Product Test & Validation

Manufacturing Production

Sourcing

Deployment

Product Engineering

Sustainment

Concept Engineering

Decommission & Recycling

Requirements Planning

Component Manufacturing

Machined Parts
We offer a wide array of defense-related components and a wide range of materials. Our state-of-the-art facilities and skilled workforce ensure that your parts meet the most demanding requirements in a quick and efficient manner.

Cast Components
We offer a wide array of defense-related cast components and a wide range of materials. Our state-of-the-art facilities and skilled workforce ensure that your parts meet the most demanding requirements in a quick and efficient manner.

Engineered Systems
We offer a wide array of defense-related engineered systems and a wide range of materials. Our state-of-the-art facilities and skilled workforce ensure that your parts meet the most demanding requirements in a quick and efficient manner.

Estimating
We offer a wide array of defense-related estimating services and a wide range of materials. Our state-of-the-art facilities and skilled workforce ensure that your parts meet the most demanding requirements in a quick and efficient manner.

Virtual Showroom
We offer a wide array of defense-related virtual showroom services and a wide range of materials. Our state-of-the-art facilities and skilled workforce ensure that your parts meet the most demanding requirements in a quick and efficient manner.

Die Database
We offer a wide array of defense-related die database services and a wide range of materials. Our state-of-the-art facilities and skilled workforce ensure that your parts meet the most demanding requirements in a quick and efficient manner.

Projects
We offer a wide array of defense-related project services and a wide range of materials. Our state-of-the-art facilities and skilled workforce ensure that your parts meet the most demanding requirements in a quick and efficient manner.

Testimonials
We offer a wide array of defense-related testimonials services and a wide range of materials. Our state-of-the-art facilities and skilled workforce ensure that your parts meet the most demanding requirements in a quick and efficient manner.



The depth and breadth of ATI's program portfolio is unique. ATI-led programs cover every aspect of the Advanced Manufacturing Enterprise - from preproduction supply chain risk assessment; to manufacturing, deployment & maintenance; to product phase-out & recycling.

PLANNING/RISK ASSESSMENT

ATI is integrating part and process models with cost models. This allows designers to see the cost impact of decisions in real time and early in the design process.

DESIGN

Next Generation Visualization reduces iterations in design through integration of Computer Aided Design (CAD) and Virtual Reality. The system enables all of the supply chain to make changes in a virtual environment and transfer the changes back to the CAD design.

PRODUCT ENGINEERING

ATI leads an international industry/government consortium that develops and implements information standards to support Model-based Engineering, Manufacturing, and Sustainment.

Members represent leading manufacturers, government agencies, software vendors and research organizations.

MANUFACTURING

ATI leads a Tank-Automotive Research, Development and Engineering Center (TARDEC) program to evaluate the feasibility and benefits of 3-dimensional (3D) laser scanning technology to address Reverse Engineering and Quality Assurance processes in a manufacturing environment. The program integrated laser scanning technology with current manufacturing processes in use at the Anniston Army Depot.

SUSTAINMENT

ATI led the development and deployment of a containerized, mobile and transportable system to produce on-demand cast parts

and rapidly re-supply damaged combat and combat support vehicles.

ATI played a lead role in the development and implementation of an online purchasing site for DoD that delivers over 100,000 orders per year. The system integrates orders and contract vehicles to provide users with a single-point-purchase interface for catalog and non-catalog items. Warfighters can place orders online and have them directly shipped without the burden of dealing with various supply sources.

SOURCING and SUPPLY CHAINS

ATI leads a team that is transforming the Missile Defense Agency and other DoD weapons systems programs into lean, efficient, responsive enterprises.

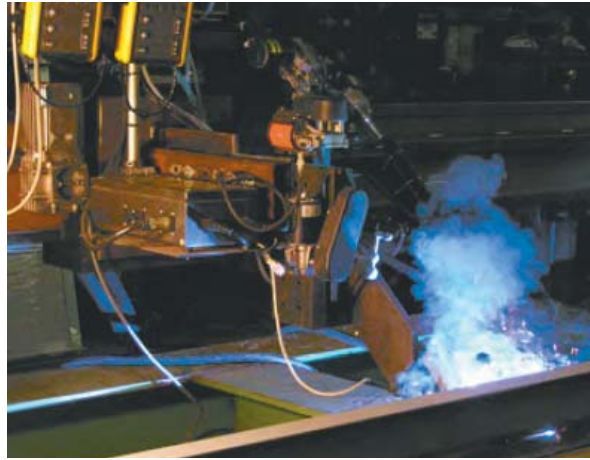
ATI delivers value at each step of the product life cycle and supply chain.

MARITIME

Technologies generated by ATI-led maritime programs have generated transition rates of up to 80%.

Wide-spread industry adoption and use of these technologies generate strong returns on Federal R&D investments.





ATI leads programs, co-funded by the US Navy and the US shipbuilding industry, to reduce the cost of building and maintaining Navy warships. Projects are chosen in accordance with a strategic roadmap which ATI helps develop with the Office of Naval Research and the leading shipyards. Solicitations for work are issued regularly to ensure the benefits of continuous competition.

Remote Climbing Robot for Automated Welding results in costs savings of 50-70% per weld job with a substantial reduction in set-up and in-process time.

Extended Lean Enterprise concepts saved \$450,000 for consumables alone at one shipyard and improved productivity by more than 20% in 36 months.

Advanced Structural Joining Methods such as laser cutting, precision forming and laser welding, reduce the time to fit and weld structural steel. This resulted in a 30% reduction in steel cutting costs and an 8% reduction in plate usage.

Web-based Production Engineering improved shipyard planning and execution. The system integrated design, material control, and scheduling with production processes, and resulted in on-schedule first-of-class ship delivery with more than 10% cost savings, reduced overtime and re-work with a 40% production increase.

Low-cost Pultruded Composite materials and joining techniques reduce weight, improve fuel economy and increase ships' lifespans. The use of pultruded panels reduced costs by 35-40%, and labor by more than 40%.

Arc Welding and Distortion Mitigation allows the programming of wave forms to lower the effective heat input to the base plate. This increases productivity and welding speed over primed steel surfaces, reduces distortion 30%, and increases weld completion more than 200%.

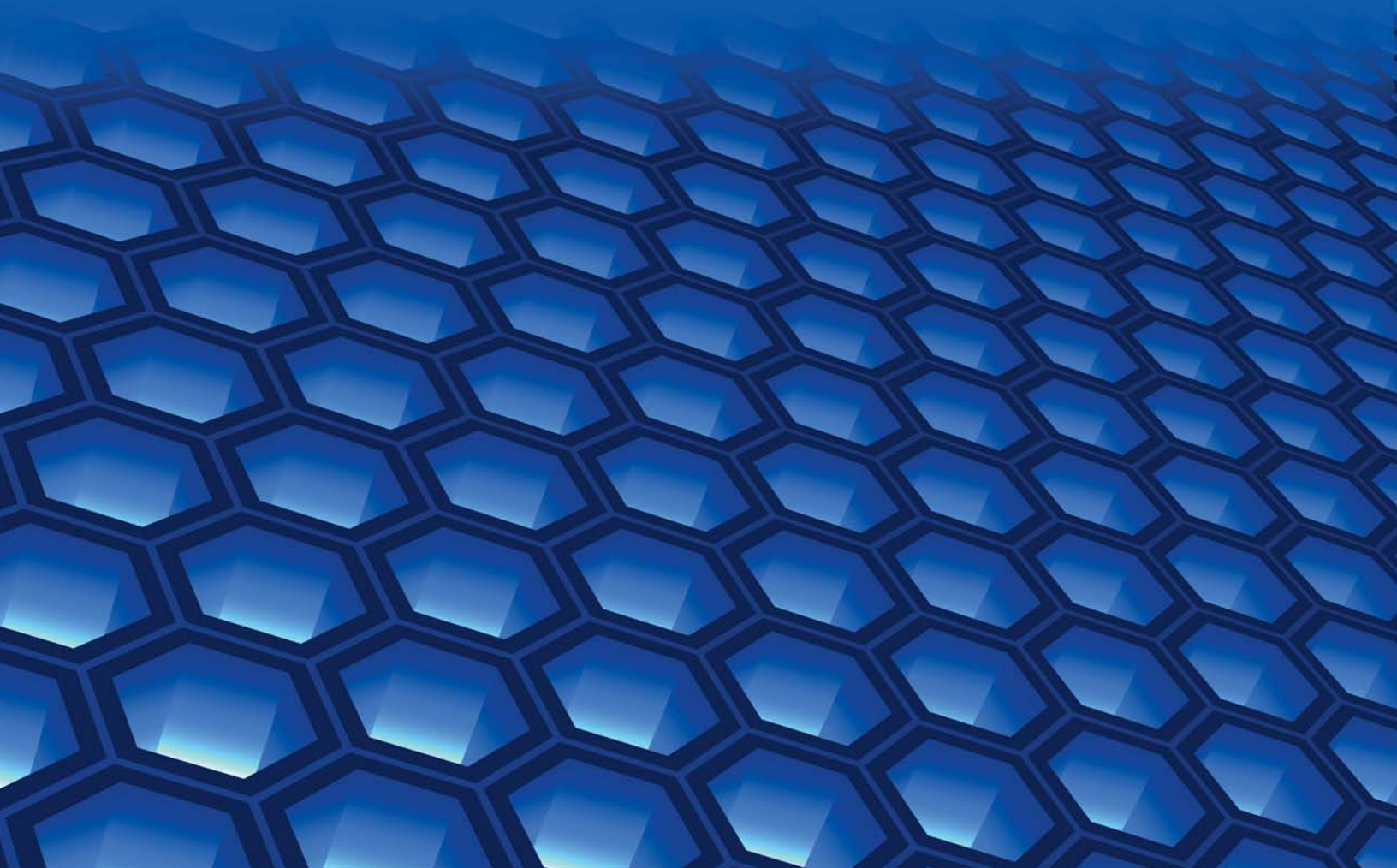
Portable Automated Bulkhead and Hull Straightener for plates distorted during welding is 1.8 times faster than the traditional manual method. Other benefits include improved working conditions and decreased paint damage.

ATI blends streams of public and private R&D funding to efficiently develop and deploy new technologies.

ADVANCED MATERIALS

ATI's advanced materials expertise and robust network of partners deliver high performance, weight reduction, and lower costs for ships, planes and land vehicles.

Experienced program management and contracting maximize technology transition.





ATI's subject matter expertise in advanced materials makes us uniquely capable of delivering technology solutions to Department of Defense and Corporate clients. We act as the objective agent in identifying needs, forming technical teams, developing and evaluating solutions and disseminating them across the industrial base.

ATI's expertise covers a wide range of advanced materials focus areas, including composites, polymers, ceramics, fibers and films and metal matrix materials.

Large composite support beams and composite joints for the DDG-1000 vessel will save \$3M per hull.

Carbon NanoTubes transmit power and signals in fixed-wing aircraft and rotorcraft. The project implements novel in-situ quality controls for increased quality nanomaterials at less cost.

ATI conducted thirteen independent assessments of military technology during training exercises at military bases in the US and internationally.

A unique 3-layer coating system improves military gas tanker trucks. Prior to the development of this technology, tankers were outfitted with protective armor which added significant weight, resulting in reduced loads. The coating system prevents cargo leakage and enables tankers to be used to full capacity.

Composite prosthetics sockets will save 38% on the fabrication of definitive sockets, but the real benefit is increased comfort and quality-of-life for amputees.

Out-of-autoclave Technology will reduce the need for autoclaves - expensive, large equipment - in the manufacturing of composites and aircraft structures. This will substantially reduce costs.

The ATI-led Center of Excellence for Composites generates high ROI.

To date, the Navy's investment in composites for Virginia Class submarines has been \$7.6M.

Per ship cost avoidance is \$6M.

Total cost avoidance will exceed \$155M.

METALS

ATI brings the right mix of people together to develop solutions for our clients.

ATI marshals the talents of a partner network of 230 forging organizations, 2130 foundries and 27 leading research institutions to deliver improved readiness to over 80 military organizations.





ATI leads applied research in:

- Cast and forged metal parts manufacturing improvements for military readiness
- Antimicrobial copper touch surfaces and heating, ventilation, and air conditioning applications
- Safe vanadium microalloyed steel in industrial and military applications
- Titanium alloys for armor and lightweighting
- Reduction of metalcasting energy intensity

Academia provides basic research. Close collaboration with the Federal client assures relevant solutions to real world problems. The participation of thousands of industry partners ensures a shared learning curve and technical transfer of innovations across the entire industrial base.

ATI leads teams that represent **every facet of the metal parts procurement supply chain.** The teams have generated **cost savings totaling more than \$130M** for the Defense Logistics Agency (DLA).

A tool **linking new part orders with existing tooling has saved \$2.6M** to date.

15% weight reduction and 50% cost savings resulted from the replacement of extensively machined parts with cast parts which exceeded performance requirements.

An ATI/industry **technical consulting and problem-solving team** generated **16% average price and 23% average lead time reductions** for DLA parts procurement.

Computer control of die cooling line water on military truck parts **increased productivity 26%.**

Scrap was reduced from 14% to less than 1%. **Cost was reduced by 5-10%.** Other benefits include reduced start-up time, increased die life, and reduced downtime.

An ATI-led team responded to **91 requests for forging assistance,** resulting in DLA Aviation savings of

\$1.5M annually. **For every dollar invested, the client saved \$11.**

The **Job Shop Lean** Project used forging process flow improvements with a **25% reduction in set up time, 16% reduction in set-up steps, and 30% reduction in operator travel.**

Robotic machining that moves independently of the work piece has the ability to feed as quickly on a large part as it does on a smaller part. This will reduce **capital investment by 35%; parts cost by 20%; and decrease cycle times by 25%.**

ATI has executed casting and forging programs with continuous innovation for over a decade to solve DLA's procurement challenges.

ORDNANCE

ATI puts client funding to work quickly and efficiently to deliver technology-based solutions.





ATI executes collaborative research with extreme process efficiency. Using fast and efficient contracting, we put client funds to work quickly to deliver critical technologies. Based on this proven ability, ATI was chosen to manage a \$700M DoD ordnance technology development program.

ATI assists in the planning and execution of a **multi-project munitions technology development and prototype demonstration** program under contract with the US Army. This effort advances and expands US military technological superiority in this critical field.

A consortium of **over 150 companies and academic institutions** conducts research, development and deployment of Advanced Warheads, Explosives, Propellants, Pyrotechnics, Fuzes/Sensors, Demilitarization, Enabling Technologies, Insensitive Munitions, and Ordnance Protection and Survivability.

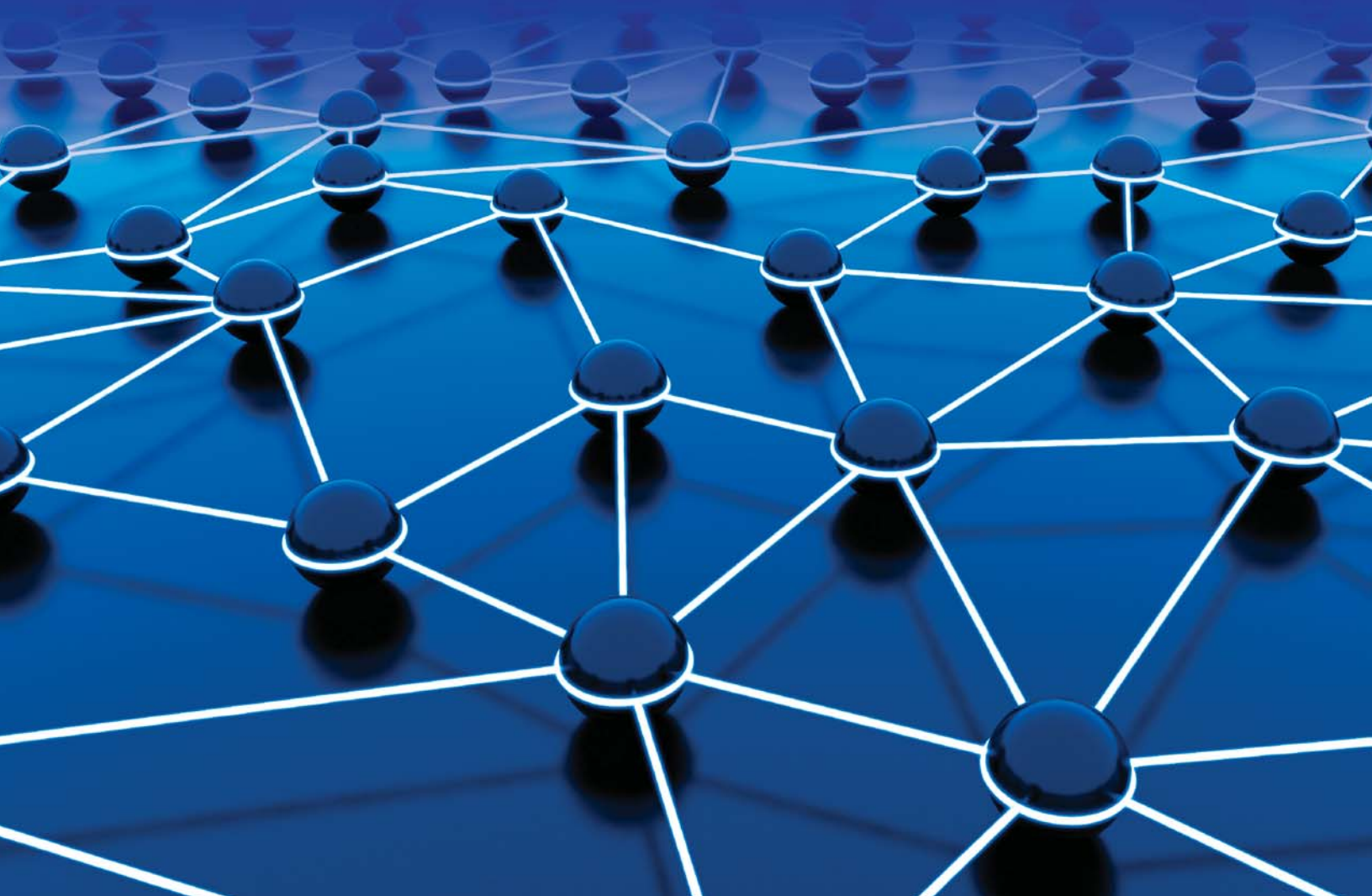
ATI helped the program put **\$289M under contract across more than 100 projects in 21 months**. Rapid throughput of research funds is critical to achieve DoD's operational objectives.

ATI manages the business operations of the DoD Ordnance Technology Consortium.

The program combines the convenience of one-stop shopping with the value of continuous competition and multi-sourcing.

INTEROPERABILITY

ATI coordinates the efforts of various domains, industries and individuals to solve problems.





ATI develops standards, technology tools and processes to enable effective collaboration between individuals, agencies, and jurisdictions. This includes improved interoperability between different computer systems and communication technologies as well as between people.

ATI acted as technical lead on the **design, development and implementation of an Interagency Operations Center** that helped various agencies and jurisdictions collaborate in securing one of the Nation's leading seaports. Technologies included secure voice and data communications and an intelligence sharing portal. The program was **proclaimed by Congress as a national model** for port security.

An ATI-led team developed **interoperability standards to help capture and share electronic medical records**. The standards

have been implemented and tested by the Secretary of US Health and Human Services. They are now **mandatory for federal agencies implementing healthcare information** technology systems.

ATI conducts interoperability-related research and provides unbiased evaluations of existing and emerging **command and control capabilities for DoD's Joint Systems Integration Center**.

ATI led the development of a system that **stores and shares law enforcement information across jurisdictions to solve crimes and**

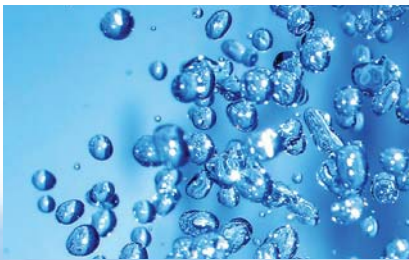
stop criminals. It is used by hundreds of agencies in multiple states.

ATI leads an international team developing **product data standards to enable model-based engineering, manufacturing, and sustainment**. Members from the aerospace, automotive, electronic, and other industries collaborated to develop standards which are now used in the manufacture of hundreds of thousands of products worldwide. The team's **improved standard development process reduced the time to create an international standard from 5-9 to 1-2 years**.

**By packaging related technologies - such as Interagency Operations Centers, Information-Sharing Portals, and Geospatial Systems -
ATI is a technology broker delivering
integrated solution sets.**

ENERGY and ENVIRONMENTAL SUSTAINABILITY

SCRA's environmental sustainability portfolio includes innovations that decrease dependency on petroleum, minimize the health impact of pollution and promote economic growth built around emerging technologies.





SCRA through both ATI and its SC Launch program, promotes economic growth built around emerging alternative energy technologies. Sustainable energy, waste stream recovery, and manufacturing efficiencies are key focus areas.

SCRA and partners have begun work on a **sustainable energy initiative for both the Department of Energy and the National Park Service** at the historic Fort Sumter site in Charleston, SC. Energy at Fort Sumter is currently provided by generators, requiring significant quantities of conventional fuel to be shipped to the island site each month. SCRA is developing and deploying a **sustainable, closed-loop power system that will integrate solar panels, hydrogen rendition and storage equipment and fuel cells**. The application of these technologies will make the island's power-generation self-sustaining and environmentally-friendly.

SCRA is in the early stages of new waste-stream recovery projects for corporate clients. The lead project is **collecting methane produced from industrial waste** generated

by a manufacturing plant. Some of the **methane is burned for energy to power the plant, and some is converted to hydrogen** which is used to power forklifts and in-plant drayage equipment.

SCRA led an **installation of ten backup power fuel cell systems** on behalf of the Army at Fort Jackson, SC. The power systems utilize **fuel cells that to date have outperformed the battery systems they replaced**. This project won the Palmetto Pillar Award for clean energy innovation within SC.

In recognition of SCRA's fiscal stewardship and expertise in energy and environmental sustainability, **SC's Energy Office hired SCRA to provide technical and economic evaluations of proposals** from state agencies, universities, and school districts **to allocate \$40M in federal energy efficiency grants**.

ATI leads a Department of Energy program that develops and applies energy reduction technologies for metalcasting. The **program will save 50 trillion BTUs per year, resulting in 400 million gallons of gasoline saved**.

Early-stage companies supported by SC Launch have developed many innovative clean energy technologies, such as

- **Off-grid power** - fuel cell power and fuel source in one integrated system featuring a 'just add water' hydrogen storage cartridge
- **Plug-in hybrid device** - converts trucks into electric-drive vehicles without changes to the engine, transmission, support systems or emissions
- **Conversion of plastics to oil** - converts non-recyclable waste plastics into synthetic crude oil and transportation fuels

SCRA fosters collaborations to capitalize on economic development opportunities through 'green technology' innovations.

HEALTHCARE and BIOSCIENCE

ATI advances health sciences, treatment and prevention, nutrition, prosthetics, anti-microbial copper and electronic medical records.





ATI is involved in diverse initiatives to improve healthcare through technology.

The Personal Health Record is a method used for achieving an accessible electronic medical record that empowers the individual consumer, provides interoperability between military users, military healthcare systems and private sector healthcare providers, and improves continuity and quality of care.

ATI leads a panel that overcomes technical and policy obstacles to healthcare information technology interoperability by **blending best-of-breed methods and processes to harmonize healthcare data standards**. The collaboration gains broad-based acceptance

and support via formal charter. **All Federal agencies are now required to use the team's standards for sharing healthcare information.**

The Copper Touch Surfaces Program led by ATI, evaluates the effectiveness of copper applications to improve health and wellness. Copper has inherent antimicrobial properties with the potential to limit the spread of infectious diseases and allergens. Preliminary results showed a **90% bacterial reduction on copper components** versus traditional components.

An ATI-led composites consortium applies **advanced materials to prosthetic sockets** to improve the lives of injured service members. Projected fabrication **cost savings are 38%**.

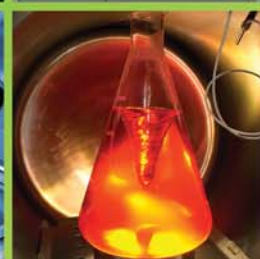
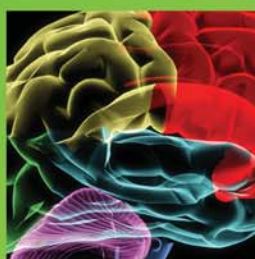
ATI leads a national research collaboration in nutrition that combines the scientific, intellectual and organizational strengths of researchers engaged in health related problems. The primary focus is to foster innovative research initiatives and outreach programs related to human health.

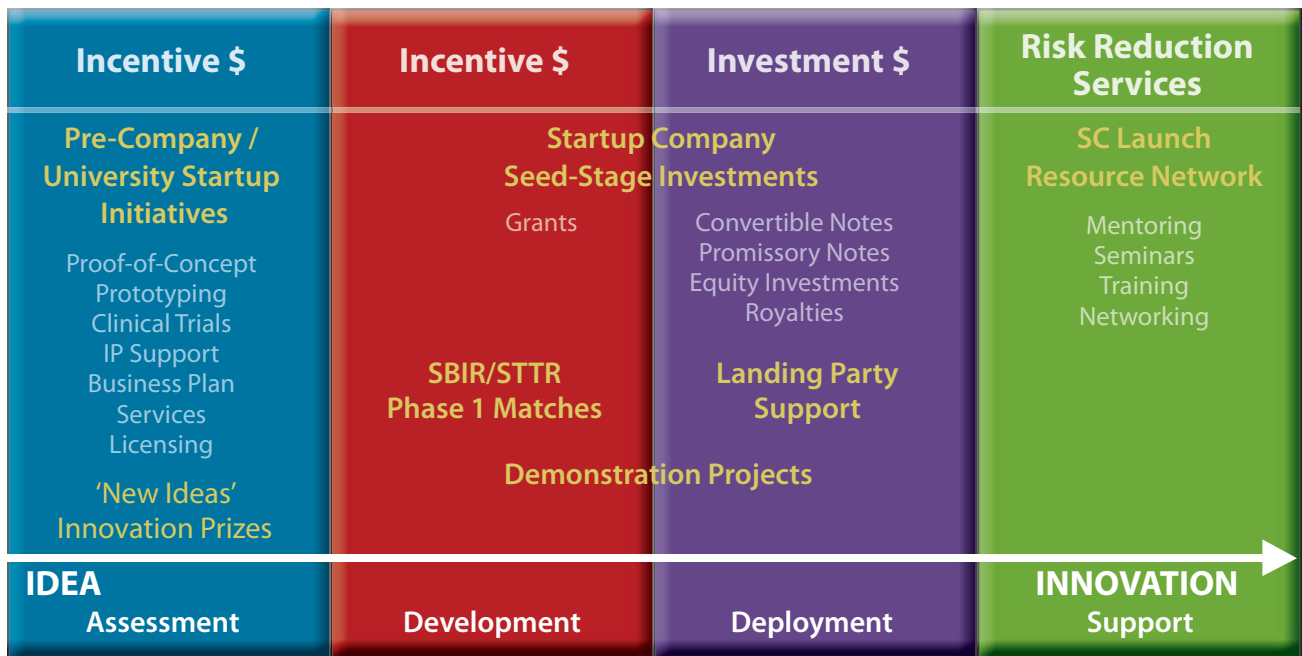
ATI has a keen awareness of the markets we serve and the real needs of our clients.

This makes us uniquely capable of packaging partner networks and creating real solutions.

COMMERCIALIZATION SERVICES

SCRA is a powerhouse for commercialization of innovative technologies.





SCRA delivers on its economic development mission through both its ATI operations and its SC Launch program. SC Launch helps entrepreneurs build start-up companies and create high wage-earning jobs. Participation in the program positions early-stage companies to secure Angel and Venture follow-on funding.

Since the start of operations in 2006, SC Launch has produced an impressive slate of outcomes.

- 104,000,000 dollars in follow-on capital secured by SC Launch Portfolio Companies
- 68,000 average salary (in dollars) of the jobs created
- 415 applicants to the program
- 234 contributors to the Industry Partnership Fund
- 188 entities received SC Launch support and funding
- 48 innovation prizes awarded to inventors
- 38 investments in Portfolio Companies
- 32 matches provided to Small Companies receiving Federal SBIR/STTR Awards
- 27 demonstration projects funded
- 10 landing parties brought to South Carolina from other states and countries
- 4 Innovation Centers to commercialize research discoveries
- 2 US-based operational awards won by SC Launch program
- 1 international recognition award

Forbes recognized SC Launch as a top National example of effective entrepreneurial support, leading to early-stage company formation and job creation.

Bundled Partner Services

Through its SC Launch affiliate, SCRA provides and facilitates private investments in emerging IP providers.

SC Launch-supported Portfolio Companies include:

Avancen - wireless device for bedside delivery of oral pain medication

Bridge to Life - organ storage and transplant solutions

Charleston Laboratories Inc. - opioid drugs with minimal or no nausea

CIVISonline, Inc. - audience interactivity and citizen journalism

Climax Global Energy - plastic waste-to-fuel conversion

Cooperative Diagnostics - real-time diagnostic tests to detect diseases

CreatiVasc Medical - medical devices for end stage renal disease patients

DigitalDerm - early melanoma detection technology

EV Power Systems Inc. - hybrid and all-electric vehicle power systems

FirstString Research, Inc. - novel peptide developed for scar prevention and tissue regeneration

Hoowaki - microstructured products for improved energy efficiency

Immunologix - human antibody-based therapeutics

Innegrity - high performance fiber manufacturer focusing on the composites industry

Ion Surgical - arthroscopic device for ACL (anterior cruciate ligament) and rotator cuff repair

iTekka - innovative software solutions to enhance everyday work routine while increasing productivity and revenue

KIYATEC, LLC - company delivers enabling 3-D cell culture tools for the pharmaceutical, biomedical and life science industries

Lab21, Inc. - molecular diagnostic products and services

MedProcure - materials procurement applications for medical offices

Materials Innovation Technologies (MIT-RCF) - patented technology for recycling carbon fiber

Ometric - real-time, in-line spectroscopic analysis

PinPoint GeoTech - automated data collection and reporting for city, state, and county governments

Quintesocial - social networking platform

Sabal Medical - automated medication carts and bar code verification software for the delivery of narcotics

SensorTech - sensors that measures force, pressure, torque, or impact with the ability to be formed into many shapes and sizes

Terressentia - accelerated oxidation and filtration for the beverage industry

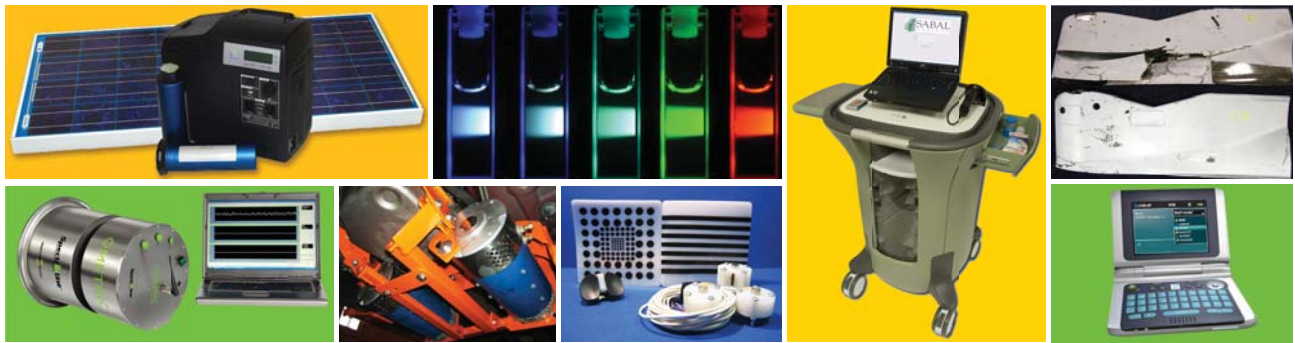
VidiStar - physicians' web-based diagnostic cardiovascular system imaging product

Vigilix ITM - real-time systems for event management and monitoring

Vitasol - innovative cellular resuscitative product

Zipit Wireless - technology that makes managing and connecting devices seamless and scalable



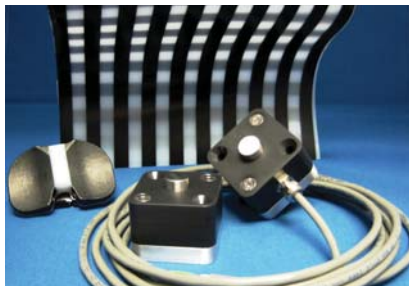


SC Launch provides seed capital and support to start-up technology companies.

SCRA maps the capabilities of qualifying SC Launch companies with the challenges facing ATI's Federal and Corporate clients. In addition to delivering technology solutions, these companies may also satisfy Federal contract requirements regarding small business participation. The SC Launch program increases the effectiveness of Federal small business support by matching Phase I Federal Small Business Investigative Research (SBIR) awards won by South Carolina-based companies.



Advanced Core Technologies (ACT) provides **analysis and visualization tools to predict and assess impacts to supply chains** and to discover untapped suppliers to improve mission fitness. **Through a program led by SCRA's ATI affiliate, ACT helps the Missile Defense Agency** analyze and plan for potential readiness issues posed by supply disruptions.



SensorTech's uniquely durable and formable conductive **polymer sensors measure load, tension, pressure or vibration**. They have many applications - from blast tests for helmets to detection devices and security switches. These sensors are being **applied to prosthetics as part of an ATI-led Federally-funded advanced materials program**.



SCRA has invested over \$26 Million to support SC Launch company growth and commercialization.

SCRA manages a fund of \$6 Million in tax-incented private donations each year to support start-up tech companies.

SCRA-supported **start-ups have received over \$100 Million in follow-on private equity** funding.

SCRA's Federal and Corporate clients may benefit from innovations developed by SC Launch client companies. SC Launch client companies that qualify as sub-contractors to SCRA-led Federal contracts gain access to new markets.

The SCRA Innovation Centers are state of the art research and business facilities.

SCRA built and equipped laboratories, secure rooms, manufacturing and business facilities.

SCRA's Innovation Centers, built in close alignment with our research university partners, represent the stepping stones from basic research to market-ready technologies. They are places where intellectual property can be developed into deployable technologies and companies can grow in furtherance of our economic development mission.



Trident Research Center

The Trident Research Center (TRC) is an SCRA research campus complex which includes 20 acres of land and three buildings with more than 178,000 square feet of offices, labs and conference rooms.



SCRA MUSC Innovation Center

The SCRA MUSC Innovation Center in Charleston, SC, features fully-equipped wet labs for applied research in bioscience, energy and environmental sustainability.



SCRA USC Innovation Center

The SCRA USC Innovation Center in Columbia, SC, is a state of the art facility for early-stage companies entering scale-up manufacturing stages.



Duke Energy Innovation Center

Under construction in partnership with Duke Energy and Clemson, this advanced materials research facility in Anderson, SC, is slated for opening in Spring 2011.



SCRA ATI Innovation Center

The SCRA ATI Innovation Center in Greenwood, SC, serves as a scale-up facility for diagnostic, therapeutic and pharmaceutical companies.

In addition to designing and building facilities, SCRA provides comprehensive site management.



SCRAMUSC Innovation Center

645 Meeting Street, Charleston, SC

This newest component of Charleston's growing bio-based cluster supports the sophisticated requirements of early-stage to mature bioscience corporations. The 28,400 square foot facility consists of flexible use, multi-tenant laboratory and office space fully-equipped for biopharma, biomed and biotech research and commercialization. The building opened in December 2009.

Amenities Include:

- 11 wet labs equipped with case works
- Secure lab area accessible by card key
- Common shared lab area with dishwasher, distilled water and sub-zero freezers
- Shared dark room
- Lab sizes from 660 sq ft to 1200 sq ft
- 10 separate enclosed offices in the lab area
- Fully vented labs
- Fire protection
- On-site parking and common meeting rooms
- Network access including email
- Administrative office assistance
- Flexible modular office configurations
- 24/7 security monitoring





SCRA USC Innovation Center

1000 Catawba Street, Columbia, SC

This 66,000 square foot facility in downtown Columbia is designed to house high-tech companies emerging primarily from research at the University of South Carolina and entering commercialization and scale-up manufacturing stages. It is situated and designed to stimulate and sustain clean next-generation manufacturing and will have a large economic impact with a low environmental impact. The building opened in July 2010.

Amenities Include:

- 58,000 sq ft of open space
- Ample space for 10-15 High-tech Light Manufacturing Start-Ups
- On-site parking and meeting rooms
- Internet access including email
- Administrative office assistance
- Flexible modular office configurations
- 24/7 security monitoring
- Walking distance to the University of South Carolina



Recent Awards

The ATI-led Metalcasting Program's Procurement Solutions Network Project won the 2010 Defense Logistics Agency (DLA) Commander's Choice Award. The award recognizes initiatives that advance DLA's mission of improving the quality of life of US service members.

The ATI-led Copper Touch Surfaces program was featured as the leading "highlighted project" in the 2009 annual report for the

Army's Telemedicine and Advanced Technology Research Center.

An SCRA-led installation of ten backup power systems at Fort Jackson, SC, was recognized with the "Palmetto Pillar Award" in September 2009 for clean energy innovation within South Carolina. The power systems utilize fuel cells that have out-performed the battery systems they replaced.

An ATI-led forgings program won the DMSMS (Diminishing Manufacturing Suppliers and Material Shortages) Achievement Award for eliminating tooling duplication costs and reducing administrative and production lead times for critical defense parts. Noted in the award summary is a database that contains locations and descriptions of forging dies for 280,000 National Stock Numbered parts with a combined tooling value of \$5 Billion.



Bob Kiggans, Vice Chair of SCRA affiliate ATI, was honored with the International Leadership Award by the American Society of Mechanical Engineers (ASME) in Montreal, Canada. Mr. Kiggans earned this prestigious award because of his outstanding leadership in furthering the discipline of computers and information in engineering and making it such a vital part of the world today.



Greg Frank, SCRA's COO, accepts an award for Regionalism & Cross-Border Collaboration from the International Economic Development Council. This award focuses on innovative approaches to fostering, governing, and sustaining regional and cross-border collaborations in the areas of business retention and expansion.

Strategic Advisory Group

SCRA's newly-formed Strategic Advisory Group is comprised of strategic thought leaders who represent the Departments of Defense and Homeland Security, as well as large industry, small business and the venture capital investment community. The members' extensive experience and knowledge of the Federal market assists in execution of SCRA's long-term strategic business plan. The Huffington Post recently cited SCRA, and the Strategic Advisory Group in particular, for its ability to build synergy between Federal agencies and innovative small businesses.

Vice Admiral Albert J. Baciocco, Jr., USN (Ret.)

Christopher D. Brady, Chairman and Managing Director, The Chart Group

Lawrence P. Farrell, Jr., Lieutenant General, USAF (RET), President, National Defense Industrial Association

George Foresman, former Undersecretary for Preparedness, Department of Homeland Security

Thomas F. Hash, former President of Bechtel National, Inc.

Governor James "Jim" Hodges Attorney and senior advisor at McGuire Woods Consulting, partner at McGuire Woods, LLP, former Governor of South Carolina, and former member of the SC State House of Representatives

Darryl K. Horne, Chairman, President and Chief Executive Officer of Horne International, Inc.

Admiral Timothy J. Keating, USN (RET)

General Barry R. McCaffrey, USA (RET), President of BR McCaffrey Associates, LLC

Lieutenant General John Sattler USMC (RET)

General Charles E. Wilhelm, USMC (RET)

Ambassador David Wilkins Attorney/ Partner with Nelson Mullins Riley & Scarborough LLP, former US Ambassador to Canada and former member of the SC State House of Representatives

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For 27 years, SCRA has grown and delivered favorable outcomes for its clients and partners.

1983 - 2004

SCRA was formed by the SC Legislature with a one-time grant of 1400 undeveloped acres and \$500,000

An SCRA team developed a **computer-driven manufacturing** system for rapid manufacture of defense parts

An SCRA team developed **STEP product data standards for the ISO** used in hundreds of thousands of products

SCRA, US shipyards, and the US Navy begin applied research to **reduce the cost of Navy ships**

SCRA won contract award to run the Navy Center of Excellence in **composites manufacturing; results include \$100M savings** on Virginia Class submarines

2005-2010

SCRA **revenues exceeded \$74M** in 2005

Multi-agency information sharing tool for law enforcement used in multiple states with over 220,000 queries/year

SC Launch formed to help commercialize innovations; **SC Launch helped grow over 230 start-up entities**, creating high-paying, knowledge-based jobs

SCRA-led team develops a **machine enabling one sailor to move 5-ton loads** in confined spaces on a moving ship

Interagency Operations Center proclaimed by Congress as **national model for port security**

120,000 orders delivered annually using SCRA-developed component of **DoD's e-commerce site**

Millionth part manufactured by Anniston Army Depot using SCRA rapid manufacturing technology

SCRA and SC university partners test antimicrobial **copper on touch surfaces in hospital settings**

First of its kind **port container inspection** and security technology screens commercial cargo

SCRA **revenues exceeded \$100M** in 2008

SC Launch received **National SSTI Award** for Excellence in Economic Development

All Federal agencies required to use SCRA team's standards for **sharing healthcare information**

SC Launch Companies earn **top honors at Southeast BIO Investor Forum**

Received **Alfred P. Sloan workplace effectiveness** award

Won **\$700M, 7-year Ordnance Tech Consortium**

Secretary of U.S. Health and Human Services praised SCRA team's **interoperability standards**

Columbia Fuel Cell Collaborative received **Innovator Award from Southern Growth Policies Board**

\$20 Million Research Award - the largest competitive National Science Foundation award in SC history

Wall Street Journal Top Workplace Awarded

SCRA built two Innovation Centers equipped for bioscience research and **light manufacturing**; a third for **advanced materials** research will open in 2011

Received **Palmetto Pillar Award** for hydrogen fuel cell deployment

Awarded **\$99M Shipbuilding Center of Excellence** contract

Forbes.com cites **SC Launch** as prime example of effective economic development

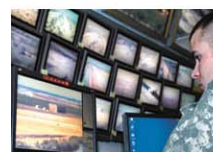
Huffington Post: SCRA lauded for synergy between Federal agencies and innovative small businesses

2 International Economic Development Council Awards

SCRA helped Lab21 Inc., a **UK-based biomed company, establish US headquarters** in Greenville, SC

SCRA secures Federal funding for **SC Launch Company to apply sensors** for comfort of prosthetics

SCRA **revenues exceeded \$170M** in 2010





www.scra.org 843.760.3342