

Rock Program Highlights

- The ROCK Program has worked with over 100 companies in the Rockford area resulting in technology improvements for their businesses
- Acquired a unique 3D metal printing rapid prototyping system (Extrude Hone - \$90k) for TechWorks, which will be available for use by Rockford area companies to experiment
- Financed the connection of a fiber optic link to EIGERlab (\$25k)
- Developing a unique vibration cancellation system for micromachines based on NIU technology – Professor Kuo
 - Working with Ingersoll and Atometric to utilize this technology in their products
- Donating space at EIGERlab for MMI to operate and demonstrate equipment
- Supported Sundstrand efforts to build a larger power systems laboratory suitable for aerospace, military and commercial needs (\$90K)
- NIU has supported the Institute of Tribology and Coatings with a \$1.1 million contract, which will help the Rockford gear industry
- Working with Gary Fredericks of Fluidic MicroControls and Arizona State University to develop a fluidic linear actuator version as an alternative
- Former NIU student worked to establish a pooled purchasing company (Rock River Iron) for small companies based on NIU software. After some initial trials, it was determined that the time was not right for this endeavor.
- NIU has developed a contract with Rock Island Arsenal (RIA) to provide manufacturing technology consulting using NIU staff and Rockford experts
 - Through this contract, RIA has asked NIU to help them find component suppliers for their \$400 million M-119 Howitzer contract
 - NIU has worked with MARRV to secure bids on 15 components worth as much as \$5 million in Rockford subcontracting in the next 4 years.
 - More parts are expected to be bid on
 - RIA has requested that NIU help them to establish a BPA (Blanket Purchasing Agreement) with a Rockford company to procure Howitzer parts more competitively and quickly
 - RIA is extremely pleased with Rockford pricing and technical skills shown on initial budgetary estimates
- NIU has 16 faculty members and an equal number of students working on projects with Rockford companies as a part of this program
 - Including a microforming literature search, market study and design of a microforming press with Alion Science and Technology and NSF Funding
- NIU has 7 full time equivalent staff members at EIGERlab – perhaps more than any other organization
- NIU staff routinely volunteers to help all companies in the EIGERlab with their technology needs and is doing so on a weekly, if not daily basis

- NIU has supported MARRV since its inception
 - Performed a survey of MARRV member manufacturing capabilities to allow MARRV to understand individual and collective member capabilities
 - Providing software and server capacity for MARRV including Internet –based project management, pooled buying, supply chain capability modeling, quality assurance tracking
 - Performed capacity analysis for MARRV member companies Superior Joining & SubSource
 - Provided rent-free office space/equipment for MARRV for first four months
 - Worked with them to develop a major bid to Parker Hannifin in the spring of 2005 (Effort was not successful, but we are working on them again)
 - Brought RIA work to MARRV. Currently deciding best bid strategy
 - Expect this to lead to at least \$5 million in contracts with Rockford companies in next several years
 - Also a great lead-up to bidding on Future Combat System parts when that program gets to a production stage (expected no sooner than in FY08)

- NIU and the Abilities Center worked with Honeywell MicroSwitch spin-offs to insure that the 12 employees (jobs) stay in the Northern Illinois area and yet provide good service to Honeywell Freeport to maintain the job base there

- NIU is working with Abilities Center and EIGERlab to develop a satellite facility in TechWorks to house rapid prototyping, high velocity machining, high power laser, super surface finishing and nano material production technologies facilities in the TechWorks building, giving Rockford area businesses access to a number of these capabilities to learn how to use them. [EIGERlab does not have sufficient manufacturing floor space to accommodate these machines and has emphasized micro manufacturing with the space it has.]

- The NIU College of Engineering and Engineering Technology is working with the Rockford Chamber of Commerce and local companies to develop internship opportunities for NIU engineering students hailing from the Rockford area as well as job opportunities for fresh NIU graduates

- The NIU College of Business has worked with RAV to develop a marketing study of micro-manufacturing business potential. The ROCK program will be working more with the business school this spring to refine that study

- NIU Outreach is working with Rockford Economic Development groups to bring new businesses to the area

- NIU is working heavily with Rock Valley College to use RVC to provide the first two years of engineering training prior to students needing to transfer to DeKalb. NIU, RVC and the Abilities Center joined in a \$850,000 bid to NSF to develop a laser technicians training course

- NIU is offering Rockford-based Industrial Technology degree programs

- NIU would like to leverage EIGERlab capabilities/interests with other regional economic development interests such as in the Quad Cities area and the Fox River Valley area west of Chicago recognizing that our competitors are not regional, but international

- NIU ROCK has been *working extensively with the AgTech Park initiative and Rockford area companies to develop businesses based on biofuels* and other agricultural products used for industrial purposes
 - The recent Growth Dimensions bid request had three bids from groups strongly facilitated by the ROCK Program staff
 - One of these efforts will produce products to greatly increase efficiency of ethanol plant production and, if successful, could produce hundreds of jobs in the area
 - A major area entrepreneur is very supportive of this effort and seems likely to invest and locate facilities in Rockford