3-D Printing • Art • Engineering • Programming • Collaboration • Robotics • Design • DIY

"Makers" and the Innovation Economy

RACDC

Randolph Area Community Development Corporation

2016 Annual Report

Building Community

" The true sign of intelligence is not knowledge, but imagination."
–Albert Einstein

Julie Iffland, Executive Director

You may also have seen it on Front Porch Forum, a short post which heralded the dawn of a new era. A local resident had an old lawn mower with a broken part no longer available from the manufacturer, and he asked if anyone had a 3-D printer he could borrow to make the part himself. Welcome to the Maker Movement and the Innovation Economy where "Do-It-Yourself" meets High Tech Tools.

a·ha mo·ment
NOUN
1. informal. a moment of sudden insight or discovery:

Self-reliance requires ingenuity, so rural places like ours have always produced more than their fair share of innovation. VT Castings produced a better way to stay warm with wood to save on fuel. LEDdynamics produced the first LED tube light that you could use without the expense of replacing your fixture. Genius!

Today's "Maker Movement" brings us back to our DIY roots but adds a whole new set of digital hardware and software to the mix. The biggest difference is probably less in the tools themselves, than the incredible power of relatively inexpensive tools that are more portable and available to the average person. With a 3-D printer and some software run on a laptop, a creative person can produce things that once required a manufacturing plant or at least a tool shop.

Another big difference is that today's Makers like to mix it up more. Makerspaces (real and virtual) are shared tool shops where creative minds of every stripe work together, or side by side. Artists discover tools that expand their palette. Engineers are inspired by dance to perfect a piece of robotics. The sky is the limit. And it may be work, but it is also very fun and very cool…creating is part of who we are as humans, and finding your "inner maker" is magical and empowering.

Many of tomorrow's inventions will be created in these spaces. To give our students the tools to find their inner maker, we need to expose them to other creative minds and power their creativity with STEAM: Science, Technology, Engineering, Arts & Mathematics. Randolph's first Maker Faire is our way of celebrating this tech soup. It is as fundamental to our economy, present and future, as electrification was 100 years ago.

Mission Statement

Randolph Area Community Development Corporation (RACDC) is a nonprofit organization that unites the community behind initiatives which strengthen our region's social and economic assets in order to enrich quality of life, instill pride and build confidence. We do this by promoting sound development practices and investment, creating affordable housing options, preserving environmental and historic resources, and leading in the revitalization of downtown and village centers.

Vermont Drone

Maker Faire visitors experience Virtual Realty

Doug Webster

THE RANDOLPH MINI MAKER FAIRE

RACDC was proud to host Randolph's first Mini Maker Faire and our 24th annual meeting on the weekend of October 8th. The annual meeting speaker, and our guide through the maker faire process, Doug Webster, is an engineer and artist, 23 year veteran with the Vermont Agency of Education administering Career and Technical Education, founder of the Champlain Maker Faire and the Burlington Generator Makerspace, and President of CMF Inc., a nonprofit acting as a catalyst to grow making everywhere.

" Because empowering kids to evolve from "You can do *that*?" to "*I* can do *that*!" is one of the best gifts we can bestow. "

The Maker Movement marries physical, hands-on inventiveness with technology that is revolutionizing what people can invent and produce on their own. It's also creating a culture of collaboration that fuels exploration and innovation. And crowd sourcing is making capital more accessible for anyone with a good idea.

Why should we care?

Because the tools that are powering the maker movement are also powering local economies and the future. The 3D printer industry alone (aka additive manufacturing or rapid product development) is projected to increase from $3 billion in 2013 to $21 billion worldwide in 2020. Because empowering kids to evolve from "You can do *that*?" to "*I* can do *that*!" is one of the best gifts we can bestow.

The Maker Faire was a great success, with about 300 visitors of all ages interacting with 15 demonstrators featuring robotics, virtual reality gaming, weaving, drones, LED lighting and heat to light conversion, a fire-breathing dragon sculpture, 3D printing, high performance home innovation, the internet of things, a bicycle transmission, scribblebots, theoretical bio-engineering, welding arts, and more.

We want to thank all our sponsors, exhibitors and volunteers for making the day successful and fun. How often does the average person get to fly a drone, anyway?

Randolph Mini Maker Faire
OCT 8, NOON - 5pm
Downtown Randolph
2 South Main Street
Celebrating Innovation, Ingenuity, And the Makers who turn ideas into reality
randolphmakerfaire.com

Going the Extra Kilowatt. 2016's Sponsor-Powered Partnerships

RACDC staff had the great good fortune this year to partner with four innovation organizations on projects that are energizing our community. All four are contributing to grow our economy. All four prioritize not only the bottom line, but respect for their employees and the environment, and a commitment to the strength of our community. We want to thank these supporters for their continuing leadership, inspiration and collaboration on projects with positive impact.

60 attend Heat Pump Workshop hosted by RACDC, EVT, and GMP.

Efficiency Vermont (EVT). Thanks to our work with the state's Designated Downtown program, we were awarded the opportunity to work hand-in-hand with Efficiency Vermont during a six-month pilot program to bring their energy-saving expertise and financial incentives directly into the community. Together we significantly increased local exposure to energy and money saving opportunities for our businesses and residences resulting in immediate savings of 300,000 KWH, with more in the works. Thanks to the pairing of skills, EVT reached 450% more small businesses in this period than in the previous year. During our April 1st Community Energy Day, hosted by EVT Director Liz Gamache, we also connected energy professionals with VTC students and faculty for a fascinating "Master Class" discussion about careers in energy.

Bob Sparadeo of LEDdynamics helps a customer trade in old bulbs at our LED Bulb Swap Event.

Green Mountain Power (GMP). One of the most forward-looking utility companies in the country, GMP is finding ways to enable even those who can't afford to buy new efficiency equipment, like cold climate heat pumps, to benefit from the savings. They are also making grants for Electric Vehicle Charging Stations, including a grant to Randolph. GMP leads in supporting the Maker Movement, dedicating space at their headquarters to emerging makers, and supporting similar efforts around the state, such as Randolph's first Mini Maker Faire.

LEDdynamics. The first in the country to create an LED tube replacement bulb that doesn't require a new fixture, this local company has both heart and mind. When we were planning to hold our first Maker Faire, LEDdyanmics President Bill McGrath reached out to express their support and say, "How can we help?" and then they did, in a big way. This summer, our LED Swap Day made their tube lighting available to local businesses and residents at a 30% discount. These bulbs can save 60% more than old fluorescent bulbs and contain no hazardous substances, so they are safer and greener.

Catamount Solar's worker cooperative has agreed to host a new community park on their downtown property.

Catamount Solar. Catamount Solar is a local, employee-owned, solar design and installation company whose founders set out to create a company "steeped in community values and managed for long-term sustainability." Working with Randolph's Energy Committee, they led the team that installed the community solar array, where anyone in the community could buy-in to benefit from solar savings at a modest price.

ENERGETIC PUBLIC SPACE!

Catamount Solar had grown to 16 full-time employees, and needed more space. They were in the process of purchasing a downtown parcel to expand their headquarters when RACDC approached them with a proposal. The idea was to transform a vacant corner of that lot, in a prominent location at the corner of Merchants Row and Pleasant Street, into an engaging and beautiful community space to sit, eat lunch, play, reflect and maybe even recharge a cell phone.

Catamount's founders, Dan Kinney & Kevin McCollister, immediately embraced the vision and agreed to support the project by contributing the space and seed money to get the project off the ground.

The idea was inspired by the work of Ward Joyce, an architect and former VTC Professor who has led some impressive community renewal work in Montpelier. RACDC asked Ward to visit the site to see what he thought. Ward loved the idea and location, and agreed to lead the design process. Morgan Easton, a VTC student and RACDC intern who worked with Joyce on the Montpelier pocket park, will donate her services to the design process under his guidance.

A diverse steering committee will help with outreach to the public and vetting of the design elements. One public meeting was held in August to gather ideas. Another will be held this fall to get more public comments on the draft design.

The park has already received initial pledges of financial and/or in-kind support from Catamount Solar, Efficiency Vermont, Red Lion Inn, Randolph Sunrise Rotary Club, the Town of Randolph Select Board and Economic Development Council, and LEDdynamics. When the design is finalized, the steering committee will work on securing the remaining community partners and funding necessary to complete the project.

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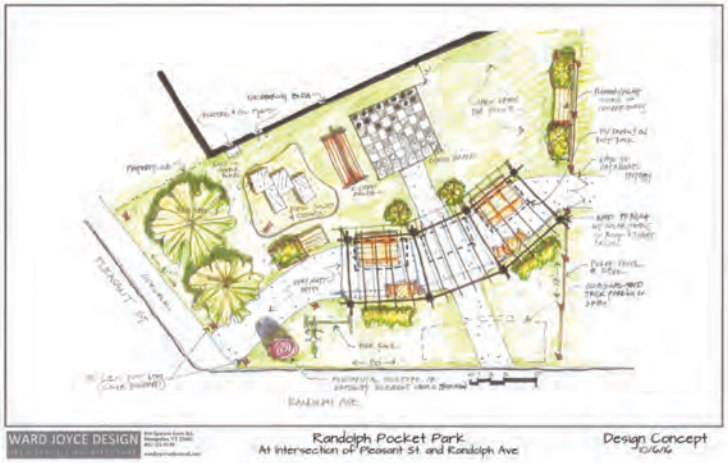
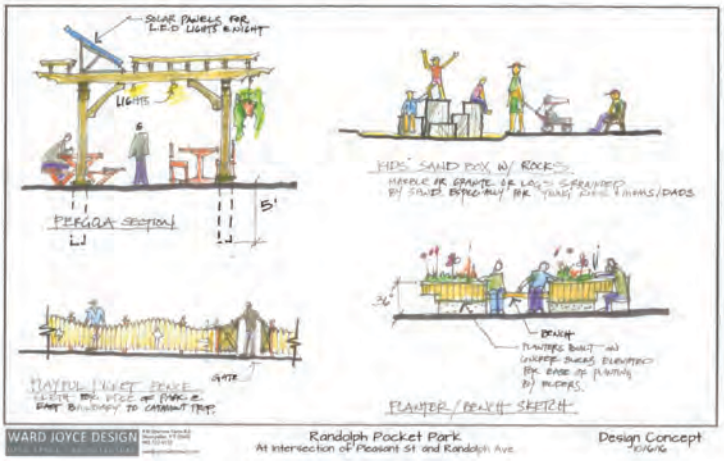


The First Design is ready for public review and comments.



" Public places are vessels for building our capacity to work together and they are the spaces that define our communities."
-Ward Joyce, architect.

CELEBRATE 5 YEARS BEHIND & MANY AHEAD. SASH IS HERE TO STAY!!

On November 20, 2016, RACDC will hold an open house for, SASH (Support And Services at Home), to celebrate three milestones: its 5th year of success as a Medicare-funded Pilot Program, being heralded across the country as a national model, and the Green Mountain Care Board's unanimous decision to make SASH a permanent part of Vermont's health care reform model. Third party studies comparing similar populations with and without SASH prove that SASH works, both to substantially reduce health care costs and to improve health in the seniors it serves…at no cost to them.

SASH a caring partnership
SUPPORT AND SERVICES at HOME

SASH is a home-grown wellness program for all Medicare-eligible seniors who wish to live better lives. RACDC hosts SASH in our area. Our SASH Coordinator, Dede Tracy, and Wellness Nurse, Catherine Clark, are the core team, but they confer regularly with SASH Partners at Visiting Nurses & Hospice, Gifford Medical Center, the Council on Aging, and the Clara Martin Center, to provide personalized support to participants in meeting their own healthy-living plan goals, troubleshoot obstacles to their success, and lend transitional support during times of stress or illness.

Special programs include trips and social events, like dances and movie nights; classes and workshops on everything from computer security to grief and loss; and recreation, like walking groups and Tai Chi classes. SASH truly helps give seniors the tools to make better choices and live happier, healthier lives, and we couldn't be prouder of our SASH team and partners.

Hutchinson Award Honoree – Peter Nowlan, Esq.

Peter Nowlan is the 2016 Hutchinson Award honoree. The Award was named for Jim Hutchinson, a larger-than-life local figure who died unexpectedly in the prime of his life, but left a remarkable legacy that defines the kind of devotion to community that this award honors and celebrates. Mel Adams, Randolph Town Manager, who worked with Peter for many years, presented the award.

Peter grew up in Windsor, VT, studied history at UVM and then served as an infantry captain with duty in Viet Nam. Following his military service he entered the new Vermont Law School became a member of the first graduating class of 1976, after which he served as Assistant Dean of VLS, Assistant VT Attorney General, and a private practitioner with Pat Meyer in the successful firm of Nowlan and Meyer. They retired in 2015, leaving many of his clients to wail "Woe is us!" – including Mel.

Peter's civic life was equally rich. Mel joked that "Peter is a lawyer, which implied that he likes to talk, which drew him to be both Town and School moderator from the 1990's to 2010, as well as President of the Randolph Chamber of Commerce, and member of the Randolph Neighborhood Housing Services, American Legion Post 9 Honor Guard, and director and vice chair of Gifford Medical Center since 2012."

Peter and his wife, Kathy, also found time to raise a family, and so naturally, he became a director of the Randolph High School, serving as chair of it and the governing board of the Randolph Area Vocational Center, and various sports associations, from youth baseball to golf.

Peter told the Herald when he retired, "I knew that I would enjoy a small-town practice, because I would enjoy the variety of work, and I would enjoy working for the people. Apply yourself and you can establish a nice practice, making a decent living, and becoming an integral part of the community." Peter, it can never be said that you have not been an integral part of this community. For all you have given to us and for all you may have given up to serve your community, your state and your nation, it is an honor on behalf of RACDC to present you with the Hutchinson Award for Selfless Service to the Community.

President's Report: Pam Stafford, President

Raspberry Pi isn't for dessert any more. No, it's not misspelled. Thanks to RACDC volunteer and IT guru, Nathan Johnston, we now know that Raspberry π is not food in the classic sense but an inexpensive ($25), mini-computer to make programming accessible to a broader audience. Like the high school age robotics team that demonstrated at Randolph's first Maker Faire, we now all have the potential to make things go with a microchip and some coding.

And lest we think that the "Maker Movement" is only a fad, recently, the BBC (British Broadcasting Corporation), better known for world news and classical music, announced that it would give out one million programmable mini computers they call "micro:bits" to year 7 students across Britain. Why? Computer.com reported that Sinead Rocks, head of BBC Learning, told them that children are given paintbrushes when they're young, with no experience, and it should be exactly the same with technology.

"The BBC micro:bit is all about young people learning to express themselves digitally, and it's their device to own," she said. "It's our most ambitious education initiative for 30 years. And as the micro:bit is able to connect to everything from mobile phones to plant pots and Raspberry Pis, this could be for the internet of things what the BBC Micro was to the British gaming industry."

Those of us who didn't grow up with computers may find it odd to hear programming referred to as "expression," but today, even for young people accustomed to using technology, using someone else's program may not be enough to truly embrace the digital future. Like strangers in any strange new land, we may need to "learn the language." Raspberry Pi, anyone?

Treasurer's Report for the 2016 Annual Meeting : Peter Reed, Treasurer

The balance sheet of the Randolph Area Community Development Corporation (RACDC) remains strong, with **total assets** of $6.022 million, and **net assets** of $2.44 million (unaudited). Randolph House Holdings (RHH), a subsidiary, is consolidated into RACDC's financials. Consolidated profit and loss figures (unaudited) for the fiscal year ended June 30, 2016 show revenues of $1.335 million, and expenses of $1.174 million, with a net positive result of $161 thousand. Much of this is restricted to specific uses, and will be plowed back into properties as operating or capital reserves. Cash and in-kind donations totaled over $98 thousand during the year. There were no material issues with the 2015 audit and we do not anticipate any material issues for the 2016 audit, which is currently underway.

Notwithstanding the favorable net results, significant financial challenges ahead for 2016-17 include:

- Ongoing negative cash flow from Joslyn House, which has been subsidized with donations and positive results from other rental properties. A major rehabilitation project for Joslyn House is under consideration over the next 2-3 years.
- Funding for economic development is not sufficient to meet the needs of our business community, and we hope to build a stronger and more diverse funding base.
- Management of the upcoming purchase and infrastructure upgrades for Armstrong Mobile Home Park will require construction loans and financial monitoring to ensure the project meets approved budgets for long term grants and financing.

We appreciate the financial and technical support received from a wide variety of individuals and local businesses, and look forward to continuing to build RACDC's financial footing over the coming year.

Comings & Goings!

Crystal Hand, new VISTA Member

Please welcome **Crystal Hand** to our community! RACDC's new VISTA member arrived in Vermont in mid-September, having travelled cross-country from Los Angeles to do a year of service in the Randolph area. Crystal holds an undergraduate degree in Sociology and a Master's degree in Demography. We're already impressed by her talent and enthusiasm.

The Americorps VISTA program (Volunteers in Service to America) was founded in 1965 as a national service program to fight poverty across America.

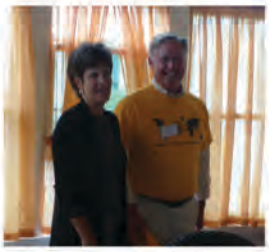
Why Vermont when she could have chosen to serve anywhere in the country?
"I chose Vermont for the beautiful natural setting and because I wanted to start my career in non-profit work within a tightly knit community. I was drawn to RACDC because of its mission to build a strong downtown, develop more opportunities for young people, and create housing options."

Crystal is embracing VT life with a visit to the Tunbridge Fair, hiking, and Contra dancing, and she's looking forward to experiencing a real Vermont winter!

Jane Pekol with Bd. Mbr. Lee Moore at Safe & Seen Halloween

We are delighted that **Jane Pekol** has agreed to join the staff as our Operations Manager. Jane's background in construction, weatherization, and renewable energy will serve us well as she takes over our housing and loan fund operations, as well as assisting in other program areas. Jane and her husband, Joe, live in Northfield with their pack of rescue dogs, Bart, LadyBird, Leroy & Beau. Be sure to welcome her to the RACDC Community.

We bid farewell to **Doug Sanders**, RACDC's Board Member turned COO/CFO, who has spent two years working in the trenches at RACDC (sometimes literally). Doug has enriched the organization and those who worked with him, through his skill, caring and sense of humor. We wish Doug and his wife, Monique, all the best in their move Down East. We'll miss you, "Dub!"



Randolph Area Community Development Corporation

21 North Main Street
PO Box 409
Randolph, VT 05060-0409

email: racdc@racdc.com
phone: (802) 728-4305
fax: (802) 728-4863

Staff

Julie Iffland, Executive Director
Jane Pekol, Operations Manager
Dede Tracy, SASH Coordinator
Catherine Clark, SASH Wellness Nurse
Sam Paddock, Property Manager
Nathan Johnston, IT Volunteer
Crystal Hand, VISTA Member
Al & Arlene Wright, JH Resident Managers
Christie Ashline, JH Housekeeping
Pam Gendron, JH Cook
Barb Giroux, JH Resident Services
Christina Jochum, JH Cook
Patricia LaPlante, JH Cook
Theresa McIntyre, JH Cook
Mary Tucker, JH Cook
Bev Whitney, JH Cook

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Thanks to our Annual Meeting, Annual Report & Maker Faire Sponsors!