CHAIRMAN’S MESSAGE:
“AN URBANFUL PATH TO TRANSFORMATION”

Greetings to all friends of the American Precision Museum,

During this past year, Steve Dalessio, our former Board Chairman, switched hats and came on board as Executive Director of the Museum. This provided welcome continuity in a year of many accomplishments... including:

- A complete web site upgrade
- Expanded use of social media
- A professionally developed visitor’s orientation film
- A robust education program
- Donations of new CNC and robotic equipment used to compare current technology to original methods

Going forward, the Museum is on a purposeful path to transformation. We know where we want to go, and we are getting there.

We start by preserving the rich history that was created within our National Historic Landmark Building in the late 1840s. We are adding clarity to how the innovations of Robbins & Lawrence were foundational to the development of the “American System” of manufacturing and simultaneously to the development of the American machine tool industry.

Continuing innovation in manufacturing is a theme that links mid-nineteenth century breakthroughs right through today. Our museum will use changing exhibits to tell these stories, and our Innovation Center demonstrates current technology to give the visitor a look at how technology is used today.

Most important, we want to use our exhibits and our place in history as a backdrop to an education program that introduces young people to the joy of making things. For those who cannot be on site, we will create virtual learning opportunities to be communicated over social media.

In the end, our hope is to enlighten all that we reach to the proud history of American manufacturing and to create awareness of its now promising future.

Thank you for your support,

Lee Morris

MESSAGE FROM THE EXECUTIVE DIRECTOR

What an exciting time to take the helm at the American Precision Museum. I'm so pleased to introduce our 2019-2020 Annual Report. It was an incredible year for the Museum - the organization finished strongly despite the 4th quarter being effected by COVID-19 restrictions.

This is thanks in large part to the impressive team of people that keeps our institution humming, and whom I’ve had the pleasure to get to know since I started as Executive Director in September 2019. Our education, exhibits and visitor services staff are dedicated, passionate, knowledgeable and adaptable. Always thinking ahead, they continue to demonstrate their creative thinking and their drive to design welcoming, educational spaces that are new, different and exciting.

The “Operational Team” is equally talented, ensuring that our collection, finances, fundraising and operations management dovetail with our programs, always with a vigilant eye on our strategic goals and priorities.

None of this would have been possible without the outstanding support from our many members, corporate and foundation donors. Finally, I’m grateful to the many volunteers that make up our Board of Trustees and Advisory Committees. They are the strength of this organization, who truly make the Museum an asset for our region and beyond.

With another great year in the books, we are now looking ahead to our next year - and it’s going to be exciting. Our new Advanced Manufacturing exhibits are running thanks to the many generous donations from leaders in the machine tool industry, our 2020 exhibit on the Science and Technology of Measurement has also launched. Please check our website for updates and more information, and until then, THANK YOU for being a supporter of the American Precision Museum. We could not do this without you.

Warmly,

Steve Dalessio, Executive Director
FINANCIAL INFORMATION

The charts below reflect Revenue and Expenses for APM’s fiscal year 2019-2020 (May 1, 2019 through April 30, 2020).

REVENUE

- Endowment: 13%
- Admissions & Memberships: 18%
- Gift Shop: 4%
- Gifts: 28%
- Grants: 7%

EXPENSES

- Programs & Education: 40%
- Management & Collections: 13%
- Development & Fundraising: 13%
- Marketing & Promotion: 5%

SOURCES OF FUNDS

$531,970

USES OF FUNDS

$763,470

- *14% of the funds came from Temporarily Restricted monies raised in 2018-2019

HOW TO SUPPORT US

DONATIONS

Donations not only help us to continue operations but additionally allow us to build and improve. Your donation might help us build new exhibits, acquire new equipment for our Learning Lab or Innovation Station, bring our programs off site, or even contribute to year-round operations.

MEMBERSHIP

Membership revenue is unrestricted and, unlike donations, can be relied upon year after year. We’ve simplified the levels of membership to the following:

- Individual ($35 annually)
- Family/Dual ($55 annually)
- Associate Membership ($100 annually and includes membership in North American Reciprocat ing Museum association)
- Friend of APM ($250 annually, available to families or companies)

Each level of membership comes with perks and our deep gratitude.

PLANNED GIVING

THE MILL BROOK SOCIETY

The museum has partnered with the Vermont Community Foundation to offer charitable gift annuities, charitable remainder trusts, and charitable lead trusts. Bequests, retirement plans, cash, or securities are additional ways to give.

TIME AND MATERIALS

If you’re local to the museum, we can use volunteers to assist with tours, help in the garden, and additional on-site tasks.

Even if Windsor is far from you, we can also use committee members to meet digitally (applications must be approved), donations of materials for the Working Machine Shop & Innovation Station, and digital advocates - share our newsletter, or our website, or our social media posts with those whom you think would find us interesting.

VISITOR EXPERIENCE

As you see from the comments throughout, we had a wonderful year engaging both young and young at heart! We had every state in the nation visit the museum in 2019 and 23 different countries. We’re very proud that we are becoming a national museum.

This year, we allowed visitors to the museum during the off-season (if they were willing to wear coats and not mind the cold). We’d had 500 between December and March!

Our front desk staff did a terrific job of taking on some of the Learning Lab duties and working with the little ones that wanted to explore.

We’re always looking out for new items in the gift shop that will remind you of your visit and perhaps delight and inspire visitors in the future.

There are many changes in the works, including a new visitor guide for the Museum Hall and a new interactive tour guide with additional video, text, and audio.

Overall, we’re looking forward to a different kind of 2020, one of learning while keeping safe and engaging imagination.

2019-20 STATS

4,715 VISITS

OF THOSE, 426 VISITORS BETWEEN NOV - MAR (OFF-SEASON)

50 STATES REPRESENTED

23 NATIONS REPRESENTED
NEW DISPLAY:

THE SCIENCE AND TECHNOLOGY OF MEASUREMENT

The American Precision Museum is pleased to present The Science and Technology of Measurement as part of the Vermont Curators’ Group Statewide Exhibit 2020 Vision: Seeing the World Through Technology.

Our spin on that is inspection and accuracy. Precision manufacturing depends on accurate measurement. We want people to realize measurement isn’t just a ruler or a tape measure, but an integral part of the world around us that allows us to be accurate to the micron. What’s more, there are a ton of jobs in quality and inspection that rely on this level of attention to detail, so we hope our collection of items from the 1800s to today sparks some interest. Precise and accurate measurement tells a story no matter what a visitor’s background may be - whether one has machine experience or is more interested in history.

Items on display include historical items like Edison’s watt-hour meter and the world’s first super-micrometer (accurate to the millionth of an inch. Elements of measurement to be displayed will also include digital elements also hands-on elements to be released at a later date.

NEW ARTIFACT:

ASCHAUER WORK BENCH

Many visitors love the model steam plant and working push-button diorama on the exhibit floor. Requiring extreme precision for the level of exquisite detail, the workbench - also crafted by miniature artist John Aschauer - adds context and beauty to the exhibit space.

MINIATURES AND MODELS

A highlight of the collections year for both exhibition and acquisition was the pop-up miniature show in January. The museum has many more objects in its collection than are ever on display, and we surprised even ourselves with the many miniatures and models brought from storage. From steam engines to a logging mill to tiny bar stock and workbenches, these small precision wonders delighted an unexpectedly large audience in the few days they were on display. And the show inspired one visitor to donate a scale model of a steam engine, complete with manual (in German).

Many of the miniatures that had been on display for the exhibit are currently on display in the Windsor House for viewing by the public.
The museum will be providing hands-on and virtual learning opportunities to highlight the history of the museum, the evolution of manufacturing and the future of manufacturing. We will be actively engaging with a network of educators throughout the United States to provide exciting and dynamic instruction to bring the history of the museum into relevant and exciting projects and activities. These activities will include tours, 3D printing projects and career exploration activities.

Our goal is to continue showing that what we have in the museum represents a foundation and that industry has continued to innovate and improve over the last 175 years. This museum is a place where culture and history, STEM and innovation, and 21st Century careers can come together.

Collections are at the core of all we do at the American Precision Museum, central to our mission. As the American Association of Museums has written, our job is to know what we have, know where it is, take good care of it, and make sure someone gets some good out of it. A newly formed collections team has been working on just that during 2019-2020.

Perhaps the most important collections work of the year has been the continuing improvement of the object catalog. Collections technician John Alexander has spent many hours editing, revising, and adding to the records in the collections database. This essential tool helps us identify, find, and learn about the thousands of objects in our varied collections. Some of the other activities of the collections team include:

- Consulting the Vermont Historical Records Program about our archives
- Beginning an inventory of the contents of 40 boxes of books in storage
- Meeting with two local historical society directors to discuss collections issues
- Attending collections-related sessions at the New England Museum Association conference

What’s in store for the coming year? New exhibits will feature some rarely seen collection objects, such as historic measuring devices in the 2020 Vision exhibit and engineering drawings in an upcoming exhibit on the art of industry. A collecting plan needs to be written to guide our future acquisitions, with associated handouts for visitors who want to donate objects. A collection survey can help us begin to refine the collection, with the goal of finding more appropriate homes for objects that don’t serve our mission. And when traveling becomes safer we hope to visit other industrial history museums to learn about their collections and how we can help each other.

Of course, the largest and most important collection object is the landmark Robbins and Lawrence Armory, our museum home. With the help of the development committee, a successful grant application was submitted to the Vermont Division for Historic Preservation to repair and repaint the windows on the south side of the building. That’s not just for aesthetics and good stewardship, either: adequate windows can help with energy costs, preservation (regarding heat and humidity), and potential future year-round operations.

And while work will continue on the south side windows, the Dorothy M. Morris Garden and Margaret Rothschild Park have been refreshed and are ready for public use and for museum events.

**2019 PROGRAM HIGHLIGHTS**

**APOLLO DAY 2019**
We celebrated the 50th anniversary of the Apollo Moon Landing. With support from VERMONT NASA SPACE GRANT, APM hosted a day of activities - including building rovers and rocket launchers! Over 70 guests attended this special day.

**WINDSOR DAY**
A Celebration of Manufacturing in Windsor and the Upper Precision Valley. This special Open House featured the story of Windsor’s contributions to the development and evolution of machine tools and manufacturing in America.

**INNOVATION STATION (WORKING MACHINE SHOP)**
APM Interns gain work experience both explaining the working machine shop to visitors and creating projects, like key chains, goblets, and more in the Innovation Station. If you know a young person who’d be a great fit for APM, send them our way! (See last page for more information on the updated machine shop.)
NATIONAL ENGINEERING WEEK 2020


NATIONAL RELEVANCE AND INCREASED DIGITAL PRESENCE

While building our national presence through digital assets has been a part of our strategy, this has become unexpectedly important in the last quarter of our fiscal year and into the new one due to COVID-19 restrictions. We increased our social media content (posting daily on Facebook and weekly on Instagram) as well as adding several different types of content to the website. We’ve recently updated our website and added tools to improve both our newsletter experience as well as our online donation and membership experience.

To experience the museum from wherever you are, try one of the following options:

- Vermont Art Online is a digital portal to Vermont’s museums and galleries, presented in partnership with the Vermont Curators Group with generous support from the Vermont Arts Council and Vermont Humanities Council.
- We’ve also added several of our present day galleries to our Google Maps Street View listing. This works from a phone or a computer.
- Lastly, our exhibits page of our website will continue to develop ‘digital exhibits’ such as downloadable e-books and more.
- Our goal is to help you experience the best of APM wherever you are.

IGNITING INNOVATION

“Igniting Innovation: the Manufacturing Revolution in Precision Valley” (a film by Edgefactor that shares our story) has been accepted into the Raw Science Film Festival.

Parts of the film are used in our new Visitor Orientation video - which you can now view at our website!

MOVIE POSTER

IN MEMORIAM

Suzanne (Sue) Richardson Daniels was a former board chair of the museum who was deeply involved for many years. Her contributions included bringing on Windsor’s Cone employees to assist at the museum, the archaeological dig of the gristmill on the museum’s property, and more. She was involved with additional historical and archaeological societies as well and taught for many years. Additionally, she commissioned the model gristmill that is once again on display in our lobby. These old mills help us understand how our armory’s wheel and lineshaft system worked and gives us context for the era. In 2020, her family also donated some of Sue’s wonderful collection of books - which we can offer as part of a small library at the museum. Sue passed away in February, 2020.

IN 2020 CALENDAR

Speaker Series: The museum is pleased to present various speakers through the summer. Check website for details.
We are grateful to our many contributors who support the museum through memberships and donations. Each gift we receive is important. Your contributions come in many forms – membership, annual fund, special purpose gifts, in kind, and those given in honor or memory of a loved one. We also recognize our volunteers who give their valuable time and talent to APM’s operations, events, the board of trustees and working committees. We received 475 gifts to the fund and 327 members joined or renewed.

The gifts listed below were received between May 1, 2019 and April 30, 2020, our fiscal year. The total value of gifts (membership + any donation) is reflected in the recognition level.
THANK YOU, CORPORATE MEMBERS

Our Corporate Members donate annually to support the museum. Any company is welcome to join as a corporate member - we particularly encourage those in the machine tool and manufacturing industries to help us preserve industrial history and inspire the next generation.
INNOVATION STATION UPDATE

We are grateful to the following corporations for their extraordinary generosity in updating the working machine shop:

- Haas Automation, Inc
- Midaco Corporation
- Gosiger Automation
- HFO/Trident
- Evolution Aero
- Abbott Workholding Products
- Kennametal

Midaco Pallet Changer being delivered (August 2019)

The FANUC robot arm demonstrates industrial robots by running a program.

The HAAS DT1 ready to go.

Above left: a student starts a program.
Above right: some of the objects being machined.