Highlights from our 50th Anniversary Year

A Plan for our Next 50 Years!
In the past year, trustees and staff worked hard on a new plan. It circles back to museum founder Ed Battison’s vision for strong engagement with the machine tool industry.

Plan Mission
- Improve our appeal to families to get involved.
- Create excitement about manufacturing careers.
- Educate towards the future, highlighting the connection between manufacturing and prosperity.

Plan Goals
- Expand our engagement with manufacturers.
- Assess our facility and collections – how best can we use them?
- Transform our welcome area. As soon as visitors walk in, the excitement must begin!
- Display advanced manufacturing technology alongside historical innovation throughout the exhibits.

Our signature event, the Model Engineering Show & Maker Space in October, drew record sponsorships and record attendance.

Over 40 modelers, makers, and presenters made the show a grand success. We appreciate our underwriters Mascoma Savings Bank, Jane Osgood and Ted Hilles, Windsor Improvement Corporation, L.F. Trottier, Windsor Mansion Inn, Cota & Cota, and Blood’s Catering.

The Dorothy Morris Interpretive Area, and the Margaret Rothchild Garden were rebuilt and dedicated by the Morris Family in August. Left to right: Anthony Morris, Lee Morris, and Robert E. Morris Jr.

Thanks to the Gene Haas Foundation, our new film American Ingenuity at American Precision Museum launched in time for Manufacturing Week in October. The film is a call to action inviting youth to change the world through careers in manufacturing. It features Windsor students testing the underwater robot they built to help monitor the dam upstream from the museum. Below, EduFactor camerman works with Vince Moeykens and Kip Gaddis at the museum. Watch it on our website at americanprecision.org.

Visitors love talking with our student interns! We enhanced the Working Machine Shop by strengthening our safety program.

In this edition...
Honor Roll of Donors
Corporate Members
Exhibits and Events
Message from the Director and more.
It Has a Bearing

Engineering brings science to life. Engineering is the way we solve the world’s technical problems. Just like our mechanical forebears at the Robbins & Lawrence Armory in the 1840s, engineers today build solutions to create a better world. They use technology to solve medical problems, like creating a prosthetic hand to allow a person to type or write. They design and build equipment to make solar and wind power more efficient and less costly. They create complex machines and systems to keep industry safe and clean for workers and for the communities where they reside. They are developing the technology for self-driving vehicles. Tomorrow, these autonomous vehicles will reshape our society in ways that can only be imagined.

“Let’s work together to speak up for science and engineering in our schools and society.”

Actionable engineering that shapes our world is built on research—in science, technology, mathematics, physics and more. The problem solvers of the future will continue to rely on the basic methods of science, to identify problems, record evidence, develop hypotheses, and test solutions.

Science and technology museums today have a big role to play in fostering scientific and engineering literacy in the communities we serve. Through exhibits and programs, we can help visitors understand the world of technology and nurture their curiosity — whether they are members of the general public or school kids developing career aspirations and setting educational goals. APM embraces our role of helping foster the next generation of problem solvers and innovators.

Today we live in a world where the importance of straightforward facts is frequently questioned. Today’s world includes the possibility of declining investment in basic research that could threaten our country with an innovation deficit. We cannot afford to let this happen.

We invite our members and supporters to stand with American Precision Museum and other science and technology centers and speak up for science and engineering. The future of our country depends on us to do so.

Our Mission: To capture the imaginations of young and old with the spirit of innovation, problem solving, and design demonstrated through the dynamic story of the machines and people which form the foundation and future of the manufacturing industry in America.
This year and the next several years look to be years of critical change at APM. Over the last year the American Precision Museum staff, Executive Committee and several Trustees have analyzed the past, present and future of the museum. We have concluded that the message, the exhibits and educational programs at the museum need to be more exciting for visitors—particularly younger ones. We also must better showcase current machined component manufacturing as providing good jobs. Without these changes it is clear that the ongoing viability of APM would be in doubt. The result of this thinking is the exciting new “Transformation Plan”.

The Transformation Plan sets out a new path for APM. It calls for making the museum more exciting for young people and their parents, and for educating the public about the connection between manufacturing and prosperity in the United States. This year we will make small changes to the current exhibit to make the exhibits clearer to visitors. With help from machine tool builders and support companies, APM plans to show how the innovations created at the museum’s site in the 1840s transformed into the machine tool industry of today. There is already significant support from the industry for this approach.

Since its founding in 1966 APM has always enjoyed a close working relationship with machine tool businesses, and their contributions have been essential. With U.S. manufacturing productivity at an all time high, APM has every reason to expect that the Transformation Plan will increase our support from the manufacturing industry. The museum will be a venue that shows off the continuing innovation and invention that is the heart and soul of this dynamic sector of our economy.

To keep APM operating, we have had to draw on our reserves. The staff and Executive Committee have been improving our financial management so we better understand our fiscal position and what we need to do to have a balanced budget. (Continued on next page)
We have made adjustments that should enhance the performance of our endowment and our operations.

I want to thank the Executive Committee for their creativity and effort in making APM work better and the staff for keeping things going and working hard on the transformation. Special thanks go to Lee Morris, whose family has been supporting APM since its founding, Larry Schwartz, a new Trustee, and Chris Gray for their work developing our Transformation Plan and widening the path for the machine tool industry’s investment in APM.

The challenge is raising the funds to make the museum sustainable and to implement the Transformation Plan. We need new Trustees, and more individual and corporate members and supporters to help with making this happen. We welcome suggestions on all aspects of the museum.

The building, collections and history at APM are far too important to lose. To succeed we must be tied to the exciting future of manufacturing.

Sincerely,

Eric Gilbertson
Chairman, Board of Trustees

---

**In Memoriam**

D. Sean Kersey (April 11, 1965 - March 30, 2017)

We are sad to share the news that our Trustee Sean Kersey passed away after a battle with cancer. Residing in Lebanon, NH with his wife Michelle and two children, Sean was Manager of Facilities and Maintenance and Environmental Health and Safety at Timken Aerospace in Lebanon. Sean was first elected to the APM Board of Trustees on July 9, 2013. Shortly thereafter he was elected as Chair, and led a series of transformations beginning with the meeting of our Board of Advisors in August 2013. Sean’s insight, vision, and leadership were instrumental in the revision of our mission statement and the development of our Corporate Membership program. Sean led APM to focus less on the past and more on the future of manufacturing. Sean had spark, intensity and skill, and he will be greatly missed.
Corporate Members

In the 1840s, Robbins & Lawrence created a center of excellence in hand-crafted gunsmithing, patternmaking, and precision milling. Their work in this building set the stage for future manufacturing around the world. Their business model was based in apprenticeship, sharing of skills across firms, and investment in innovation.

Our corporate members listed below carry on these deep traditions even as they innovate and look to the future. Today, advanced manufacturing leaders continue to invest in new technologies creating new manufacturing jobs that fuel our economy. They support the museum’s mission to tell the story of the machines and people that form the foundation and future of manufacturing.

**Leader ($10,000 or more)**

**Benefactor ($5,000)**

**Participant ($500)**

**Machine Shop Participant ($250)**
Thank you to our many contributors who support the museum. Every gift we receive is important. The gifts listed here were received between January 1, 2016 and December 31, 2016. Your contributions come in many ways—membership, annual fund, special purpose gifts, gifts in-kind, and those made in honor of or in memory of a loved one. We also thank our volunteers who give time and talent to the museum’s operations, the Board of Trustees, and working committees. We received 244 gifts to the Annual Fund and 306 members joined or renewed. We welcomed 7 new corporate members and 14 corporate members renewed. If a donor is also a member, one of these membership abbreviations will follow his/her name: LM - Life Member; SM - Steward; PM - Patron; AM - Associate; FM - Family; and IM - Individual. Please let us know if we have made any errors in our listing of our donors and members.

Robbins & Lawrence Society
($2,500 and up)
Farley Family Charitable Foundation
Jack and Dorothy Byrne Foundation
Robert Van Etten Jacobs
Doug and Jean Loudon - LM
Lee and Diane Morris
Jane Osgood and Ted Hilles
Osgood-Hilles Charitable Trust
Rick and Linda Roesch - LM
Margaret and Eric Rothchild - LM
Merritt Roe Smith-IM

Innovators Society
($1,000-$2,499)
John Bainbridge Jr.
Cone Automatic Machine Co. Charitable Foundation
Steve Dalessio - FM
John K. Grady
Joseph and Patricia Jablonowski
Anthony and Susan Morris
Michael Newbold - LM
Peter D. Rebar
Barrie and Pat Sellers
Kirk D. Stackhouse - PM
Camiel and Anne Marie Thorrez - LM
Vermont Automobile Enthusiasts

Precision Valley Society
($500-$999)
Mark Aldrich - FM
Bryant Chucking Grinder Charitable Foundation

The 1966 Society
($100-$249)
Robert and Esther Allen
Dennis Bassett
Edward and Judith Becker - AM
Arthur Beutler
Donald Brehm
Michael and Pamela Brown
T. Jack Carpenter
Gene and Judy Cesari - AM
Robert and Barbara Coleberd - IM
Edmond and Anne Cooley - AM
Christopher Costa
Cota & Cota, Inc.
Russell Craig
Dennis and Anne Cross - AM
Vincent J. DeMore - IM
Rolf Diamant and Nora Mitchell - PM
John Dryout
John Dunville - IM
Mark Elrod and Judith Foulke - AM
Christopher and Angela Evans - IM
Five Twenty-five Foundation
Darlyne Franzén
Claudia Gabriel
James and Donna-Belle Garvin - FM
Eric and Clara Gilbertson - FM
Jonathan and Stacey Glastris
J. Douglas and Nancy Graham
David Hallenbeck - FM
James Hamilton and Judy Boucher
Thomas A. Hammond - IM
Robert and Lois Holter
Glenn Hopkins - PM
Alan and Barbara Huffman - AM
Thomas H. Hughes - AM
Robert and Betty Johnson
Robert B. Kancir - FM
Ken Kamimura
F. Terence King
Ken Kranzusch
Summer Joy Kuehn
Roger and Carolyn Lang
Ann Lawless
Bill Lewis - AM
David S. Lindquist - AM
Nelson J. Lock
Malcolm S. Mason
Mr. and Mrs. Robert McAllister
David C. McClary - IM
Wayne McCutchion - FM
James L. McRae
Ronald and Laura Mitchell
James A. Monk
Miles and Pat Mushlin
E. Burr Nash - AM
Nashua Community College
John and Barbara Osborn
Rudy Parhanieni - IM
Michael Protenic - PM
Richard Powalka - IM
John Rohlf - AM
Michael Schaefer
Ralph H. Shepard - AM
Jane E. Sherman - LM
Stanley Shire - IM
John J. Siergiewicz Jr.
Ronald K. Smeltzer - FM
Ernest W. Smith - AM
John W. Snarski Jr. - IM
T. Michael Speidel - IM
Earle C. Stubbs
John P. Tatlock - IM
John S. Taylor - AM
Peter Teale
James Thompson - AM
David and Patricia Toland - AM
Donald Weigt

Katherine Carter
German Gun Collectors Association
Clark and Happy Griffths - LM
Seymour and Shirley Lehrer
Charles Leni - IM
Bill Lynn - IM
William C. Martin
Tom and Barbara Putnam
John and Emily Sands
Alex and Debra Slocum
Richard and Sheila White - AM
Don Whitney - PM

Edwin Battison Society
($250-$499)
Liora Alschuler
Jay Boeri
John and Vivian Brown
Ruth Carter
Stephen F. Christy
Newell and Kate Flather
Shirley Grainger-Inselburg-AM
Karle Gurcke
Daryl and Eric Hagopian
Fukuo & Tokuko Hashimoto
James N. Heald II - LM
Richard and Nancy Pitkin - PM
Helen Samuels and Greg Anderson
Gene Seidler - AM
Mark Sharnoff
Alden Sherman - LM
Gary and Sigrid Sihler - AM
Peter Wenk - AM
Gil Whittemore & Anstis Benfield

American Precision Museum - Annual Report 2016
Steven Wenk - AM
Westminster Tool, Inc.
A. David Wunsch - FM
John and Ruth Wyman

Friends
($1 - $99)
Randolph Aey
Howard and Mary Andrews - FM
Tony Ashby - IM
Charles and Laura Baldwin
Kevin S. Barney
Gail Barton - IM
Iris M. Berezin - IM
Daniel Berth
Robert W. Bernstein
F. Steele Blackall
William E. Blockley
Gael Boardman
Joanna Bodenweber
and Geoffrey Fried - FM
Andy Boyce and Jenn Boeri-Boyce
Brandthropology
Bruce and Elsie Brenner - IM
James T. Brenner
Miriam and Mitchell Brodsky - IM
Jean and Richard Brown
Alan and Nancy Bugbee - IM
Sarah F. Carter
Robert Chave
Gregory Colling
Damien Connolly
Carolyn A. Coker
William and Kathleen Corley
Richard and Mary Corrigan
Daniel Czajka
Pama Dangelo
Steve Danielson - IM
Douglas and Kiyo Dawson
Emery DeWitt
Design Workshop
Connie Filbin and Dick Corum
Wayne Fischer - IM
Kathaleen and Charles Giurtino - FM
Michael Greenberg - IM
Mr. and Mrs. Edward J. Goldman - AM
Joseph Gresser
Helen Greathouse
Michael Harnett - IM
Gary Hamel
F. Leo Hickey - FM
Richard Hoerstel - FM
Donald and Carolyn Hoke - IM
Ben Holleran
Jay R. Holmes
Frank and Joyce Homan
Glenn Hopkins - FM
William N. Hosley
Tom A. Hull - IM
James and Marilyn Hurley
Margaret Jackson
Eric A. Jautz - IM
Edwin and Sharon Jeffery
Craig Jennings
Benjamin E. Kaplan - IM
Francis E. Kennedy - AM
Ed Kercher
James and Barbara Kerr
Verna M. Kloos - AM
Ronald and Anita Krauth - FM
Andrew Krivenko - IM
James H. H. Lampert
Carl Locken
Frederick and Margaret Lorenzen
Steve Lubar
George F. Luthringer - FM
Seth Marks
Joseph W. Martin III - IM
Carol B. Martin - IM
Donald E. Maurer
William and Kristen McCartney
Diana McNamara
David McPike
Glenn and Barbara Meurer - FM
Jeff Miller
Jeffrey M. Milroy
L. David Minsk
Bruce Moseley
Barbara and Frederick Naef - IM
David Noyes
George Petry
Marjorie Pierce and James Pallutto Sr. - FM
Willis L. Platt - IM
William and Ellen Rewinski - AM
Clayton and Ann Robson
Mark Sandefur
Debra Shearer
Bob Shields
Christopher Steele
Betsy Stefany
Richard Stott
William J. Tansey - FM
John and Nida Tansey - FM
Thomas K. Tate - IM
Derek Trelstad
Nathaniel and Helen Tyler
Wayne Vaughn - IM
Ben Wallace
Paul Waltz - IM
Robert Wells
Mike and Rosemary Whitney
Jeffrey and Jill White
Jack and Clarice Willis - FM
Adrian Wolverton - IM
Alan and Beverly Young - IM
Greg and Lucy Young - FM

In Memory Of
Detrich Apel
German Gun Collectors Association
Jeff Miller
John Aschauer & Hilda Kelsay
Claudia Gabriel
Ed Battison
Nathaniel Tyler III
Robert Brown
Jean Brown
Charles Carter
Ruth Carter
Katherine D. Carter
Charles Greathouse
Helen Greathouse
Thomas Hallenbeck
David Hallenbeck
Thomas Levesque
Mrs. Thomas Levesque
Bob and Dot Morris
Anthony and Susan Morris
Frank and Shigeo Nubu
Ken Kamimura
Robert W. Powalka
Richard Powalka
Donald M. Rebar
Peter Rebar
Reuben Thundercloud
Donald Weight
Lori Steadman
Jeffrey M. Milroy

In Honor of
Walter Czajka
Daniel Czajka

Eric Gilbertson
Five Twenty-five Foundation Inc.
Clay Washburn
Connie Filbin & Dick Corum

Gifts In-Kind
Albert Albrecht
Robert K. Allen
Association for Manufacturing Technology
Blood’s Catering
Susan Bonthron
Steve Dalessio
Gardner Business Media, Inc.
Edgar Grallert
Tyler, Simms, & St. Sauveur
WCAX-TV

Special Gifts
Blood’s Catering
Cota & Cota
Steve Dalessio
Harpoon Brewery
Mascoma Savings Bank
Lee Morris
Jane Osgood and Ted Hilles
Rick and Linda Roesch
Snapdragon Inn
L.F. Trottier
Windsor Improvement Corporation
Windsor Mansion Inn

INDIVIDUAL MEMBERS
Steward
($500)
Joseph Bozik
Robert Forrant
Bruce S. Nicholas

Patron
($250)
Kip & Sandy Bergstrom
Coastal Safety LLC
Ralph and Barbara Hegman
Daniel L. Hertz Jr.
Chris Michaud
Thank you to all our donors, members, and volunteers.
Exhibits and Events 2017

EXHIBITS

Waterwheel and Millwork
Explore a new, working three dimensional model to follow water flowing from the mill pond via a channel outside into a box flume inside to the 18 foot diameter breast-style wheel, and then back out into the brook. The wheel powered machinery on the upper floors.

Drawings explain how a massive waterwheel in the basement of this brick factory building diverted water from the Mill Brook to power machines using a complex systems of gears, shafts, and pulleys.

Arming the Union
This site played a critical role in outfitting the Union Army during the Civil War. Learn how the precision tool industry served as the backbone of American industrial and military power.

Shaping Consumer Culture
In the years following the Civil War, the tools of armory practice were put to work making consumer goods that required more accuracy.

Industrial Might
Machine tools served as the backbone of American industry used to build automobiles, airplanes, and a vast selection of consumer products.

How It’s Made Today
New exhibit elements will explore modern manufacturing techniques.

Shaping America
From the tool revolution of the 1800s to advanced manufacturing today, technical innovation has shaped who we are and how we live.

The Tool Revolution describes how ingenious mechanics in the 1840s forged an industrial America by creating one of the best gun-making operations in the world in Windsor.

PROGRAMS

Sunday, June 11
2:00 pm
Manufacturing Today
Join Economics Professor Dr. Marie Duggan from Keene State College to hear her perspective on manufacturing today. Most jobs in precision tools are not going overseas right now. The firms creating stable middle class jobs tend to be independent, mid-size firms. What’s gone wrong and how can we nurture the independents?

Saturday, June 17
2:00 pm
Expert Insight Tour
Join museum trustee Steve Dalessio on a walk-through of the exhibit hall as he shares his knowledge about favorite machines on display, and discusses the evolution into new machines in today’s manufacturing environment. He will be bringing show and tell items to share. Steve is General Manager and Partner at Lake Machine Co. Inc. in Claremont NH and enjoys sharing his passion for machining technology.

Sunday, July 9
2:00 pm
Family Maker Day: Make a Maze
Roll up your sleeves, use your ingenuity, and gather items from our stash of found materials to create a marble maze to take home.

196 Main Street
Windsor VT
05089
802-674-5781
Exhibits and Events 2017
Sunday, July 23
FREE ADMISSION DAY
2:00pm
Of Wheelmen, The New Woman, and Good Roads: Bicycling in Vermont, 1880-1920
University of Vermont Professor Luis Vivanco explores the fascinating early history of the bicycle in Vermont.

During the 1890s, enthusiasm exploded statewide as bicycles became safer, women took to the wheel, roads improved, and retailers developed novel advertising techniques. Although popular interest waned, the bicycle was tied to important changes in industrial production, consumerism, road policies, gender relations, and new cultural ideas about auto-mobility and effortless speed.

Sunday, August 6
2:00pm
From Paper to Part
Join trustee Steve Dalessio as he shows several different technologies for taking a design to implementation. First, see a slide show about the design process, then follow Steve as he shows different ways of making his part using different machines in the exhibit, from the Serial #1 Bridgeport mill to a 3D printer.

Sunday, August 20
FREE ADMISSION DAY
2:00pm
Off Target: What Hollywood, Journalists and Shooters Get Wrong About Guns
This lecture and Q&A session examines how our perceptions of firearms have been distorted by media and folklore. Such distortions—about the mechanics, ease of use, and lethality of guns—have seriously hindered public discussion about the regulation of firearms. Dr. Mark Timney is an award-winning mass communications practitioner and educator with more than twenty years of professional experience in the mass media.

Saturday, September 23
10:00 am – 5:00 pm
Smithsonian Magazine Museum Day
Free admission at participating museums all across the country with the Smithsonian Day pass, obtainable online or in the Smithsonian magazine.

Early October
Upper Valley Manufacturing Week
APM coordinates student tours of manufacturing companies throughout the region during this week-long workforce development program.

MFG DAY
Saturday, October 28
9:00 am – 4:00 pm
18th Annual Model Engineering Show & Maker Space, Windsor Recreation Center and the museum
Admission to both:
$10 for adults
$5 for students
Visit with New England’s finest model engineers, attend workshops and watch live demonstrations. Admission to this special event is not part of our membership benefits.

Admission
Members free
Adults $8
Students $5
Kids under 6 free
Family $20

Special Group Rates
Call for details 802-674-5781

Hours
Open daily 10:00 am - 5:00 pm Memorial Day weekend through October.