



# AMERICAN PRECISION MUSEUM

PO BOX 679 196 MAIN ST. WINDSOR VT

# PRESERVATION BULLETIN

A SPECIAL "THANK YOU" REPORT  
TO OUR PHASE I RESTORATION PROJECT FUNDERS

JANUARY 2006

## NEW SLATE ROOF

In July 2005, the roofers from the Melanson Co., Keene NH, installed scaffolding around the building and removed the deteriorated old slates and wood shingles underneath, and replaced them with a new slate roof. There were several additional accomplishments beyond the original contract. We added a new membrane on the stair tower roof, and an adjustment was necessary to replace more of the roof sheathing underneath the old roof than anticipated. Repairs to the west end of the north dormer were also completed, and the cupola received a new coat of paint to extend the life of its surface metal.



Photos by Bob Eddy

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# 70 RESTORED WINDOWS, WELL, ALMOST.....

Windows specialist, Jim Hunt, of The Rift Cut, Middlebury VT, took advantage of the scaffolding installed by the roofers. He and his crew completed the work on the sills and jambs from inside and outside. The window sashes were removed to his Middlebury workshop. First, the crew strips the old paint and removes, cleans and saves the glass. Epoxy and wood patch repairs are made where needed, and each sash receives a coat of primer. Then the glass and glazing go in, followed by



one more coat of primer and two coats of finish paint. 11 of the 70 sash were so deteriorated that he rebuilt them entirely from scratch.

Some of the sash are still in Middlebury but Hunt tightened up the plastic and boarding temporarily installed in the sash openings before winter set in. Although behind schedule in completing the final batch of sash repairs, he re-

fuses to compromise on the exacting standards specified in his contract. Fortunately, our project overall is still on schedule and all remaining work is under contract. The last batch of window sash will be reinstalled in February.

Above, Hunt discovered and filled 33 voids above the window casings below the bricks. He installed a gunnable, paintable foam used in boatbuilding repairs. Photo Bob Eddy.



Above, temporary columns and cribbing support the attic framing. These are some of the structural issues to be addressed in the next project. Photo Tom Keefe.

Below, this north facing window got a new sill in 2005. Many more in similar condition still need restoration. Photo John Alexander.





Photo John Alexander.

## BID PACKAGE FOR STRUCTURAL REPAIRS

Due to careful planning, good management, and some luck, the roof and windows project contracts came in under budget. Thus we had the funds to address another critical project, and thankfully, our major funders were cooperative about this change. Architect Tom Keefe and his structural engineering specialist Steve Sopko of Zarembo-Sopko Associ-

ates, Troy NY, have been telling us for several years about three areas of concern: the need for cupola shoring and repair, attic floor structure repair, including 3<sup>rd</sup> floor columns, and stabilization/repair of beams moving laterally at 2<sup>nd</sup> floor southeast. As part of Phase I, we contracted with them to complete a thorough analysis and develop the bid package

and construction drawings.

### Priority for Phase II

Keefe estimates that \$75,000 will be needed to put the project out to bid, manage it, and complete the construction work. As soon as we raise the remaining \$30,000 needed, we will go ahead with this work immediately.

## MASONRY STABILIZATION, TIE RODS, AND PLANNING

The Melanson Co. hired Montpelier VT mason, Jamie Duggan, to stabilize the bricks in several critical areas to make it possible for the roofers to install the flashings. Working directly under architect Keefe, Duggan installed tie rods to hold the south and north walls together as a temporary measure until the interior structural repairs can be

completed.

The scaffolding surrounding the building provided another opportunity. Through Duggan's initiative, the museum was able to implement a second partnership with the graduate program in Historic Preservation at University of Vermont. (The first was a comprehensive survey of

the building's windows completed in 2003). As a student in the program, Duggan designed a project to photo-document the building's masonry issues and plot them on Tom Keefe's elevation drawings. Duggan's report, to be completed in May 2006, will be an important and economical planning tool for the masonry restoration.

## CONSERVATION EASEMENT

Three of our funders, *Save America's Treasures*, the Vermont Housing and Conservation Board (VHCB), and the Preservation Trust of Vermont (PTV) all required a conservation easement to protect their investment in the project. Through the easement, the mu-

seum agrees to maintain the new roof and restored windows. VHCB drafted the easement document, including photography, and contributes to the easement stewardship fund at PTV, who will hold the easement and monitor it. We are very grateful

to attorney Catherine W. Scott, of the Norwich, VT law firm Hershensen, Carter, Scott and McGee for acting as our attorney and completing the deed research VHCB incorporated into the easement.

Thank you, Kitty!



Photo Bob Eddy.



Photo Bob Eddy.

The American Precision Museum, founded in 1966, preserves the heritage of the mechanical arts, celebrates the ingenuity of our mechanical forebears, and explores the effects of their work on our everyday lives. Housed in the original 1946 Robbins and Lawrence Armory in Windsor, Vermont, the museum was designated a National Historic Landmark in 1972. It now holds the largest collection of historically significant machine tools in the nation.

### THANK YOU, PHASE I DONORS

<i>Save America's Treasures</i>	\$200,000
Vermont Housing and Conservation Board	100,000
Preservation Trust of Vermont - Freeman Foundation	50,000
Timken Foundation of Canton, OH	40,000
Gleason Foundation	5,000
Private Foundations	50,000
<u>Individual donors</u>	<u>15,775</u>
<b>PHASE I TOTAL</b>	<b>\$ 460,775</b>

### PHASE II PROJECTS

<u>Priorities for 2006 (estimates)</u>	
Urgent structural & cupola repairs	\$ 75,000
Restore remaining 96 windows	135,000
Basement remediation to control moisture	15,000
Safety and access improvements	25,000
<u>Additionally</u>	
Masonry planning	
Masonry restoration	

### THANK YOU, PHASE II DONORS TO DATE

1772 Foundation (for windows)	\$ 60,000
Mascoma Bank	22,500
Individual donors	1,966

## Can you help with Phase II now?

*Individual gifts, large and small, show support and help leverage grant funds.*

\_\_\_\_ Yes, I want to support the Building Preservation Fund with a gift or pledge of \$\_\_\_\_. Please make checks payable to *American Precision Museum*, or fill in your credit card information below. Please write your name as you would like it printed in our Annual Report:

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City State Zip:** \_\_\_\_\_

**Credit Card:** \_\_\_\_ *Visa* \_\_\_\_ *Mastercard*

**Number** \_\_\_\_\_

**Expiration Date** \_\_\_\_\_

**Your signature is required for credit card payments** \_\_\_\_\_

Mail this form to American Precision Museum, PO Box 679, Windsor VT, 05089.

**Thank You!**