

Out of the weather

BY MICHAEL LEVIN

Our Folly combined Washington hubris with Island creativity. What else could you call commissioning a weathervane in the form of a dog, for a house far from our D.C. home, before we hired an architect? Let alone before the site was cleared or a roof took shape? Not just any vane, either – an inside-out shebang that would let us read the wind without sleet-neck from going outside.

Thomas
Jefferson,
Travis Tuck,
and a Samoyed
named Sam

Thomas Jefferson had an inside weathervane, suggested by Roman gazebos. As with everything, he improved it, installed it at Monticello near Charlottesville, Va., and made it part of a program (a planned national weather system).

But the wood shaft of Jefferson's vane passed straight through a low solid roof to the portico ceiling where its compass points were painted. Our shaft, it developed, would drop more than eight feet through an empty windowed cupola, so its pointers could be seen from inside. To catch the wind near Monticello's dome, Jefferson's shaft rose 10 feet above its roof, braced like an oil derrick. Our



outside vane could be short, but had this bracing problem in spades – on the inside. Jefferson's vane was a simple arrow, wired to its rod. Ours would be a snow-white sled dog, thick fur flowing, sniffing the breeze.

So it was that we found ourselves on a chill February afternoon in

Travis Tuck's Vineyard Haven studio, darkness routed by fountains of brazing sparks, talking repoussée and chisels, annealing and form. We knew the Travis of Home and Garden magazine, vane-maker to the stars, fabricator of sharks and other numbered pieces, "each an individual work of art."

That Travis resembled Friar Tuck, and cultivated the semblance for market edge. But soon we saw a different Travis, quiet and dead se-

rious, practitioner of a craft with roots in a past that only sailors and pilots retain, the thousands of years when reading the wind meant guessing the weather and guesses meant life or death – when to sow or thresh, to hunt or harvest. "It's not just sculpture, it has to work," he remarked later, recalling with contempt a New York show of vanes commissioned from contemporary artists. "They only think it's art if it sits there in a corner not doing anything. If it does something, has some function, it's not art anymore."

He also was quiet because of what he faced for the first time. As Travis makes them, weathervanes have a vertical fixed rod welded to a bracket that hugs the ridgepole. The round end of that rod (the "male") fits into the round inside of a sleeve that drops



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Sam: He inspired his copper counterpart.

over it (the "female"). The top rounded end (the "bearing edge") turns freely on the bottom rounded end. The actual vane – an arrow supporting a whale, a dinosaur, a gold osprey

– is attached to this sleeve. It moves with the sleeve, keeping its nose to the wind because there's always more mass at its rear than its front. Perfectly balanced, it would spin aimlessly.

In other words, a good vane basically hangs and spins on a fixed rod. Our Folly turned that upside down. If the vane was outside and inside, how would motion be carried to the inner vane?

Both vanes must be permanently attached to that rod, so they could move in unison. The rod could no longer be fixed – it, too, must spin. But how would that rod stay true? If a new shaft went clear through the roof ridge, how would the thing be waterproofed? What would be the new bearing edge? How could it be protected against seizing up?

Vane with a view: Aquinnah, Gay Head Light and Vineyard Sound are in the distance, beyond the copper arrow of the Levin weathervane.

PHOTO BY TRAVIS TUCK

Jefferson weathervane, Monticello

brazed to the rod, a slim copper sleeve with a splendid copper arrow.

And one spring day, three years after that studio talk, the vane was installed and tested – working fine.

That should have been that. But the next windy night we were dumped from our beds by reverberations like Thor hurling tools at Menemsha. The noise was persistent, penetrating, unignorable. Despite Travis's collars, there was just enough flex for wind to rattle the rod against the middle of the shaft, like the old trick of shaking sheet metal to make radio thunder.

Vibration would have to be dampened. But how to do that – or do it without taking the vane apart – was another matter. It now was apparent why Jefferson, no dummy, used wood for his shaft. For us that was not an option: Travis's tolerances did not allow wood linings.

Back in Washington we consulted acoustical engineers, to no effect. We consulted our Russian cousins, naval architects who worked on silent sub propulsion before they emigrated. Nyet. Then, on a bird walk with a physicist friend, we mentioned our dilemma. "O rings!" he exclaimed – the same rubber circles that failed on NASA's Challenger. "Put O rings on the rod!"

Travis was dubious. He worried about temperature variations. He wanted to inject something – plastic, foam insulation – anything to avoid disassembly and not foul the action. But he ran some tests with rubber bands. O rings exactly the right size and thickness might work.

Where to get them? We called NASA. NASA bounced us to the Internet. Travis searched "O rings," found five defense contractors who fit the bill – if he wanted a truckload. So he turned to the supplier of last resort: Shirley's Hardware in Vineyard Haven. In fact, he walked across State Road from his shop and bought six rings from Shirley's for a dollar. The shaft had to be uncollared, the rod unbrazed and extracted. But our

time of thunder was past.

And that should have been that. Unfortunately, in the scramble to address interior scale, we forgot the exterior. The arrow over the cupola was too low. Not only did it look squat; it was invisible near the house.

Travis, who does not frazzle, began to look frazzled. The arrow would have to be raised. Because of the vane's construction, this was not minor. To keep the Dog at its elevation inside, the shaft and rod had to be extended outside with new sections. This meant taking the thing apart again. It also risked making the outside cardinal points – the brass "S," "N" and so forth – disproportionately small.

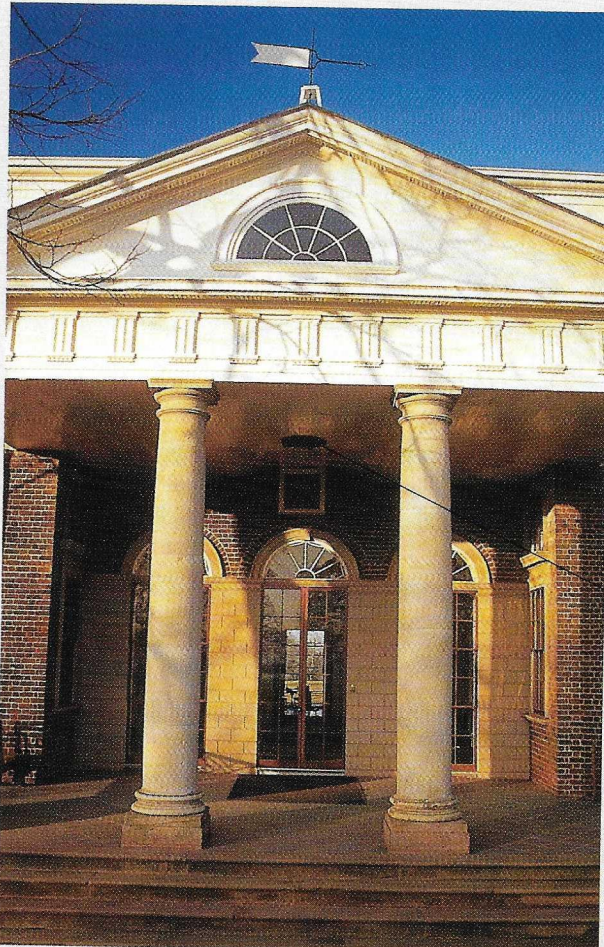
At a Last Council we compromised. The arrow could rise perhaps 18 inches without changing the cardinals or creating other problems. We shook on it. The deed was done.

Travis moved on to other vanes and the commissions no one hears of, such as a sculpture of Europa, an otter cradling a sundial, a 20-foot copper altarpiece.

But though the vane works perfectly, it can't say how hard the wind blows. So we have plans for an anemometer, to go with the vane and barometer. It doesn't capture the essence of the Island. So we dream of cupola murals depicting up-Island to the north, south, east and west. And if that doesn't pan out, we understand fiber optic cables can project those views into the cupola.

We've researched the physics. We know just the people to call. ♦

Michael Levin lives in Washington, D.C., where he practices environmental law and finance. His poem, "Watered Colors," appeared in the Fall 2001 issue; his 24 winter haiku also appear in this issue.



PHOTOS COURTESY OF MONTICELLO/THOMAS JEFFERSON FOUNDATION, INC.

In Virginia wind:
Thomas Jefferson's Monticello porch, with the vane, below, visible at the peak.



WILLIAM BEISWANGER, MONTICELLO



Compass rose:
The wind direction at Monticello is read on the porch ceiling.