

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



Sam: He inspired his copper counterpart.

MICHAEL LEVIN

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

Rust did not seem relevant. Travis's metals (brass, bronze, stainless steel, copper for sculpted forms) thrive on oxidation. They reflect his passion for hues and malleability – plus his early years iron sculpting, when weeks grinding down joints led him to think art might go better without face masks. But if a brass tube outside the rod was now to bear the exterior vane, that tube couldn't be rounded. And its flat hollow bearing surface would wear and corrode.

For waterproofing and operating details, we pointed Travis to the Island's two inside weathervanes, in Edgartown's Old Whaling Church and Pilot House in Menemsha, a camp we once rented.

But these had no drawings, and their innards were inaccessible.

Our local library (the Library of Congress) sent us to Monticello. We wrote the Jefferson Foundation's librarian, who dragooned the architectural conservator. This produced field notes, sketched between 1930 and 1997. Yet these offered only half-answers. For example, the shaft of Jefferson's vane was wood, while its naked rod was iron. A lead cone nailed to the shaft covered the hole through Monticello's roof. But nothing stopped rain from running down the rod and out the shaft bottom –



ROBERT SCHELLHAMMER

To know which way the wind blows:
Travis Tuck's likeness of family dog Sam points comfortably into the wind.

okay for a portico, doubtful with dinner guests sitting beneath.

Then there was the Dog. Based on our own dear Sam, a multiple Best in Breed Samoyed at the annual summer Agricultural Fair in West Tisbury (because he's often the Only in Breed), the Dog was supposed to stride, two feet long, over the cupola. But as the cupola migrated from the kitchen to over the staircase, it seemed perverse to banish our Dog to the roof. Why not make him the inside pointer, instead of an arrow? That way the "real" sculpture could be seen from all angles, all the time.

This played hob with Travis's technique. A two-foot dog fit the scale of his metal tools, but would be grotesque seen against interior space instead of sky. "Miniaturizing" the dog to 15-inch size put it below the range of his craft.

"Like a pipefitter," he later said, "trying to use his foot-long hacksaw for 64-tooth jewelry repair."

This was critical, since Travis was wrestling with another problem. Copper is fine for smooth-skinned frogs, horses or fish. But sculpting a fluffy, triple-coated sled dog was like an Impressionist suggesting light by brush strokes that merge at a dis-

tance. How could he suggest fluffiness in copper, from the points where the dog would be viewed? The usual answer was chisels – curved, flat and so on. But he'd have to use corners and edges, and tap, not hammer. After several weeks' trials on copper scraps, he was ready.

This did not solve other scale issues. The Dog had a laughing tongue; the tongue must be brazed to the back of its jaw; that jaw was half its planned thickness. Thus its copper could melt at brazing temperature. Avoiding that meltdown would be left to the ace-in-the-hole of pickpockets and Travis: the special grace called Touch. So would the Dog's eyes – they could no longer be made by thin sections of tube with a polished center point.

About that time we realized that Travis saw the whole thing as sculpture – shaft, rod, mounts and innards, not merely the Dog. This became clear when he hand-made a bronze knuckle so we could detach the Dog and take it traveling. The collars, brackets and set-screws also would be hand-made, machined and polished to perfect curves – even the components would be Art. It was an exhilarating but slightly terrifying realization, like waking up on a toboggan ride or discovering that Alexander Calder was assembling your kitchen range.

Meanwhile the hole was dug, foundations were poured, walls began rising. We sent Travis dog shots, traded matchstick models. The Dog took shape in red copper panels, reduced from full to three-quarter round, ears removed and re-hammered for more forward thrust.

When the roof went up, Travis's team returned for fittings. The rod would be stainless steel, 10 feet long. The shaft would be a brass tube, collared at each end to hold the rod in place, fixed in the cupola by an elegant brass arm. The bearing edge at the top of that tube was a ringed ball bearing, brazed in place and packed with grease. Over it slipped, and was



COURTESY OF TRAVIS TUCK

The craftsman's hands: Vineyard Haven metalsculptor Travis Tuck at work on the vane's arrow.

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.

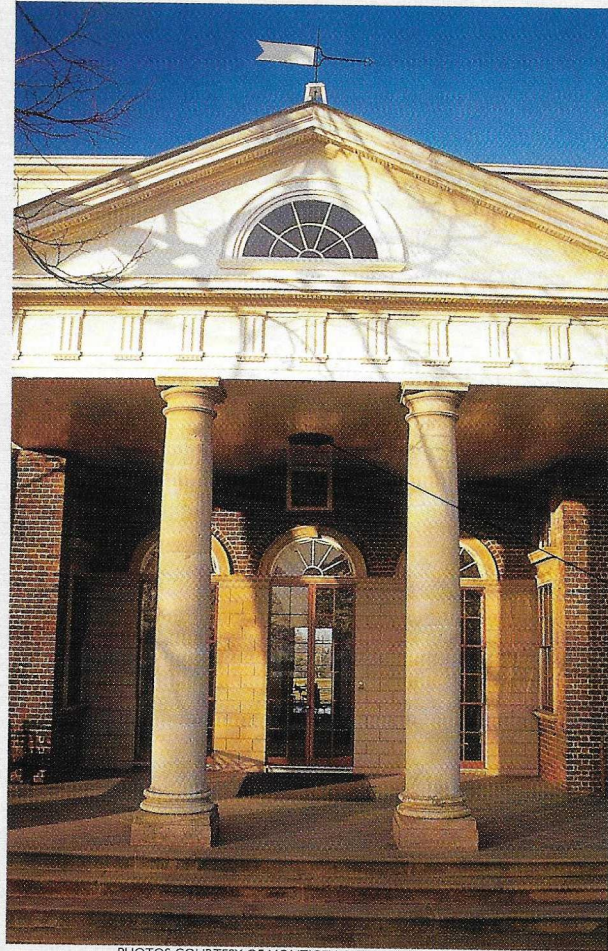
Where to get them? We called NASA. NASA bounced us to the Internet. Travis searched "O rings," found five defense contractors who fit the bill – if he wanted a truckload. So he turned to the supplier of last resort: Shirley's Hardware in Vineyard Haven. In fact, he walked across State Road from his shop 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.

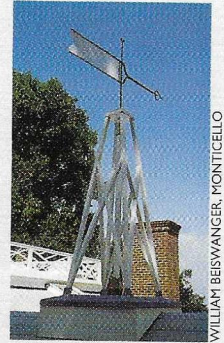
Travis, who does not frazzle, began to look frazzled. The arrow would have to be raised. Because of the vane's construction, this was not minor. To keep the Dog at its elevation inside, the shaft and rod had to be extended outside with new sections. This meant taking the thing apart again. It also risked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



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.

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.