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Paine Field whirligigs pack a lot of power

Energy Ball wind turbines are planned for the Future of Flight museum

By Bill Sheets, Herald Writer

EVERETT — A building at Paine Field is powered partly by a “whirligig.” That’s one employee’s word for the mini-windmill atop the Washington Aerospace Training and Research Center at the airport. The wind turbine, called an Energy Ball, is made by Home Energy Americas of McKinney, Texas, and distributed by Northwest Windpower of Seattle.

Unlike conventional wind turbines, the Energy Ball has six rotary blades on a horizontal axis within a 6.5-foot-diameter spherical frame. The design generates more power for its size than regular windmills, according to the company’s website.

It’s also silent and swivels to capture the wind — “it’s omnidirectional,” said Ted Thomas, managing director for Northwest Windpower.

The largest of the two Energy Balls available, the V200, generates 60 kilowatts a day in wind speeds of 22 to 25 mph — more than double what the average home would use in a day, Thomas said.

For an organization occupying a large building, such as the Washington Aerospace Training and Research Center, one V200 produces only a supplemental amount of power, Thomas said. Since July, when a meter for the turbine at the training center was installed, it’s produced about 380 kilowatts of power, he said.

More turbines can be installed, but the initial cost is high: \$22,000 for the V200, and \$12,000 for the smaller V100. A \$3,200 battery pack for storing power is available with the V200, or surplus power can be sold back into the electrical grid, he said.

A federal tax credit knocks off 30 percent off the price. Owners of property zoned for commercial use, agriculture, apartments or condos receive an additional 32 percent, Thomas said. Other state tax credits are available for power generated from renewable sources.

For anyone who can afford to have Energy Balls installed, they can go just about anywhere, according Home Energy Americas — on rooftops or on poles.

The Future of Flight museum at Paine Field expects to receive a grant of nearly \$35,000 to install a V200 on the roof and a light pole and two electric-vehicle charging stations powered by a V100 and solar panels, said Mary Brueggeman, director of development for the museum’s foundation. It all could be installed as soon as February, she said.

The Future of Flight Aviation Center & Boeing Tour is open from 8:30am – 5:30pm daily except Thanksgiving, Christmas Day and New Year’s Day. Tours of the Boeing Assembly Plant operate daily at 9, 10, 11am and 1, 2 and 3pm.

Future of Flight Aviation Center & Boeing Tour, 8415 Paine Field Blvd., Mukilteo, WA 98275, 425-438-8100, www.futureofflight.org