

concentrate | NOVEMBER 30, 2017

ANN ARBOR'S SKYSPECS RAISES \$8 MILLION TO EXPAND REACH OF DRONE WIND TURBINE INSPECTION TECH

By Sarah Rigg

 SKYSPECS

“The data is measurable and repeatable, because each inspection is done the same way,”

-Danny Ellis, CEO of SkySpecs

SkySpecs, an Ann Arbor-based company that uses automated drones to inspect wind turbines, recently landed \$8 million in financing that will allow the company to expand globally and add to its product line.

The most recent round of financing came from Statkraft Ventures, UL Ventures, and Capital Midwest with follow-on investments from Venture Investors, Huron River Ventures, and additional existing investors.

Co-founder and CEO Danny Ellis says SkySpecs' 2017 was focused on using research and development to commercialize the company's product. The company began tracking inspections in April of 2017 and completed 3,600 turbine inspections at more than 70 wind farms in the U.S. and Europe.

Ellis says the latest round of financing will allow the company to “focus on improving robotics and data analytics and taking it worldwide to customers everywhere.” Ellis says the initial wave of expansion will occur in Europe, where the wind energy industry is more mature. But SkySpecs plans to target Australia and South America shortly after that.

Ellis says the technology could be

extended to other applications, but since many of the company's existing clients are in the energy industry, energy infrastructure is likely to remain a strong focus.

There are a number of advantages to automated drone inspections, including speed, safety, and accuracy of data. Inspections of all three blades of a wind turbine can be done in 15 minutes and don't involve the dangers of having a human inspector hanging from ropes or standing on a crane, Ellis says. Automated drone inspections are also more uniform.

“The data is measurable and repeatable, because each inspection is done the same way,” Ellis says. The automated drones can repeat their procedure exactly in a way a manual drone flight or a camera inspection from the ground cannot, due to variations in user input.

“Typically, they are looking for normal wear and tear, erosion, any sort of splitting or delamination of the fiberglass,” Ellis says.

The drones are not only looking for signs of potential catastrophic failure but also pinpointing areas where the turbines might not be working efficiently.

The data gathered allows SkySpecs to recommend if something needs to be repaired or replaced right away, or if it can be put off for a few months or a year.

“If you need to repair everything, you should, but not everyone has that flexibility in the budget, and we can help them set priorities,” Ellis says.

This piece is part of a series highlighting local business growth in the Ann Arbor area. It is supported by Ann Arbor SPARK.

Sarah Rigg is a freelance writer and editor in Ypsilanti Township. You may reach her at sarahrigg1@gmail.com.

All photos courtesy of SkySpecs.

