



THIS PAGE, MAIN: Dr. Thad Roppel shows off his students' project. OPPOSITE PAGE, TOP LEFT: Beck gets ready to launch the ornithopter, while Pappas prepares to steer it. OPPOSITE PAGE, TOP RIGHT: Beck demonstrates how Robo Nova flies in the football indoor practice field. OPPOSITE PAGE, BOTTOM: Dr. Roppel and Joseph Beck.



# THE NEW WORLD OF NOVA



It's a bird! It's a plane! It's Robo Nova! Auburn engineering students Jarred Beck, Brian Pappas, and Emile Ewing refurbished a robotic cardinal that is named after our very own beloved eagle, Nova. The "ornithopter" was originally built as a senior design project in 2009 by students of Dr. Thad Roppel, an electrical and computer engineering professor. The robotic bird is operated with a remote control and was originally equipped with a GPS module and camera.

The ornithopter had been nothing but a display for two years until the summer of 2011, when Beck, Pappas, and Ewing decided to bring it back to life. After some repairs and changes, Robo Nova was up and flying. Before long, the students were ready to test out the new and improved bird in the new indoor football practice field. Beck said he was surprised by how many people showed up for the practice flights and how quickly word spread about their project. They performed about eight or nine flights, with Beck launching the bird and Pappas using the remote to fly it.

As for the future of Robo Nova, it will probably be used primarily as a demonstration for middle and high school students who visit the Engineering Department's days designed for prospective engineering students. Although the ornithopter will not be taking the place of Nova anytime soon, one day, football fans will see Robo Nova flying around Jordan-Hare before a game.

