

THE PROFESSIONAL FLIGHT INSTRUCTOR MENTOR

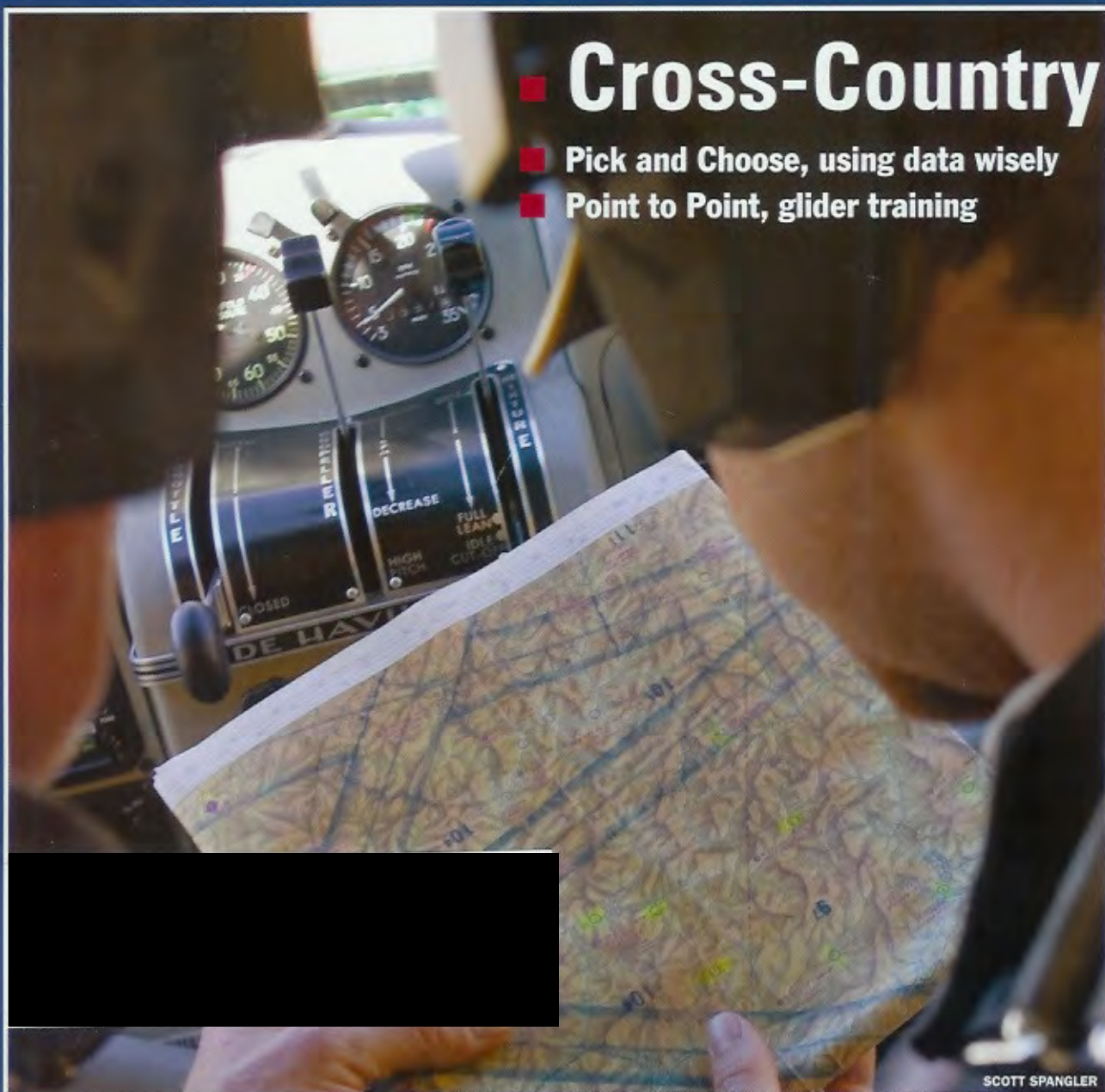
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SCOTT SPANGLER

Master Instructor McDaniels Sets NAA Record Flight a mission to raise funds for hospital

There's really no need to set a speed record for touching down at all hard-surface public-use airports in Wisconsin, but that didn't stop NAAI Master Instructor Matt McDaniels from trying it—and succeeding. Of course, it helped that he and his co-pilot were doing it for a good cause, which is reason enough.

The two pilots flew the one-day adventure in a Cirrus SR22—nicknamed *Blue Kids One*—as a fundraiser for the kids of the neurosurgery unit at Children's Hospital of Wisconsin, where McDaniels' co-pilot and the aircraft's owner, Bruce Kaufman, is chief of pediatric neurosurgery. For a day's hard work, they raised \$12,000 for the cause—and for their trouble, they ensured themselves a place in the National Aeronautic Association (NAA) record books.

"At the end of the day, we were both proud to be part of the whole thing," McDaniels says. "But it was tremendously more work than we thought it would be, both from the flight-planning aspect and definitely from the publicity and fund-raising aspect."

Flight Planning

While the entire flight took nearly 17 hours in one day—that's 17 hours of flying, with 104 takeoffs and landings—the trip was made easier by planning, preparation, and solid execution. They knew exactly what they were going to be in for, and they didn't have any surprises, McDaniels says. As an instructor, that's a lesson that he can pass along to students. But as a record attempt, the flight was something of a stunt, albeit one for a good cause—to drive up fund-raising.

They started planning by determining the best route for the effort, and the goal was to find the shortest line between all 104 airports, starting at Milwaukee-Timmerman. McDaniels says flight-planning software was key to finding the shortest routes, taking into account the number of unlighted airports across the state that would require arrival during daylight hours. There were also issues going into military and private fields—and with their fuel stops and alternates. Next came efforts to coordinate the flight with both air traffic control and flight service. They ended up getting a dedicated call sign and squawk code for the day, and with that came permission to get quickly into and out of airspace, which helped immensely.

To smooth the flight—and to speed up pit stops—the pilots had two other support airplanes follow along. Those pilots were sent ahead to check weather and expedite fuel stops. While McDaniels and Kaufman were "doing pilot stuff" during stops, or opening flight plans, or making PR calls, the support crew fueled the airplanes, cleaned the windscreens, downloaded the flight-tracking GPS that the NAA required, and did other vital support tasks.

When all was said and done, the flight's ending time was 16 hours, 42 minutes, 14 seconds, for the record. They ended up flying 2,119 nautical miles, or roughly Milwaukee to Phoenix. "Except it was all in one state, with a lot of turns and speed

changes," McDaniels says.

That first leg of the flight turned out to be the hardest, as they tackled the southeastern part of the state—the busiest, from an air-traffic point of view—in the early morning hours. While having a high density of airports in close proximity was an advantage early, because they weren't fatigued yet, they were burdened by early-morning ground fog. In fact, they had to move the first fuel stop; while they were able to make a touch-and-go at that airport, they felt it was better to wait to stop until a later airport.

That they were able to shift plans en route indicated the level of preparation they put into the flight. That's the key teaching lesson McDaniels the instructor gained from the experience. "I think the performance aspects were interesting from a teaching standpoint."

McDaniels and Kaufman studied the SR22 pilot's operating handbook (POH) to crunch numbers, ensuring that their airports were appropriate. In particular, they wanted to make sure that the odd-lot airports in the state—for example, Cribbetts, which was the state's shortest runway at only 2,100 feet—would work under anticipated wind conditions, so they were prepared to make a final go/no-go call.

Their big issue was time, McDaniels says, and to expedite arrivals and departures, they explored whether it was ever appropriate to do a downwind landing. From a time-management point of view, it would allow them to do a straight-in approach and a straight-out departure, rather than get into the traffic pattern twice, which would shave off several minutes at an airport. "Multiply that by 104 airports, and all of a sudden, you're talking about a lot of time," McDaniels says.

But there was the safety issue, so the pilots performed test flights to measure their true ground rolls and takeoff distances with a couple of knots' tail wind. On reasonable runways, they would have a margin of about 5 knots. In the end, they were fortunate, experiencing tame winds all day long. Those test flights also validated their expected fuel burns.

"As a Master Instructor talking about this with one of my students, the lesson would definitely be, you don't go into anything blind," McDaniels says. "If you prepare and you do your homework before you go, you know the performance of your airplane, and you know the legal limitations of the POH, then you should not run into any snags."

"In the end, we never scared ourselves, because we planned ahead."



**Bruce Kaufman and
Matt McDaniels**