



Air racers, Wanda Zuege and John Thompson, plot the course they will fly in the 2006 1,800-mile Marion Jayne Air Race. Photos provided by Wanda Zuege.

How to Enter the U.S. Air Race

By Wanda Zuege and Terese Barta

“It’s all About the Pilots!”

“Just do it.” That was the response I received from my fellow pilots at the airport when I voiced a desire to enter the air race. Of course, asking them was my way of getting a reality check on my aviation addiction. (I know, I know. You don’t ask fellow pilots for a reality check.)

Just do it. John Thompson, my business partner, was ready for this adventure two weeks earlier when I first brought it up in mid-March. But I’m the kind of person who likes to just dip her toes in and test the waters for awhile before taking the plunge.

I needed time to think about

it—mull it over, toss it around and visualize it. Then I creatively informed my husband that I planned to fly our airplane to Hutchinson, KS, and enter a three-day 1,800-mile air race with my business partner.

His response? Since he is the one who created my flying fever 16 years ago by purchasing a Quick Silver

weight-shift ultra-light airplane, he now just slowly shakes his head and patiently supports my flying endeavors. "How much does it cost? How long will you be gone? Are you using our plane? Is this going under advertising?" (He also wears the hat of accountant.)

And that, my fellow pilots, is what this article will be about: what is all involved in becoming a Marion Jayne air racer.

Friday, March 24, 2006, I asked John once more if he's ready for this, and within the same 60 seconds, I was on the phone with race president Pat Keefer announcing that John and I were going to enter the air race. This was my second phone call to Keefer. The first call was to welcome the U.S. Air Race to the Stevens Point, WI Municipal Airport and offer my assistance. On both occasions I found that hangar flying with Pat about air racing was an absolute joy.

It's official. Wanda Zuege and John Thompson of Am I High Aviation are now going to become racing pilots.

A 1946 Piper Clipper with a 101 knot handicap raced and beat a 400 Comanche and Glasair III.

For the past four years, John and I have been CFIs at the Stevens Point Municipal Airport. In addition to being independent flight instructors, we offer accelerated weekend ground schools for the private pilot and instrument FAA knowledge tests. We also work with the Stevens Point Airport manager, Mike Pinney, providing aircraft rental services to the Stevens Point pilot community.

The plane we will be flying is a 1968 Piper Cherokee 140 with a recently refurbished panel for IFR training. Although a Cherokee is hardly considered a racing plane, I

was amused to hear the story of how a 1946 Piper Clipper with a 101 knot handicap raced and beat a 400 Comanche and Glasair III.

As Keefer says, "This is air racing, where it's all about the pilots."

It's also reassuring to know that the race routes are designed so that even a stock model Cherokee can complete them in no-wind conditions with plenty of fuel in reserve.

The Preparations Begin

The decision is made, and now we have to do something about it. With laptops opened, we tapped into the wireless service that's conveniently available within the FBO thanks to Sentry Insurance and Brett Jarman (pilot, Bonanza owner and computer guru).

I typed "U.S. air race" into the Yahoo browser and clicked on the search button. The U. S. Air Race was the first hit. How exciting to read the description—"The longest cross-country air race in America." This is going to be a blast!

The website (www.us-airrace.org) is colorful and easy to navigate. Click on the "Entry Kit" webpage. Here you'll find that you can download and print the entry forms (as either a PDF or in Microsoft Word format), which can be filled out, or just complete the forms on computer first—then print them out and mail. Typing in the information before printing out the forms is greatly appreciated by Pat Keefer and those who have to read the forms. For folks who need to have the Entry Kit mailed, they can call (817) 491-4055 or fax (817) 491-3601. The entry process is the same whether you plan to enter the main event or the two smaller races.

The event actually includes three air races: the 1,800 mile (actually 1,764-statute mile, 1,532-nm) race from Hutchinson, KS to Stevens Point (July 19-21); the 300-mile mystery round robin race in Hutchinson (July 18), and the 300-mile air race in Stevens Point (July 23).

Once you have the Entry Kit in hand (or onscreen), you'll see the cover letter first. The cover letter

The Faces of General Aviation

The theme for the U. S. Air Race is, "It's all about the pilots." The theme for Wanda and John's Cherokee Chariot is, "The faces of general aviation." Paul Olsen of Interstate Media Service in Stevens Point, WI is working with Wanda Zuege to have Cherokee racer #2 graphics-wrapped with the above theme. To promote general aviation everywhere they go, the faces of general aviation will be prominently displayed all around the plane—a flying photo album. Orders for 2006 photos of general aviation pilots and their planes and why they fly are being accepted through June 15. If you would like to have your photo on display for \$25, call Wanda Zuege at (715) 252-3326 for details.

gives the overall brief description of all three races and the history of safety during these events, "... over 480,145 miles with a perfect safety record." I was also glad to read, "For first-time participants, a special briefing is held, and new teams are given an experienced event buddy to make their rookie experience go smoothly."

There is also a description of the rules. Rules include but are not limited to the following: Pilots must be properly certificated and current. There must be a minimum of two people on board (typically pilot and navigator), but only one needs to be a licensed pilot. The aircraft must be airworthy, have a current annual and be carrying an operating altitude encoding transponder. The top speed of the aircraft will be determined, and the handicap will be that speed in knots, as validated by a group of racers comprising the handicap validation group. The race will use VFR minimums of three miles visibility and a 1,000-foot ceiling. In each class, the team with the highest ground speed over the route relative to its handicap will win.

To determine route time, each aircraft will be equipped with a sealed “black box” GPS unit that will track the aircraft’s position. The information is downloaded into a laptop computer which will compute the actual ground speed over the course, subtract your handicap and produce the score.

According to Keefer, “Whoever does the best above their handicap is clearly the superior team and wins bragging rights and excellent hangar flying stories for yeeaaaarrrs! This will be our second year using this relatively new technology that was developed for sail plane competitions. Previously we used volunteer spotters at each location.”

The mandatory fuel stops of the 1,800-mile race are: Akron, CO (AKO), Rapid City, SD (RAP), Wolf Point, MT (OLF), Devils Lake, ND (DVL), and Orr, MN (ORB) before the final destination of Stevens Point, WI (STE).

The Pre-race Checklist

The next step is to find the checklist of things that must be sent in to enter. It’s an aviation event. There must be a checklist, right? This is what it looks like:

Item	Check here when it is in the envelope
Event Charge Form - 1 page	
Application for Entry - 2 or more pages	
Press/Program Information - 2 or more pages	
Check	
Two Glossy Group Photos of Team or .jpeg File to ppurcellk@aol.com	
Certificate of Insurance	

The NAA has endorsed the U.S. Air Race timing method as an approved process for record setting purposes. The pre-race checklist is shown above.

The Event Charge Form is one page, and it describes the charges for each of the three races. John and I decided we are doing two races, both the Marion Jayne Air Race and the Hutchinson-300 Air Race. Each fee includes participation in the air race for two persons and one aircraft, all meetings, briefings, confirmation package, hotel discounts, fuel dis-



Both CFIs, Wanda Zuege and John Thompson will fly the 1968 Piper Cherokee 140 in two of the races the U.S. Air Race is putting on this summer—the 1,800-mile Marion Jayne Air Race and the Hutchinson-300 Air Race.

counts, two Marion Jayne and wing patches, arrival package, two copies of the Official Events Program, event decals, and completion plaques or trophies. Fuel, lodging and meals are the responsibility of the team. Official

jackets and shirts are also available for the cost of \$60 and \$35 each, respectively.

The Application for Entry Form (two or more pages) is a record of the pilot and co-pilot information, aircraft and engine information, emergency contacts and sponsor names.

The Press/Program Information form requests a description of each

pilot that will be used in the press releases. The pilot is also asked to provide a list of local newspapers and contacts in his or her own community. The U. S. Air Race started in 1994 and has a lot of experience in sending press releases to each of the pilot’s local communities, as well as to the communities that are affected by the actual air race.

We also have to submit a check for the race fees and submit pictures of our race team. The fee for the Marion Jayne Air Race is \$300 plus an additional \$100 for the Hutchinson-300 Air Race. The photos can be glossy prints or electronic files.

Finally, we need the Certificate of Insurance form filled out. This is a form that can be sent to your insurance company, which in turn sends it in to the U.S. Air Race office. The important components are the insurance company name, policy number, and confirmation that the policy provides a list of limits of liability to pilot, passengers, airplane and property costs.

The final postmarked deadline for pilots to enter the race is July 10 although there are cost incentives for pilots to enter earlier.

Monday, March 27: John Thompson faxed the insurance form to have filled out by the insurance company. We don't have to wait for their reply to send in the rest of the entrance packet.

Tuesday, March 28: With digital camera in hand, we take team photos and send them to ppurcellk@aol.com.

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Wednesday, April 12: The confirmation packet arrives. This means that we are officially entered. It also tells us that we will use radio telephone designation "Race 2" for radio communication during the events instead of our N number (FAA approved). To make everything flow as smoothly as possible, the following is also included in the packet: hotel and car rental information, handicap procedure sheet, event descriptions, arrival procedures, advice to new racers, schedule of events as of April 1, route and awards, event courtesies, race number options and suggested sectionals, donations form, safety equipment manifest, and full U.S. Air Race rules.

It is important to make hotel reservations well before the suggested deadline as summer is tourist season.

The other step we must complete before we arrive in Hutchinson, KS is to determine our race handicap. This information can also be faxed in before we arrive in order to make registration go more smoothly.

Determining the Handicap

Here's how the handicap is determined. With our aircraft washed and

waxed, full of fuel, carrying the full weight of the crew and all spare cargo removed except for safety equipment (we are provided with a manifest of what we need), we will set our altimeter to read 29.92.

After climbing to 6,000 feet pressure altitude, we will observe the actual outside air temperature (OAT). On a standard day it should be 3 degrees Celsius/38 degrees Fahrenheit. For each degree that the OAT is above 3 degrees Celsius, we will descend 100 feet (equivalent to 60 feet per degree above 38 degrees Fahrenheit). If the OAT is below standard, we will climb the same amount. Here's a summer example: With the OAT at 6,000 feet (MSL) 27 degrees Celsius and altimeter set to 29.92, you would fly at an indicated pressure altitude of 3,600 feet in order to achieve flying at a density altitude of 6,000 feet. The equation is $6,000 - ((27^{\circ}\text{C} - 3^{\circ}\text{C}) \times 100) = 3,600$ feet (MSL).

At full throttle (and full RPM for constant-speed prop), the mixture will be leaned to best power according to the aircraft's *POH*. Flaps must be full up, cowl flaps fully closed, air conditioner in "off" position, ram air open, and anything protruding into the air stream retracted (vents on some aircraft must be closed).

After trimming for "hands-off" level flight (autopilot altitude/heading hold may now be used), we will maintain level flight and fly 360 degrees until five consistent GPS readings are obtained. Readings should be taken every 20 seconds and not vary more than one knot. The procedure is repeated after turning to headings of 240 and 120 degrees. The 15 speeds will be averaged. This will be our optimal race speed and handicap.

At this point, there is still much to read and do to prepare for the race ... contact sponsors, look into advertising and decals for the plane, not to mention studying the sectionals, but we are on well on our way to becoming rookie race pilots.

As an instructor, most of my scenery is limited to traffic patterns and "cross-country trips" around the

Stevens Point, WI area. I am looking forward to unfolding my race wings and preparing for this new flight experience with a fellow pilot, friend and business partner, John Thompson; to meet new pilots and enjoy their camaraderie; and to witness the visual splendor that lies ahead.

Fast forward to post race. I'm already starting to think about the wonderful flight stories John and I will be able to pass on to aspiring new pilots ... and the photos we can integrate into our PowerPoint presentations during our accelerated two-day ground schools to break up the MEGO (My Eyes Glaze Over) effect ... and then there's next year's race!^{PIPERS}

About the Race

The company running the National Air Races is U.S. Air Race, Inc., which is a nonprofit, charitable and all-volunteer company. It offers the longest air race open to all pilots. The company was founded in 1994 by the famous Marion P. Jayne, the only U.S. pilot to have raced around the world twice, winning the gold medal in 1994. The three National Air Races are: Marion Jayne Air Race, Hutchinson-300 Air Race, and Stevens Point-300 Air Race. Although the long race originally held the name the U.S. Air Race, it was renamed the Marion Jayne Air Race in her honor after her death.

The total value of cash, trophies and prizes is \$25,000, but the race is more about the camaraderie and skill involved than it is about the actual prizes. The goals of the air race are to promote the sport of general aviation, to improve all pilot skills through competition and to provide Learn to Fly scholarships. In addition, it seeks to create a common bond among pilots of all types (business to recreational) and experiences (seasoned veterans to "newbies").