The skies above Grand Forks will be buzzing on June 23 when dozens of airplanes lift off from the starting line for the 2020 Air Race Classic (ARC), a cross-country women’s air race that will originate in North Dakota for the very first time.

Between 50 and 60 planes will take off from the Grand Forks International Airport, approximately 30 seconds apart, as teams begin their journey. Racers have four days to reach the finish line in Terre Haute, Ind., flying more than 2,600 miles.

Eight cities along the route are designated timing stops for racers. There they complete airport flybys to record their speed and time. They can also refuel and stop for the night if they choose. Teams aren’t required to touch down at each stop, but the race is run only during daylight hours using visual flight rules. Teams must complete their last flybys before ARC sunset time and land at one of the route stops.

Unlike some races, the ARC isn’t necessarily won by the first team to reach the Terminus. In fact, to accommodate a variety of airplane models with varying capabilities, teams essentially race against their own handicapped speed.

In preparation for the race, teams fly a square pattern at a designated altitude and at full throttle. The resulting speed is used to calculate each team’s handicap. The ARC is won by the team who can beat its own handicap by the largest margin. Speed, weather and time management are all factors used to build a winning strategy.

Racers will begin arriving in Grand Forks as the skies above the airport buzz with excitement. The race is a test of skill, strategy and teamwork, and each team is determined to make their mark on this historic event.

By Cynthia Mason

The members of UND’s 2019 Air Race Classic Team, Carly Shukiar, Monique McAnnally, Sierra Borges and Emily Hartley.
Forks on June 19. Once they touch down, credentials will be checked and planes inspected. After inspection, racers are not allowed to return to their planes until race day. In the meantime, teams attend seminars and safety briefings to prepare them for their adventure. And, they’ll have plenty of time to explore Grand Forks.

A Long History

The ARC has its roots in the earliest days of women’s air racing, beginning with the Women’s Air Derby in 1929. Amelia Earhart was one of 20 entrants in that first cross-county race, which ran from Santa Monica, Calif., to Cleveland, Ohio, over a nine-day period.

At that time, race organizers feared women wouldn’t be strong enough to complete a long-distance flight on their own. They tried instituting a requirement calling for a man to accompany each pilot. Earhart and eventual winner, Louise Thaden, threatened to boycott the race. The requirement was dropped and the women proved they were up to the task.

Women’s air racing took a hiatus during World War II, but reemerged in 1947 as the All Women’s Transcontinental Air Race, which lasted until 1977. The ARC was established that same year and continues today. It provides women from the United States and other countries with an opportunity to meet, share their love for flying, and take part in some serious, but fun, competition. Cash prizes and medals are awarded to the top 10 teams.

In 2019, the ARC celebrated a milestone of 90 years of women’s air racing. More than 100 women from all walks of life, ranging in age from 17 to 90, formed 49 teams that flew more than 2,500 miles. They proudly carried on the legacy begun by aviation pioneers.

The ARC organization continues to advocate for women in aviation through its mission of “encouraging and educating current and future female pilots, increasing public awareness of general aviation, demonstrating women’s roles in aviation, and preserving and promoting the tradition of pioneering women in aviation.”

The Frozen Force

As they have for each of the past seven years, a team of four young women from the University of North Dakota (UND) will be participating in the ARC.

Known as the Frozen Force, the team was formed in 2012 when a group of students involved in UND’s Women In Aviation International chapter approached faculty advisor Elizabeth Bjerke with an interest in entering a team in the race. Bjerke, currently associate dean and aviation instructor at the UND College of Aerospace, was immediately on board. Following research into insurance, safety and funding, the students obtained the necessary approvals and began the application process, only to find all the race spots had filled.

Two of the young pilots were still at UND when registration came around again the following year. This time they were prepared. UND’s first ARC team competed in 2013, coached by Bjerke. The team took sixth place in the collegiate division that year and 18th place overall. UND’s best finish to date occurred in 2015 when the team flew to second place in the collegiate division and took second place overall.

Though the Frozen Force is the smallest of UND’s competitive flight teams (along with the Aerobatic Team and the Flying Team), its participation in the race has proven to be an asset to univer-
sity outreach and recruiting. The young women act as university ambassadors when they share their experiences and the opportunities available to students at UND with those interested in a career in the aviation industry.

“A requirement of the team is that they’re very active on social media channels,” Bjerke says, “and through the years we’ve had stories of prospective students meeting them on some of the airstrips they’ve landed at, or coming to campus and knowing who the team is. We’ve seen an increase in our female aviation students over the last five years, and I’d have to attribute some of it to the outreach of the air race team.”

As a general rule, members serve on the team for a maximum of two years. The turnover provides more young women with the opportunity to participate in the race and to benefit from the unique experience that helps them polish their skills and learn to trust in their abilities.

“The race is about 2,400 miles long, and making good decisions and working as a team really builds a lot of confidence,” Bjerke notes. “Different airspace, different terrain and different environment helps to prove to themselves that they can do it.”

The 2019 ARC provided a bonus experience for collegiate teams since the route included four stops in Canada. Minnetta Gardinier, ARC director and start/terminus liaison, points out that teams “got to experience flying internationally, crossing borders, going through customs, and kind of learning the rules and regulations of flying outside of the U.S. a bit.”

The 2019 and 2020 teams competing on UND’s 2019 Frozen Force team were Pilot Monique McAnnally, Co-Pilot Emily Hartley, Navigator Sierra Borges, and Ground Coordinator Carly Shukiar. Antonia Wagener, assistant chief flight instructor at UND, was the team coach.

They flew a single-engine Piper Archer airplane named Nancy. Nancy was given her moniker in honor of Borges’s grandmother. Tradition allows the navigator to name the plane each year.

McAnnally and Shukiar came to UND from California, Borges from Hawaii, and Hartley and Wagener grew up in Minnesota. Though they hail from different parts of the country and were drawn to aviation for a variety of reasons, their passion for flying brought them together as friends and made them a team. “We made sure every single one of us was confident in the decisions that we made,” McAnnally notes.

That included the three women in the airplane, as well as their ground coordinator and coach back at home base. They all were in contact via text message and FaceTime to discuss plans such as their daily distance goal or weather conditions.

When needed, students or instructors at UND’s Department of Atmospheric Sciences were available to provide weather information to guide decision making. According to McAnnally, the most helpful advice they received directed them to “better tailwinds or better altitudes to fly at.”

All agree the best part of the race was meeting fellow female aviators of all ages and backgrounds from around the country.

The Frozen Force will see two returning members in the 2020 race. Borges and Shukiar will serve as pilot and co-pilot, though who fills which role has yet to be determined. Two new team members were recently announced after a fall application process. Katia Peters was named navigator, and Elizabeth Mislav will be ground coordinator.

The public is invited to follow the team’s race progress in June on the ARC website at www.airraceclassic.org, or listen to racers in real time as they make their flyby calls at each stop by visiting www.livetc.net.

The Frozen Force is a 501(c)(3) nonprofit organization that raises funds each year to cover the costs of participating in the race. Much of the team’s fundraising is done through its online social media presence. If you would like to support the team, visit its Facebook page (/UNDAirRaceClassicTeam) or Instagram account (@undairraceclassicteam) to learn how you can help.

Spectators are encouraged to keep an eye on the sky on June 23. “There’s no better opportunity to see all of these amazing women flying these small airplanes,” Shukiar says. “I wish I would have had that when I was younger. That’s really our goal, to use this race to inspire.”

Members of the Frozen Force had fun along the route along with their fellow flyers, the Might Mavericks and the Purdue University ARC team. They even made the cover of the July/August issue of the 99s magazine. The 99s is an international organization of women pilots, co-founded by Amelia Earhart following the 1929 Women Air Derby. Photo by Cynthia Lee

With air vents closed to reduce drag on the aircraft, the 2019 race was a warm one for the aviators. Wet towels were provided to help cool them down. Pictured, left to right, are Emily Hartley, Sierra Borges and Monique McAnnally.