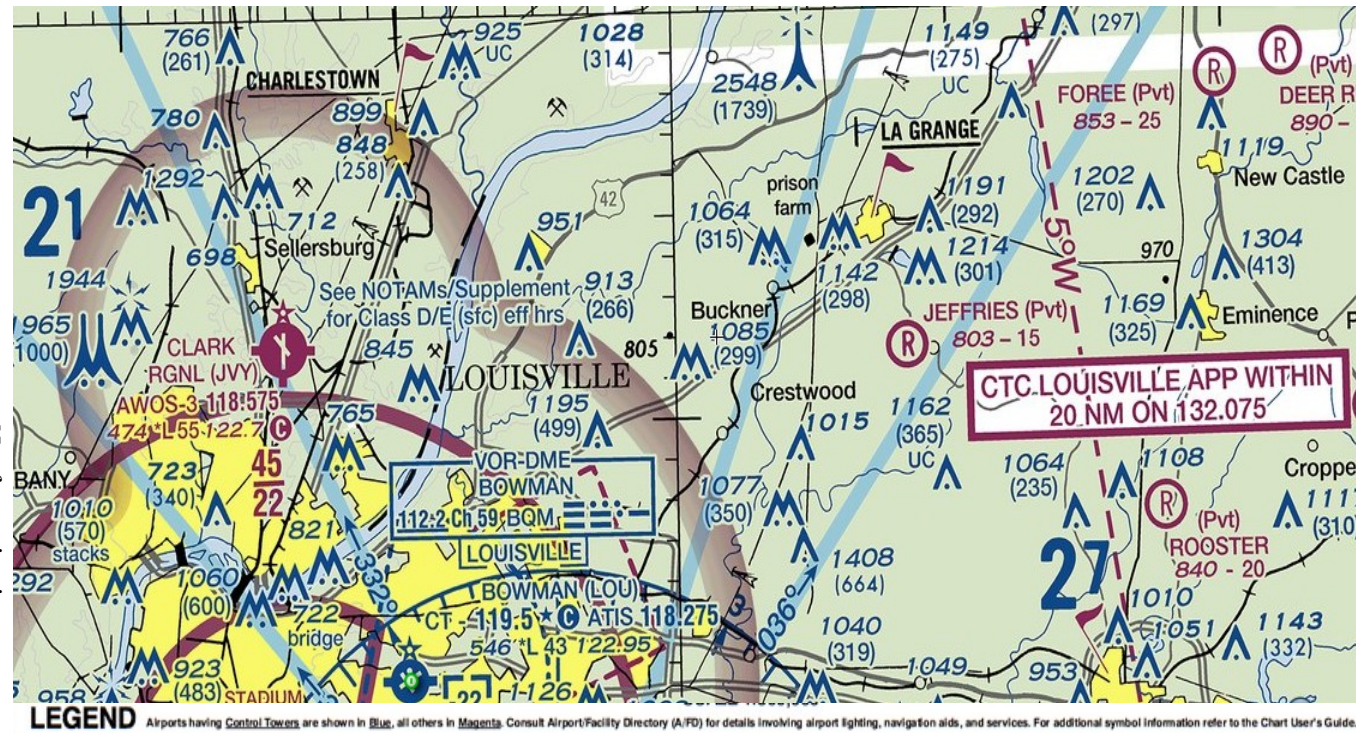


Not for navigation



Junior Aviation Badge

“Above the pines, supported by the air, like the gulls over the sea, whirling. With them I share six minutes of solitude, each, where no man can touch, no shout can reach.*”

Anne Morrow Lindbergh was the first woman in the United States to receive a first class glider license in 1930 and is one of many that paved the way for our turn in aviation. Are you ready to join the ranks? *From “Where No Man Can Touch” by Pat Valdata

- Steps:
- Preflight
 - Taxi
 - Takeoff
 - Flight
 - Landing

Purpose: When I earn this badge, I'll be able to share the world of aviation with others.

Preflight: Choices—Do one

- How does weather affect aircraft? Talk with a meteorologist about weather patterns.
- What are the main airplane parts? What purpose do they serve? Explain the difference between piston, turboprop and jet engines.
- How would you define “aircraft”? What makes a plane fly? Name the different kinds and uses of aircraft. How have the uses changed over the years?

AIRPORTS	OBSTRUCTIONS	AIRPORT TRAFFIC SERVICE AND AIRSPACE INFORMATION	TOPOGRAPHIC INFORMATION
<p>Other than hard-surfaced runways</p> <p>Hard-surfaced runways 1500 ft. to 8069 ft. in length</p> <p>Hard-surfaced runways greater than 8069 ft., or same multiple runways less than 8069 ft.</p> <p>Open dot within hard-surfaced runway configuration indicates approximate VOR, VOR-DME, or VORTAC location.</p> <p>All recognizable hard-surfaced runways, including those closed, are shown for visual identification. Airports may be public or private.</p> <p>ADDITIONAL AIRPORT INFORMATION</p> <p>Private (Pvt) - Non-public use having emergency or landmark value.</p> <p>Military - Other than hard-surfaced. All military airports are identified by abbreviations AFB, NAS, AAF, etc. For complete airport information consult DOD FLIP.</p> <p>Helipad Selected</p> <p>Unimproved</p> <p>Abandoned - paved, having landmark value, 3000 ft. or greater</p> <p>Flight Park Selected</p> <p>Ultraflight</p> <p>Services - fuel available and field attended during normal working hours depicted by use of ticks around basic airport symbol. (Normal working hours are Mon thru Fri 10:00 A.M. to 4:00 P.M. local time. Consult AFD for service availability at airports with hard-surfaced runways greater than 8069 ft.)</p> <p>★ Rotating airport beacon in operation Sunset to Sunrise</p>	<p>1000 ft. and higher AGL</p> <p>below 1000 ft. AGL</p> <p>Group Obstruction</p> <p>Obstruction with high-intensity lights</p> <p>Elevation of the top above mean sea level</p> <p>2049</p> <p>Height above ground (1149) - Under construction or UC - reported; position and elevation unverified.</p> <p>NOTICE: Guy wires may extend outward from structures.</p> <p>COMMUNICATION BOXES</p> <p>122.1R 122.6 123.6</p> <p>OAKDALE</p> <p>Underline indicates no voice on this frequency.</p> <p>Cross-hatch indicates Shutdown Status</p> <p>Operates less than continuous or On-Request.</p> <p>ASOS/AWOS</p> <p>HIWAS</p> <p>FSS radio providing voice communication</p>	<p>Only the controlled and reserved airspace effective below 18,000 ft. MSL are shown on this chart. All times are local.</p> <p>Class B Airspace</p> <p>Class C Airspace (mode C See FAR 91.215 AIM)</p> <p>Class D Airspace</p> <p>Ceiling of Class D Airspace in hundreds of feet. (A minus ceiling value indicates surface up to but not including that value).</p> <p>Class E (stc) Airspace</p> <p>Class E Airspace with floor 700 ft. above surface.</p> <p>Class E Airspace with floor 1200 ft. or greater above surface that abuts Class G Airspace.</p> <p>2400 MSL Differentiates floors of Class E Airspace greater than 700 ft. above surface.</p> <p>4500 MSL</p> <p>Class E Airspace exists at 1200' AGL unless otherwise designated as shown above.</p> <p>Class E Airspace low altitude Federal Airways are indicated by center line. Intersection - Arrows are directed towards facilities which establish intersection.</p> <p>132° V 69</p> <p>Total mileage 169</p> <p>Class E Airspace low altitude RNAV routes are indicated by center line.</p> <p>T319 TK313 RNAV (helicopter only) waypoint</p>	<p>Prohibited, Restricted, and Warning Areas; Canadian Advisory, Danger, and Restricted Areas.</p> <p>Alert Area and MOA - Military Operations Area</p> <p>Special Airport Traffic Area (See FAR Part 93 for details)</p> <p>ADIZ - Air Defense Identification Zone</p> <p>Mode C (See FAR 91.215 AIM)</p> <p>National Security Area</p> <p>Terminal Radar Service Area (TRSA)</p> <p>MTR - Military Training Route</p> <p>IR211</p> <p>MISCELLANEOUS</p> <p>1° E - Isogonic Line (2010 VALUE)</p> <p>Ultraflight Activity</p> <p>Hang Glider Activity</p> <p>Glider Operations</p> <p>Unmanned Aircraft Activity</p> <p>Parachute Jumping Area (See Airport/Facility Directory)</p> <p>Marine Light</p> <p>NAME (VPXYZ)</p> <p>Roads & Road Markers</p> <p>Railroad</p> <p>Power Transmission Lines</p> <p>Aerial Cable</p> <p>Landmark Feature - stadium, factory, school, golf course, etc.</p> <p>Outdoor Theatre</p> <p>Lookout Tower</p> <p>CG Coast Guard Station</p> <p>Race Track</p> <p>Tank-water, oil or gas</p> <p>Oil Well</p> <p>Water Well</p> <p>Mine or Quarry</p> <p>Mountain Pass</p> <p>11823 (Elevation of Pass)</p> <p>(Pass symbol does not indicate a recommended route or direction of flight and pass elevation does not indicate a recommended clearance altitude. Hazardous flight conditions may exist within and near mountain passes).</p> <p>Perennial Lake</p> <p>Dams</p> <p>Non-Perennial Lake</p> <p>Bridges and Viaducts</p>

- Now that I've earned this badge, I can give service by:
- Sharing my knowledge of aviation with others.
 - Exploring a Bronze Award take action project in aviation.
 - Organizing an aviation exploration event for younger scouts.

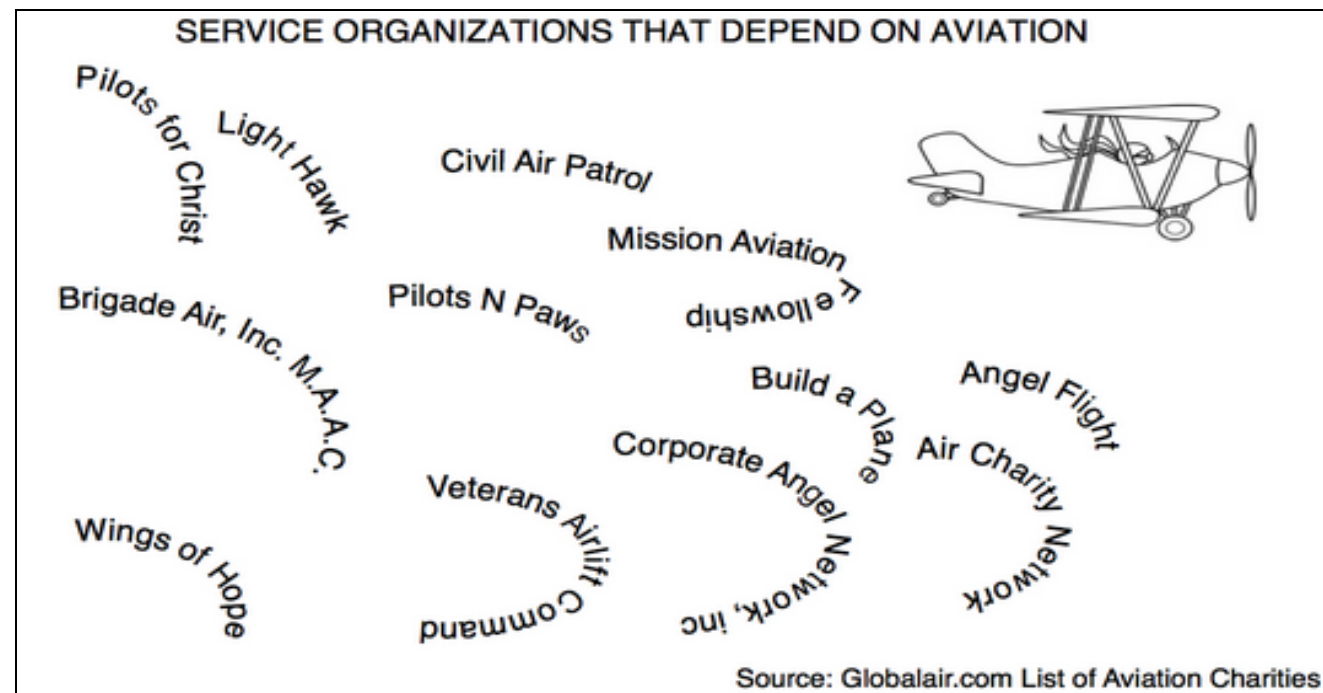
Written by Kentucky Bluegrass Ninety-Nines 2017

The Ninety-Nines are an international organization of women pilots that promotes advancement of aviation through education, scholarships and mutual support while honoring our unique history and sharing our passion for flight.

To order this badge contact: tgsanders@att.net

Taxi: Choices—Do one

- Aeronautical charts are used for navigation. Pilots must carry one on every flight. Learn 15 different symbols on the chart.
- Make a diary of your flight on a commercial airline. How did you choose your airline and route? What did you pack? Describe your experience with security. What did the actual flight feel like (take off, landing, turbulence)? How do aviation professionals (air crew, ground crew, TSA) work to be friendly, considerate and helpful? What things would you do differently on your next flight?
- Talk to some older people in your community about air travel before 1960. Not sure where to start? Ask about: early aircraft, barnstorming, dirigibles, coast to coast travel, Amelia Earhart, a Powder Puff derby, and military flying by women during the two World Wars.



Animals have been involved in aviation from the beginning. Who were the first animals to fly?

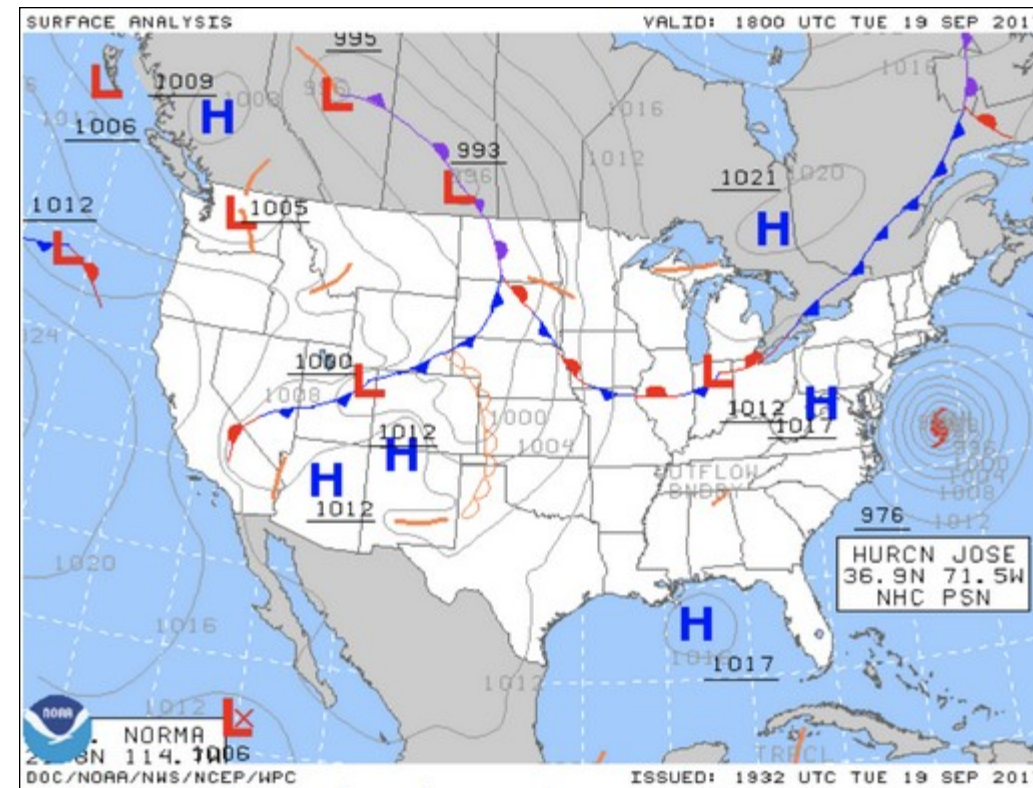
Flying in small private planes, helicopters, blimps or hot air balloons are not approved as Girl Scout Program activities.

Takeoff: Choices—Do one

- What are the requirements for the general aviation path to get your Private Pilot Certificate? Include age, books, health and approximate cost.
- Invite a pilot to speak to your group about how they received their training and became a pilot and their experiences.
- Learn about the different service organizations that use air travel as part of their mission. What is the role of air travel and how does it benefit the organization?

Flight: Choices—Do one

- Attend an air show or visit an aviation museum. Describe your impressions of what you learned or saw.
- Visit your local flight school and find out the programs that they offer.
- Visit your local airport to find out about their facilities. How many runways do they have? How are they numbered? How can you tell the active runways?



Landing: Choices—Do one

- Explore 3 careers related to aviation. What education, training and experience do you need for each profession? Which profession would be your favorite and why?
- Who invented the airplane? What country other than the United States contributed to the early design? Investigate how the first airplane was designed.
- Research 3 innovative women in aviation history. What obstacles did they overcome to fulfill their dream to fly?

Innovative women in aviation:

Therese Peltier was the first woman to solo an airplane in 1908.

Bessica Raiche made the first accredited solo flight by a woman in the United States in 1910.

Harriet Quimby was the first American woman to be licensed in 1911 and also the first to cross the English Channel in 1912.

Katherine Stinson was the first person to fly at night in 1912, the first woman to fly to China and Japan and the first woman airmail pilot in 1918.

Bessie Coleman was the first woman of African-American descent and the first Native American to hold a pilot license in 1921. She traveled to France to accomplish this.

Marga von Etzdorf was the first woman to fly for an airline in 1928 (Lufthansa).