

EAA Aircraft, Missions, and Weather

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EAA Chapter 1306

What is the EAA?



Typical Missions



Local Missions



Aerobatics



- Often within a few miles of the airport
- VFR
- More vertical than typical flying
 - Less horizontal
- Weather considerations
 - Wind direction at various altitudes
 - Ceilings critical
 - Particularly in the practice area

Pleasure / Training / Boring Holes

- Tends to stay fairly close to home
 - Less than 100 miles from origin
 - Often less than 50 miles
- VFR
 - Pattern altitude (1000 ft) often sufficient
- Often lower speed aircraft
 - More susceptible to cross-winds, gusty conditions
- Weather considerations
 - Typically optional
 - No reason to go if weather is not good
 - Exception for training
 - Non-ideal conditions may be the reason
 - Wind, visibility, turbulence major concerns

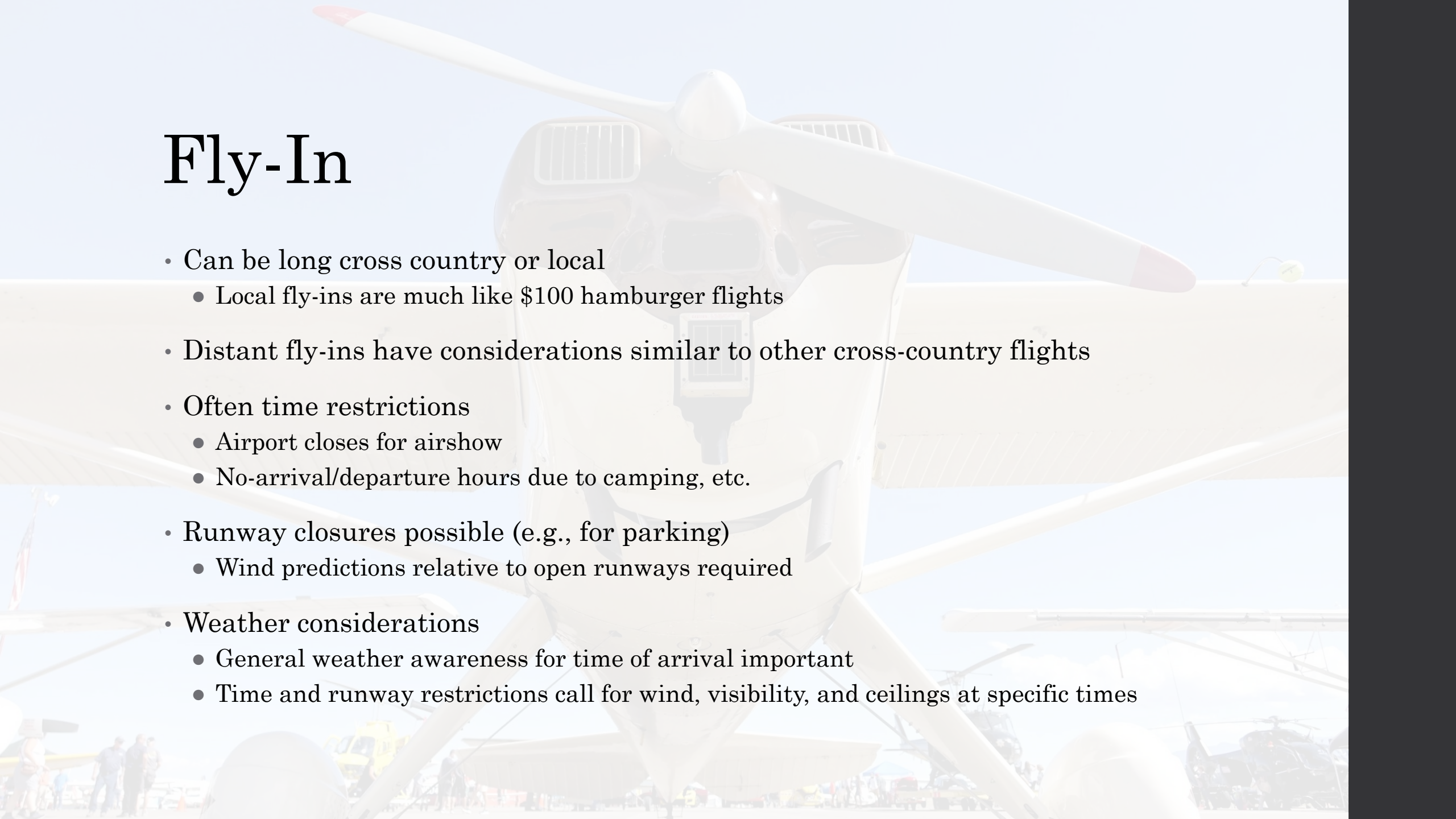


\$100 Hamburger

- Local or short cross country
- Point-to-point
 - Probably with some pleasure flying thrown in
- Often early in the day
 - Take advantage of nice weather (and pancakes!)
- Weather considerations
 - Very optional
 - No need to go if the weather is not good
 - Winds, turbulence, and visibility are the major concerns



Fly-In



- Can be long cross country or local
 - Local fly-ins are much like \$100 hamburger flights
- Distant fly-ins have considerations similar to other cross-country flights
- Often time restrictions
 - Airport closes for airshow
 - No-arrival/departure hours due to camping, etc.
- Runway closures possible (e.g., for parking)
 - Wind predictions relative to open runways required
- Weather considerations
 - General weather awareness for time of arrival important
 - Time and runway restrictions call for wind, visibility, and ceilings at specific times

Back Country

- Unique conditions for back country
 - Typically to remote locations
 - No weather service or reporting
 - Extended stays (camping, hiking, etc.)
 - Usually unpaved strips
 - Which, around here, means dirt
- Weather considerations
 - Wind, visibility, and ceilings, especially near mountains and canyons
 - Local forecasts for remote areas
 - Remote location means no communications
 - Need forecast for arrival **and** departure
 - Which may be hours or days out
 - Precipitation (past and future) vital
 - Dirt runways quickly turn into mud
 - In the Southwest, density altitude is **very** important



General Considerations I

- Pilot experience varies
 - Recreational flyers range from new Private Pilots to ATPs with 10,000 hours to ultralight pilots that only fly at dawn and dusk
 - Low time pilots will be more concerned with wind at the departure and destination
 - Even light winds can be worrying, if they are not down the runway
- Many recreational aircraft are tail draggers (conventional gear)
 - Wind is **really** a concern for this type of aircraft (on or near the ground)
 - Especially gusts
- Many recreational aircraft are very light, slow moving
 - Again, wind a major factor



General Considerations II

- This is **fun** flying
 - VFR is the rule
 - Schedules tend to be quite flexible
 - Less reason to fly in the crud
- Recreational flying
 - Skill levels vary
 - Equipment varies
 - Approaches vary
 - Some professional, some not so much
- *Simple is best*
 - *Hard to find/understand won't get looked at*



Summary

- Recreational aircraft have a wide range of missions
 - Majority are local
 - Most are VFR
- Recreational flyers have a variety of skill levels
- Recreational aircraft come in many shapes and sizes
 - Mostly smaller, lighter, slower aircraft
 - Susceptible to winds
 - Winds and density altitude important here in the Southwest
- Local weather forecasting a premium
 - Ability to gauge recent rainfall is also useful



Weather Products

Straw poll of weather products and their use

- Weather.gov Prog charts
 - Cross country planning
- Weather Underground (wunderground.com) and Windy.com
 - Local weather
 - Cross country destination general weather
 - CONUS wind patterns (windy.com)
- Skyvector
 - Radar precipitation returns
 - Local AWOS reports, METARS, etc.
- Skew-T app
 - Fog prediction
- Foreflight imagery
 - Collection of Prog charts, Precip, Outlook, Convective Forecast, Clouds, Surface, Winds aloft, AIRMETs, SIGMETs, Icing, Turbulence, Satellite, PIREPs
- TAFs, METARs
 - Cross country planning
 - Planning for future local flights
- ADS-B
 - In-flight weather avoidance
 - Alternative planning

dedicated to Randy Reimer



