

# Angel Flight Miami — Pilot & Aircraft Documentation Packet

This packet consolidates required pilot credentials, aircraft paperwork, operational briefings, weight & balance references, emergency procedures, and pre-solo requirements. Use this document as the central checklist for onboarding, flight authorizations, and CFI endorsements. Theme accent color for emphasis: #66a8eeff.



# Documentation Checklist — At a Glance

## Identity & Eligibility

Driver's license, passport, birth certificate for U.S. citizens. For non-U.S. citizens provide government ID, visa/passport, and TSA clearance where required. Ensure copies are legible and current.

## Certifications

Pilot certification, medical certification, and logbook endorsements. Include last biennial flight review documentation and proof of required ratings (SEL, MEL, IFR) plus approximate recent hours flown.

## Agreements & Insurance

Completed rental agreement form, EVEMCO insurance proof, copy of DE policy, and a valid credit card number for billing or deposits as required by the club.

## Administrative

Email confirmation, schedule pointe entry, quick book entry, and the date and initials for who checked the documentation. Keep a digital and paper copy where possible.

All items must be verified and signed off in the designated "ALL DOCUMENTATION CHECKED BY" fields with date and initials.



# Pilot & Contact Information Form

## Required Fields

Last Name, First Name, Middle Name, Employer, Address, City/State, Zip Code, DOB. Enter S.S. # only when required by policy. Keep personal data secure.

- Home Phone
- Cell Phone
- Work Phone
- E-mail

## Licenses & Ratings

Driver's License #, Pilot License #, Pilot License Type, Ratings, Medical Class and Issue Date, Passport Country and Issue Date. Record last biennial flight review and approximate hours flown in the last 6 months.

**Signature:** I hereby certify the above information is correct and that I have read and received a copy of the rental agreement.

**Signed:** \_\_\_\_\_ **Date:**

\_\_\_\_\_

For completion by CFI: CFI certifies the pilot's qualifications, lists authorized aircraft types, CFI name, number, signature and date. Record aircraft numbers (1, 2, 3, 4) as applicable.



# Weight & Balance — Critical Preflight Reference



## Takeoff & Landing Calculations

Record empty weight, passengers (front/rear), baggage, fuel quantities (gsa x 6L/gal), total gross weight, total moment, and computed center of gravity ( $CG = \text{Total Moment} / \text{Total Weight}$ ). Confirm gross weight and CG are within aircraft limits before taxi.



## Key Parameters

Document max gross weight, CG limits (FWD/AFT), take-off and landing distances, runway length, fuel on board, and max crosswind component. Check that computed CG falls within limits for safe flight operations.

During taxi briefing include weather, ceilings, visibility, winds, runway conditions, and other relevant items. Confirm weight & balance entries in the pilot's log and on the flight release.

# Wind Components — Quick Reference & Example



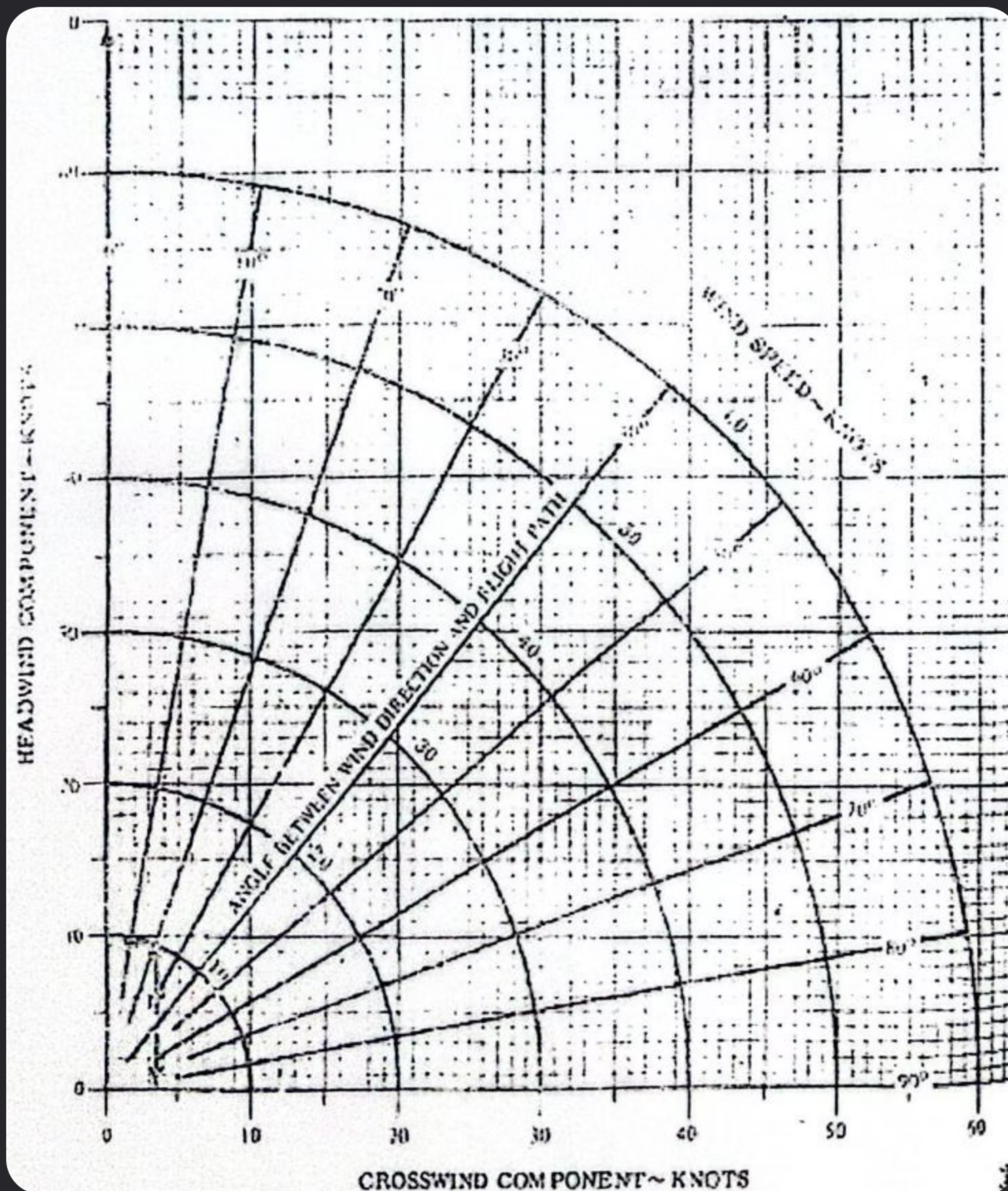
## Example Calculation

Wind speed: 10 knots. Angle between wind direction and flight path: 20°. Headwind component = 9.6 knots. Crosswind component = 3.5 knots. Use these values to determine takeoff/landing limits and maximum demonstrated crosswind.



## Operational Use

Calculate headwind and crosswind components for each runway option. If crosswind exceeds pilot or aircraft limits, select alternate runway or delay operation. Document component values in the briefing notes.



The polar wind components graph maps headwind vs. crosswind across speeds and angles. Use it to quickly read component values for planning and safe decision-making.

# Cessna 172 Performance & Speeds



## V Speeds (C-172)

Vne 184 mph | Vno 147 mph | Va 112 mph | Vfe 98 mph | Vs 54 mph | Vso 47 mph | Vx 74 mph | Vy 90 mph | Vr 60 mph



## Takeoff & Landing

Use published performance charts for ground roll and over 50 ft obstacle distances. Compute weight & balance effect on performance. Confirm runway length and wind components meet takeoff/landing performance requirements.



## Fuel & Range Considerations

Calculate usable fuel, burn rates, and reserves. Verify fuel on board aligns with planned flight time plus required reserve. Record fuel in weight & balance worksheet.

Always cross-check the POH for aircraft-specific configurations, flap settings, and airspeed targets for safe maneuvers and emergency procedures.

# Comprehensive C-172 Preflight & Before-Start Checklist

## Cabin & Cockpit

AROW documents onboard, control wheel lock removed, flight controls free and correct, ignition off, circuit breakers checked, avionics off, master switch on for checks, fuel quantity verified, flaps set as required, master switch off after checks.

## Exterior Inspections

Empennage, right wing, nose, and left wing inspections: control surfaces secure, tires and brakes condition, fuel caps secure, tank sumped and checked, pitot and static ports clear, lights checked, tie-downs removed.

## Starting, Taxi, Before Takeoff

Starting: mixture full rich, prime as required, throttle set, beacon on, brakes held while starting, adjust to 1000 RPM. Taxi: lean mixture for taxi, flaps up, avionics on, transponder standby. Before takeoff: trim for takeoff, mixture rich, engine gauges green, runup and magneto checks within limits, carb heat checked.

This card condenses the preflight flow; pilots must use the full checklist and POH for detailed step-by-step verification. Ensure the preflight is documented in log entries as required.

# Emergency Procedures — Critical Actions & Flow



## Engine Failure (Takeoff Roll / After Rotation)

During takeoff roll: throttle idle, brakes apply, flaps up, mixture cutoff, ignition & master off.  
After rotation: airspeed 65 KIAS, mixture cutoff, fuel selector off, ignition off, flaps as required, prepare for straight or within 45° landing.



## Forced Landings & Ditching

No engine: seats & belts secure, airspeed 65 KIAS, mixture cutoff, fuel off, ignition off, flaps as required, master off when landing assured.  
Ditching: declare 121.5, transponder 7700, secure heavy objects, flaps 20–30°, target 55–65 KIAS per flap configuration, unlatch doors prior to touchdown.



## Fire (Start, In-Flight, Electrical, Wing)

Engine start fire: continue cranking; if start, throttle 1700 and shutdown. If no start: throttle full, mixture cutoff, fuel off, ignition off, master off. In-flight engine fire: mixture cutoff, fuel valve off, master off, cabin heat off, airspeed 100 KIAS, forced landing.  
Electrical fire: master off, vents closed, avionic off, isolate circuits, ventilate once fire out.

Memorize key immediate actions; follow the POH checklists for complete emergency flows. After any emergency, complete required reports and maintenance action items before next flight.



## Pre-Solo Requirements & Securing the Aircraft

Pre-solo prerequisites include mastery of: proper flight preparation and planning; taxiing and surface operations including runups; normal and crosswind takeoffs and landings; straight-and-level flight and turns; climbs and climbing turns; airport traffic pattern entry and departure; collision avoidance and windshear avoidance; descents with/without turns using different configurations; flight at various airspeeds; stall recognition and recovery initiated at first indication; emergency procedures and equipment malfunctions; ground reference maneuvers; approaches with simulated engine malfunctions; slips to landing; and go-arounds. Instructors must verify competency in each area before solo endorsement.



Securing after flight: install control wheel lock, record Hobbs & tach, install nose inlet covers and pilot cover, secure tie-downs, and ensure dispatch procedures are followed. Logbook endorsements and CFI completion entries are required for record keeping.

Final step: CFI completes the "FOR COMPLETION BY CFI" section certifying aircraft types the pilot is authorized to fly, signs and dates the form. Keep one copy with the operator and one with the pilot for accountability.