

# IFR Flight Planning

# Flight planning


- ▶ Legal framework: FAR 91.103: NOTAM, Weather, Known ATC Delays, Runways, Alternates, Fuel requirements, Take off and landing performance data




# Step I: Performance

- ▶ Get a general estimate of your weight
- ▶ Calculate take off distance, climb gradient, and landing distance

# Step II: Departure

- ▶ What's the weather (current + forecast)?
  - ▶ SID/ODP (look for the T)?
  - ▶ How will you get your clearance?
  - ▶ If something goes wrong: Can you go back?
  - ▶ Taxi diagram
  - ▶ NOTAMs
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# Step III: Arrival

- ▶ What's the weather (current + forecast)?
  - ▶ Runways
  - ▶ Obstacles
  - ▶ Approaches (types, minimas)
  - ▶ Known ATC delays
  - ▶ Taxi diagram
  - ▶ NOTAMs
  - ▶ Do I need an alternate? Yes you do!
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# Step IV: Alternate

- ▶ Choose one with LPV/ILS, try to avoid circling approaches
- ▶ Can it be an alternate? Look for the “A”.
- ▶ A good alternate has a TAF.


# Step V: Route

- ▶ Most apps have “Routes cleared by ATC”. Use those.
  - ▶ We teach students to have their last fix be the IAF. This does not work in the real world.
  - ▶ Choose altitude by winds, but err on the side of “higher is better”. Rarely are we over 10,000’. Remember oxygen requirements.
  - ▶ Even/odd altitude rules.
  - ▶ RAIM, Nav aids, WAAS (as applicable)
  - ▶ Theoretically – calculate TAS, wind correction, ground speed, times. EFB does it for you.
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# Step VI: Enroute weather/NOTAMS

- ▶ Get the big picture
  - ▶ Check wind/temp
  - ▶ AIRMETs/SIGMETs
  - ▶ Evaluate icing and convective activity risks
  - ▶ PIREPS
  - ▶ METAR/TAF along the route
  - ▶ Make sure you have standard briefing, up-to-date DB in avionics, up-to-date everything on EFB, pack and pack again.
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# Step VII: Fine tune

- ▶ Enroute time
  - ▶ Fuel
  - ▶ Weight
  - ▶ Performance
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# Step VIII: File

- ▶ Possibly more than one flight plan
- ▶ Filed vs. Expected – be careful.
  - Do not get confused. If in doubt, just say “no” to ForeFlight.
- ▶ File early, file often

# Pick up your clearance

- ▶ Depart VFR vs depart IFR
  - ▶ If departing IFR: You can pick up your clearance 30 minutes prior to departure
  - ▶ Your clearance is then good for two hours
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