

IFR: The Missing Lessons

Workbook



IFR Performance Profiles for Trainers and Light Singles from *IFR: The Missing Lessons*

Operation	Power	Pitch	Config.	Airspeed	Vertical Speed	Notes
Vy Climb						
Cruise Climb						
Cruise						
Descent						
Approach Level						
Precision Approach						
Non-Precision Approach						
Level at MDA						
Missed Approach						

IFR Performance Profiles for High Performance and/or Two Engines from *IFR: The Missing Lessons*

Operation	Power	Pitch	Config.	Airspeed	Vert. Speed	Notes
Vy Climb						
Cruise Climb						
Cruise						
Descent						
Approach Level 1						
Approach Level 2						
Precision Approach						
Non-Precision Approach						
Level at MDA						
Missed Approach						
SE Approach Level						
SE Precision Approach						
SE Level at MDA						
SE Missed Approach						

IFR Takeoff Briefing

- This is a normal/short/etc. takeoff from Runway _____.
- On an engine failure with runway remaining, land straight ahead.
- Prior to _____, limited maneuvering straight ahead.
- After _____, consider a left/right turn back towards the airport.
- The IFR departure procedure is _____.
- The IFR departure alternate is _____.

Scenario/Flight Planning Form

Departure

- By what route and/or procedure will you depart, and what minimum climb gradients are you required to meet?
- If something goes wrong shortly after departure, what plan do you have to get back on the ground quickly?
- What is the minimum weather you're willing to depart into on this flight?

Arrival

- What approaches are you likely to use at the destination, and what are their minimums?
- What airports are options if the weather deteriorates at the destination, and what approaches do they offer?
- Is an alternate required? If so, what alternate will you file?

Enroute

- What route will you file? Consider your planned departure and approach, and find a route that joins those segments.
- What cruise altitude will you file, and why?
- What options are available for landing if you have problems during cruise?

Fuel planning

- Fuel to destination: _____ gallons
- Fuel to alternate: _____ gallons
- Minimum legal fuel: _____ gallons
- Fuel on board: _____ gallons

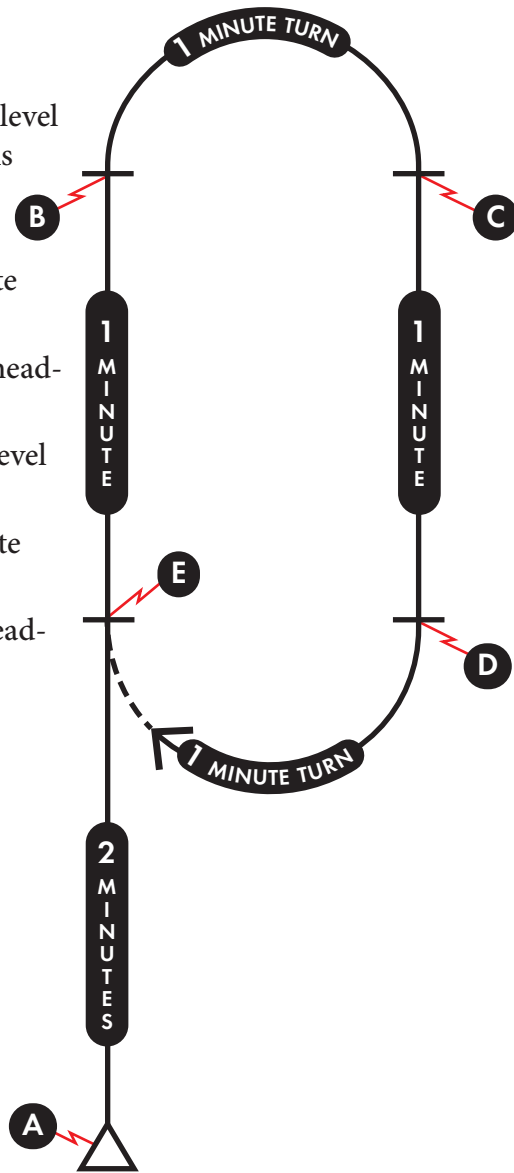
Risk Management

- What external pressures are presented by the situation, and how can they be mitigated?

Racetrack Pattern

Steps

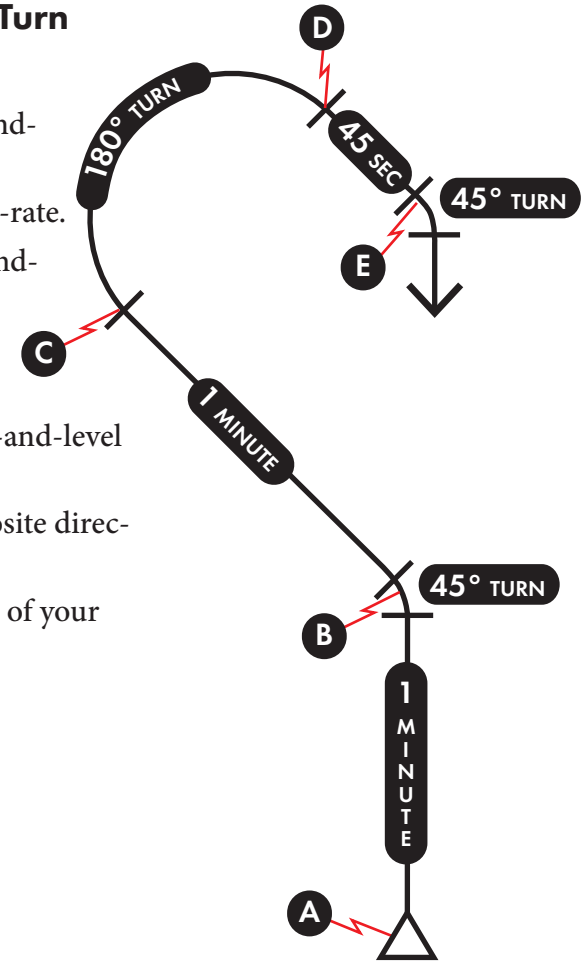
- Time 3 minutes straight-and-level flight from A to B. During this time reduce airspeed from cruise to holding speed.
- At B, start a 180° standard-rate turn.
- Roll out at C on a reciprocal heading from A.
- Time 1 minute straight-and-level from C to D.
- At D, start a 180° standard-rate turn.
- Roll out E on your original heading.



Standard Procedure Turn

Steps

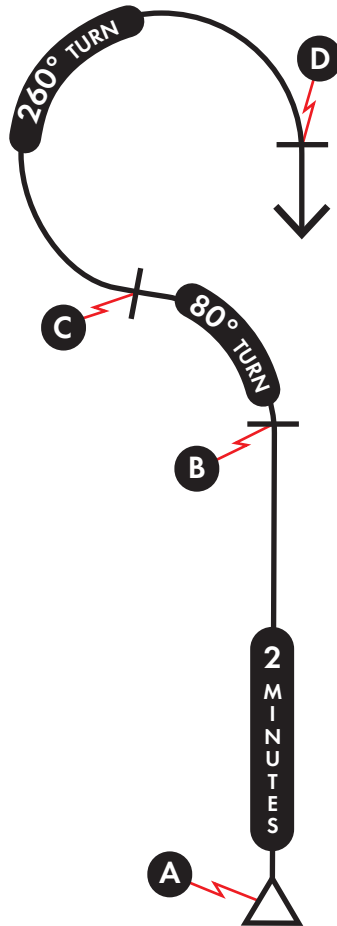
- Time a minute straight-and-level flight from A to B.
- At B, turn 45° at standard-rate.
- Time 1 minute straight-and-level to point C.
- At C, turn 180° at standard-rate.
- Time 45 seconds straight-and-level from D to E.
- At E, turn 45° in the opposite direction at standard-rate.
- Roll out on the reciprocal of your original heading.



80/260 Procedure Turn

Steps

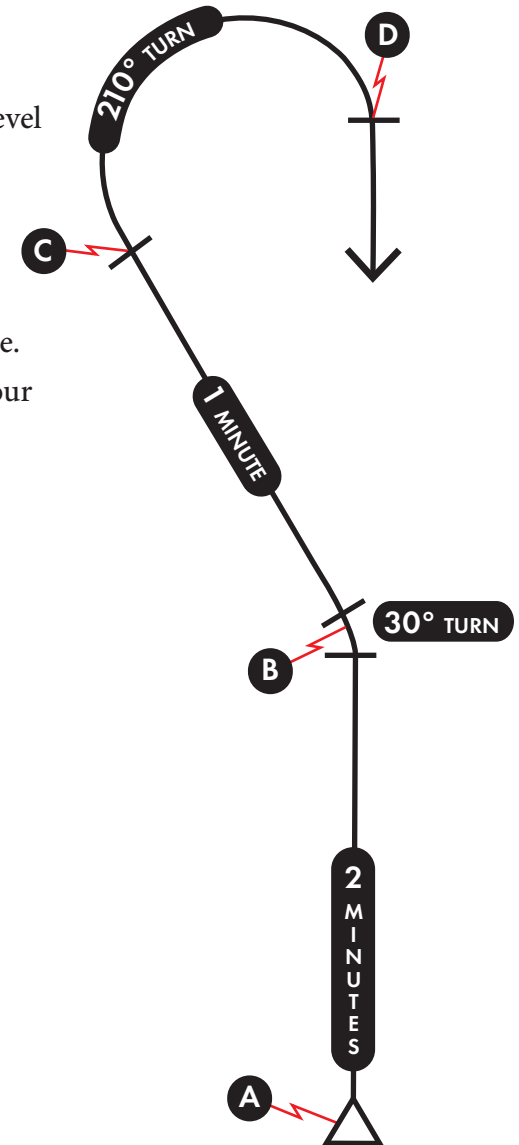
- Time 2 minutes straight-and-level flight from A to B.
- At B, turn 80° at standard-rate.
- Immediately on the completion of 80° of turn (C), turn right for a heading change of 260° at standard rate.
- Roll out on the reciprocal of your original heading (D).



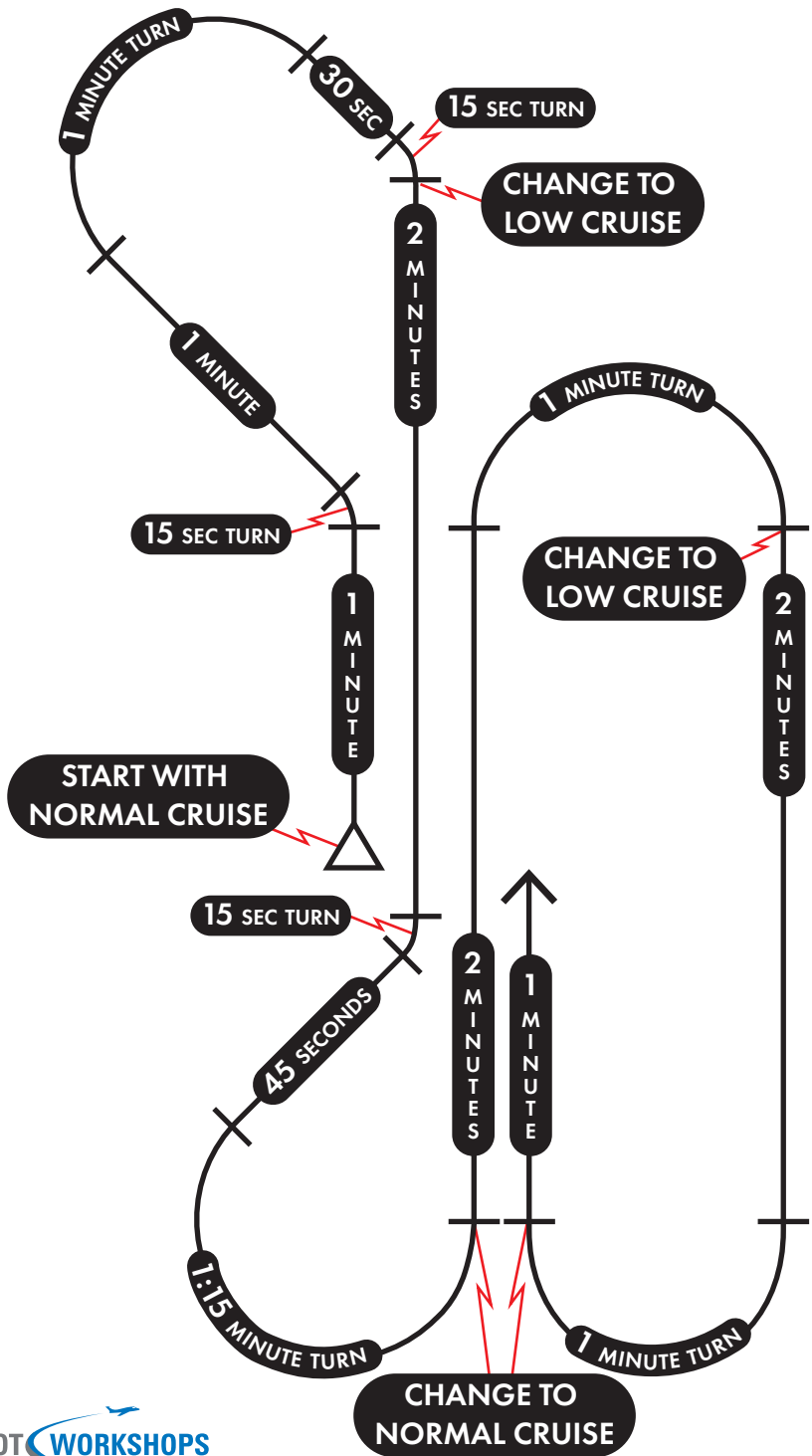
Teardrop Pattern

Steps

- Time 2 minutes straight-and-level flight from A to B.
- At B, turn 30° at standard-rate.
- Time 1 minute straight-and-level to point C.
- At C, turn 210* at standard-rate.
- Roll out on the reciprocal of your original heading (D).



Instrument Pattern A



Instrument Pattern B

