

PROCEDURES FOR NORMAL OPERATION PIPER P32R

Parameters, restrictions, procedures and emergency procedures see AFM

ENGINE START (ENGINE COLD)

1. Mixture..... IDLE CUT OFF
2. Throttle 1 MM OPEN
3. Fuel pump ON
4. Mixture..... PRIME - THEN IDLE CUT OFF
5. Fuel pump OFF
6. Starter..... ENGAGE
7. Mixture..... ENRICH
8. Power..... SET 1000 RPM
9. Oil pressure..... CHECKED

ENGINE START (ENGINE HOT)

1. Mixture..... IDLE CUT OFF
2. Throttle 1 MM OPEN
3. Starter..... ENGAGE
4. Mixture..... ENRICH
5. Power..... SET 1000 RPM
6. Oil pressure..... CHECKED

BEFORE FIRST TAXI

1. Time (Block off) TABULATED
2. Directional gyro SET
3. Taxi area FREE

TAXI

1. Taxi light..... ON
2. Power..... SET
3. Parking brake..... RELEASED

AFTER FIRST TAXI

1. Brakes CHECKED
2. Attitude indicator ERECTED / STABLE
3. Turn coordinator L/R TURNING
4. Directional gyro L/R TURN: DECREASING/INCREASING

STOP

1. Power..... SET
2. Parking brake..... SET
3. Taxi light..... OFF

ENGINE TEST

1. Power..... 2000 RPM SET
2. Oil pressure..... CHECK / GREEN ARC
3. Fuel pressure..... CHECK / GREEN ARC
4. Gyro suction..... CHECK / GREEN ARC
5. Alternator output..... POSITIVE
6. Annunciator warnings..... OFF
7. Left Magneto..... DROP ___ RPM (MAX 175)
8. Right Magneto..... DROP ___ RPM (MAX 175)
9. Difference L/R Magneto..... ___ RPM (MAX 50)
10. Propeller..... FUNCTION CHECKED
11. Mixture..... FUNCTION CHECKED
12. Throttle idle..... BETWEEN 500 AND 700 RPM
13. Power..... SET 1000 RPM

LINING UP

1. Wind (RTF / Windssock)..... DIRECTION / SPEED
2. Runway..... IDENTIFIED
3. Approach sector..... FREE
4. Lights (Landing / Strobe)..... ON

LINED UP & TAKE OFF

1. Brakes..... PUSH
2. Runway & Gyro heading..... COMPARE
3. Time..... CHECKED
4. Take off power..... SET
5. Power (min. RPM, MP, Fuel flow) ... CHECKED
6. Brakes..... RELEASED
7. Speed..... RISE

AFTER TAKE OFF

1. Rate of climb..... POSITIVE
2. Speed..... BELOW 110
3. Breakes..... PUSH
4. Gear..... UP

SAVE ALTITUDE (MIN 400 FT AAL)

- 1. Throttle 25
- 2. Propeller..... 2500
- 3. Fuel pump OFF except Circuits
- 4. Fuel flow CHECKED

2000 FT AGL

- 1. Speed V CC 105

200 FT BEFORE LEVEL OFF

- 1. Reaching (... FT / FL ...)

LEVEL OFF

- 1. Altitude (... FT / FL ...)
- 2. Attitude..... ADJUST
- 3. Power..... MP ___ / RPM ___
- 4. Trim..... ADJUST
- 5. Mixture..... EGT PEAK + 50°F ENRICH

STARTING DESCENT

- 1. Mixture..... ADJUST
- 2. Attitude..... FOR DESCENT
- 3. Power..... MP ___ / RPM ___
- 4. Trim..... ADJUST

INITIAL APPROACH

- 1. Speed BELOW 112
- 2. Flaps..... 10
- 3. Speed 100

APPROACHING GLIDE PATH

- 1. Power..... SET
- 2. Speed BELOW 132
- 3. Gear..... DOWN
- 4. Speed BELOW 112
- 5. Flaps..... 25
- 6. Speed 95
- 7. Starting..... DESCENT

FINAL APPROACH

- 1. Speed BELOW 112
- 2. Flaps..... 40
- 3. Speed V FINAL ___

BEFORE GATE

- 1. Propeller..... FULL INCREASE

GO AROUND (BEFORE GATE)

- 1. Propeller..... 2500
- 2. Throttle 25
- 3. Attitude ROTATE according Speed
- 4. Speed above 80 + pos ROC FLAPS RETRACT
- 5. Gear..... UP

GO AROUND (AFTER GATE)

- 1. Propeller..... FULL INCREASE
- 2. Throttle FULL OPEN
- 3. Attitude ROTATE according Speed
- 4. Speed above 80 + pos ROC FLAPS RETRACT
- 5. Gear..... UP

ENGINE SHUT DOWN

- 1. Electrical consumers OFF except Avionic master
- 2. Alternator OFF
- 3. Throttle IDLE
- 4. Magnetos grounding AS REQUIRED
- 5. Mixture..... CUT OFF
- 6. Magnetos OFF

TAKEOFF BRIEFING**Departure**

Takeoff procedure..... Wind, Temperatur, Gewicht, Pistenzustand
 Climb profil Safe altitude, v_x , v_y , v_{cc}
 Airspace..... Einschränkungen
 Routing Flugweg zum verlassen Flugplatzbereich

Emergency

Malfunction on Ground..... Massnahmen vor dem Abheben
 Engine failure TO & Climbout erste Massnahmen nach dem Start
 Major Malfunction after TO Massnahmen und Flugweg nach dem Start

APPROACH BRIEFING

Runway Wind, Landerichtung, Landezone
 Airspace..... Einschränkungen auf dem Flugweg
 Routing Flugweg und Höhengates beim Anflug
 Missed approach..... GA-Marke, Flugweg nach einem Durchstart

FINAL SPEED CALCULATION**MASS FACTOR**

Speed reduction on Final: 1 kt per 30 kg below MTOM

WIND FACTOR

Speed increments on Final: if windspeed or gust is exceeding 10% of v_{final}
 Add 1/2 of headwind component to v_{final}

EXAMPLE FINAL-SPEED INCREMENT

v_{final}	$v_{headwind}$		increment	v_{final}
66 KIAS	6 KT	Windspeed below 10%	0 KT	66 KIAS
66 KIAS	20 KT	Windspeed above 10%	10 KT	76 KIAS
66 KIAS	20 up to 36 KT	Gustspeed above 10%	18 KT	84 KIAS

FINAL APPROACH SPEED = v_{final} - Mass factor + Wind factor

BANK FACTOR

if bankangle for turning final is more than 25°: Add 5 kt to $v_{intermediate}$

FLIGHTPATH CALCULATION

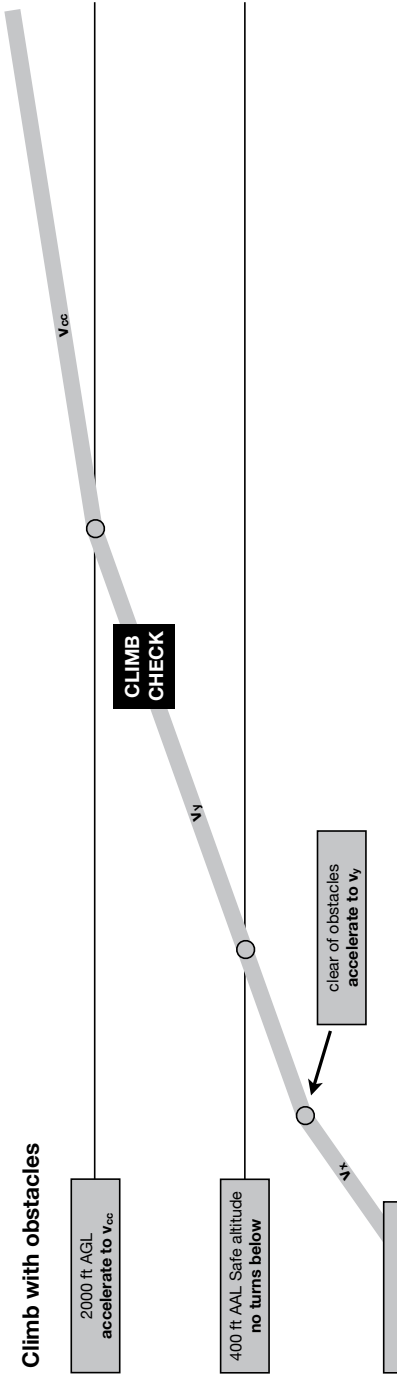
Flight angle	Gradient [ft/NM], [%]	ROD/ROC [ft/min]	ref. RPM (no wind)
3°	300 ft/NM = 5%	GS x 5	1700
4°	400 ft/NM = 7%	GS x 7	1600
5°	500 ft/NM = 9%	GS x 9	1500

ROD/ROC [ft/min] = GS [kt] x Gradient [%]

Climb with obstacles

2000 ft AGL
accelerate to V_{cc}

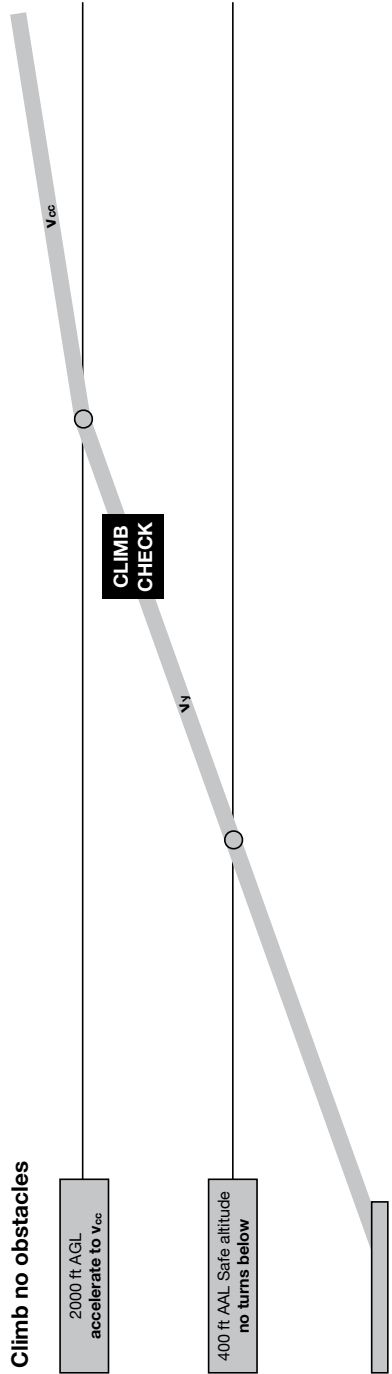
400 ft AAL Safe altitude
no turns below

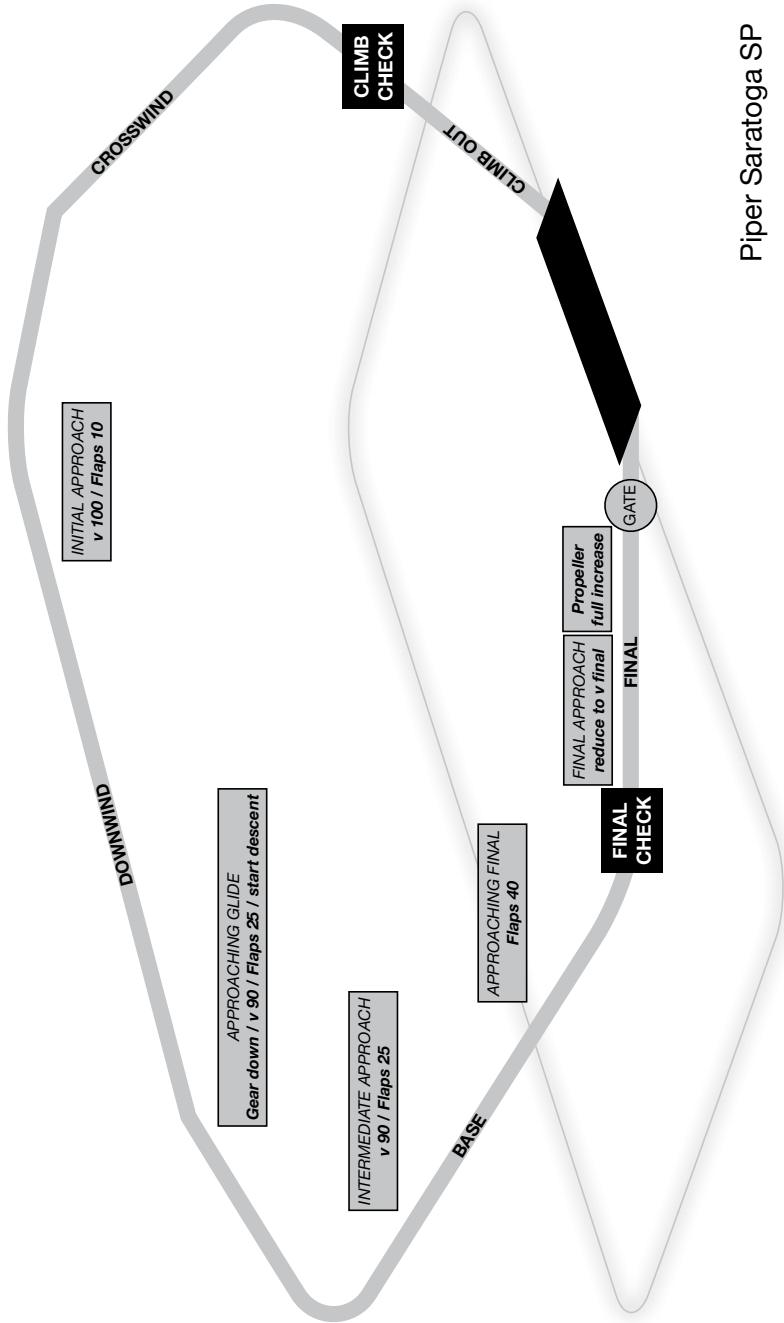


Climb no obstacles

2000 ft AGL
accelerate to V_{cc}

400 ft AAL Safe altitude
no turns below





Jan11
v5.2

FLUGSCHULE GRENCHEN

PROCEDURES

Piper Saratoga SP

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