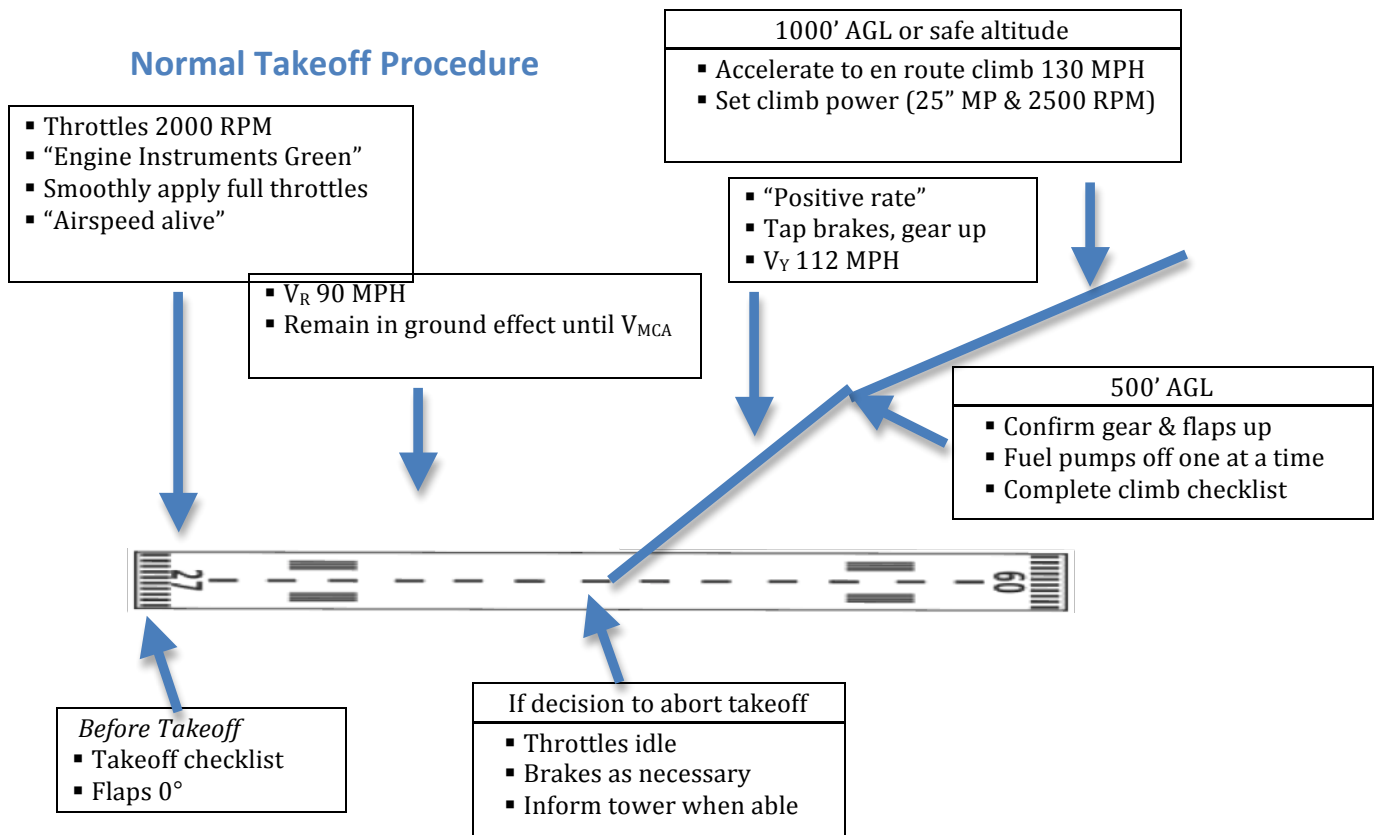
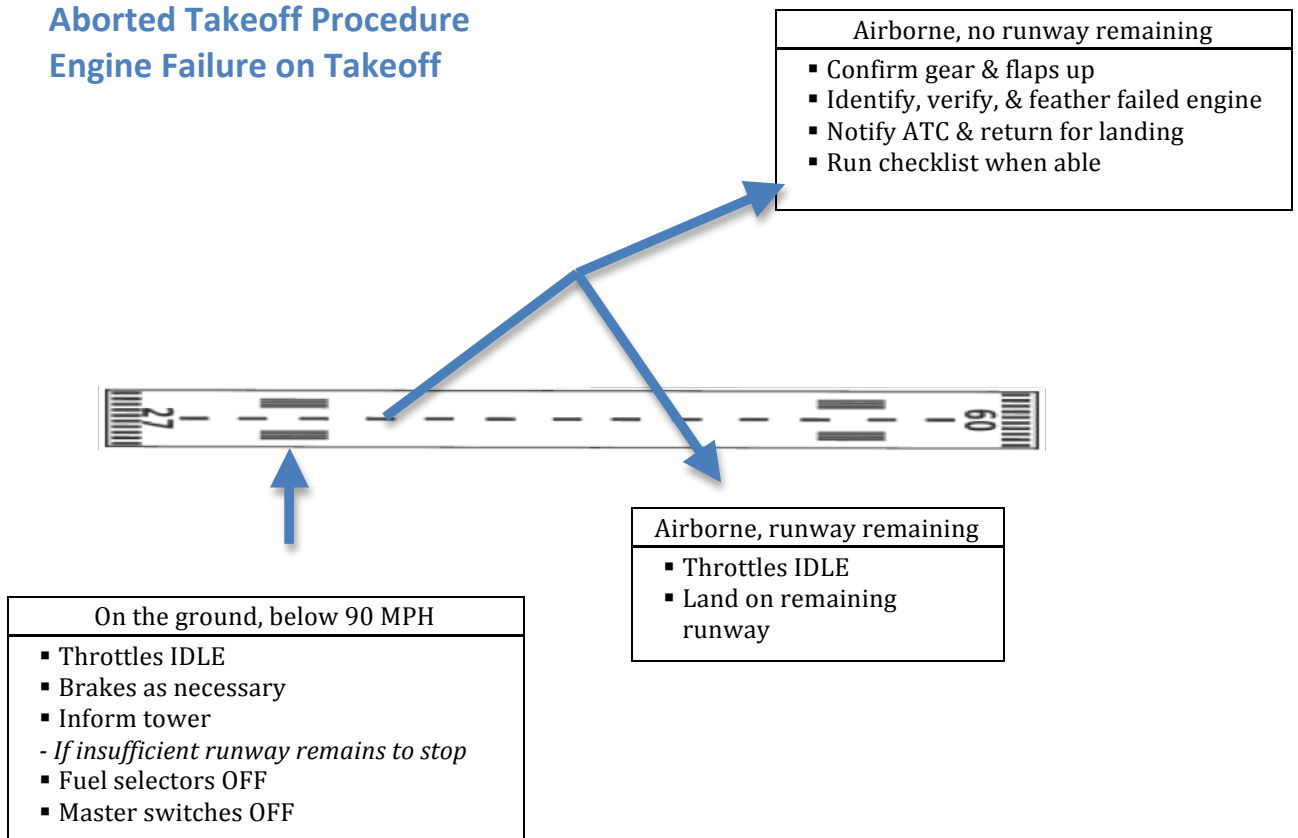


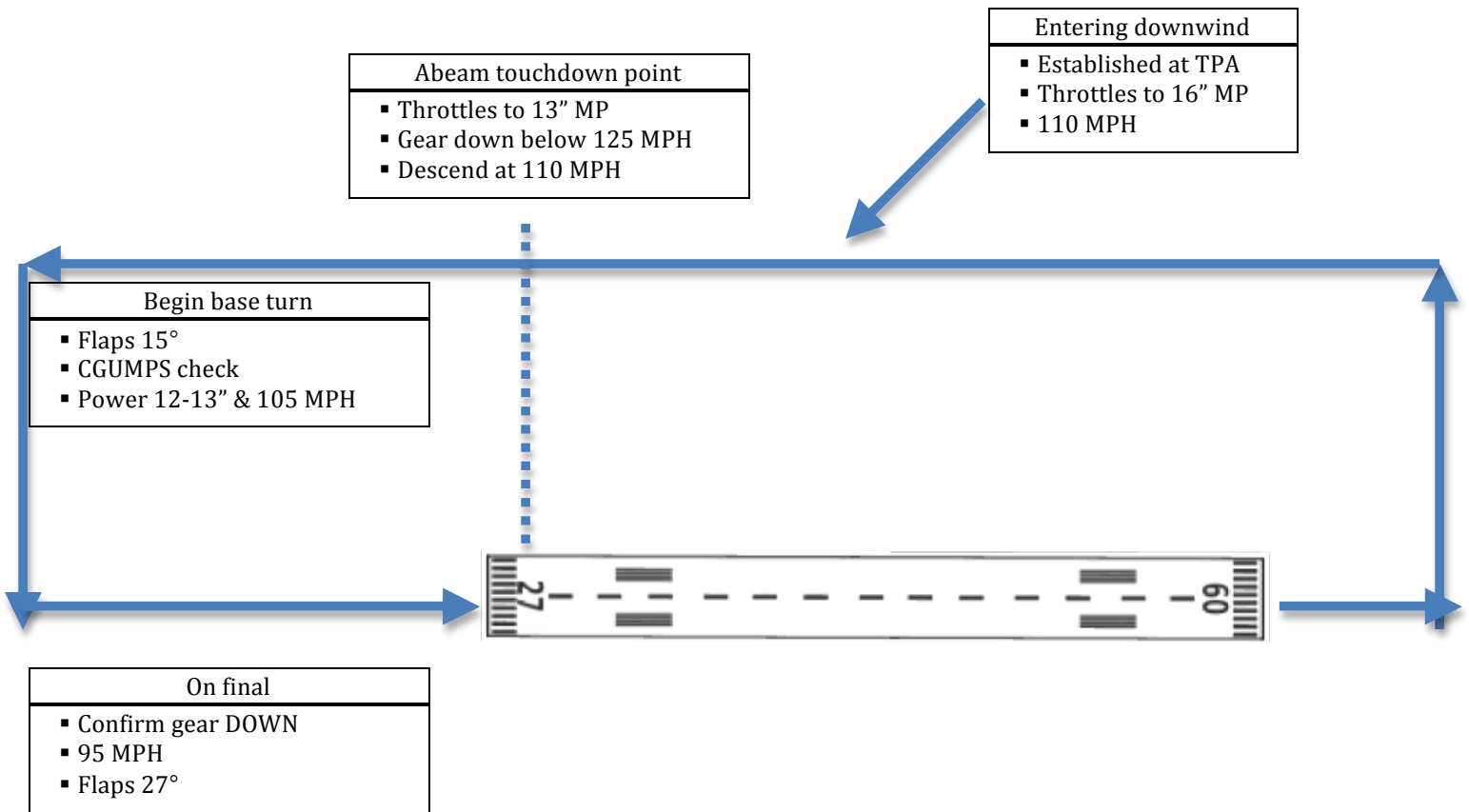
Normal Takeoff Procedure



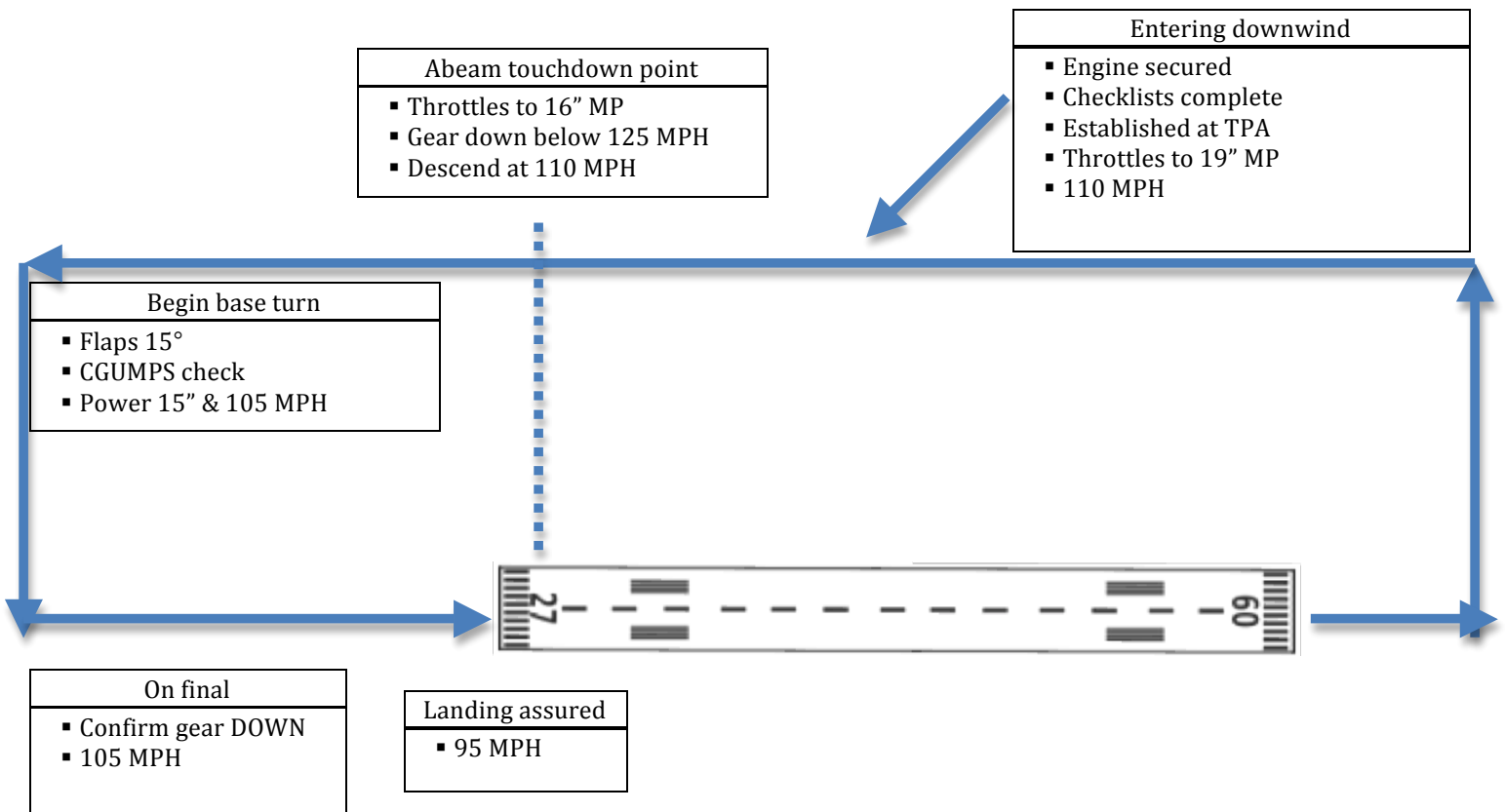
Aborted Takeoff Procedure Engine Failure on Takeoff



Normal Approach & Landing



Single-Engine Approach & Landing



Soft-Field Takeoff Procedure

- Yoke full aft
- Apply full throttle & check engine instruments
- "Airspeed alive"

- Remain in ground effect until V_{MCA}

- 1000' AGL or safe altitude
- Accelerate to en route climb 130 MPH
- Set climb power (25" MP & 2500 RPM)

- "Positive rate"
- Tap brakes, gear up
- V_Y 112 MPH

- 500' AGL
- Confirm gear & flaps up
- Fuel pumps off one at a time
- Complete climb checklist



- Before Takeoff*
- Takeoff checklist
 - Flaps 15°

- If decision to abort takeoff
- Throttles idle
 - Brakes as necessary
 - Inform tower when able

Short-Field Takeoff Procedure

- Hold brakes until 2000 RPM
- "Engine Instruments Green"
- Release brakes
- Increase to full throttle
- "Airspeed alive"

- V_R 80 MPH
- V_X 90 MPH

- Clear of obstacles
- Accelerate to V_Y 112 MPH
 - Gear UP
 - Flaps UP

- 1000' AGL or safe altitude
- Accelerate to en route climb 130 MPH
- Set climb power (25" MP & 2500 RPM)

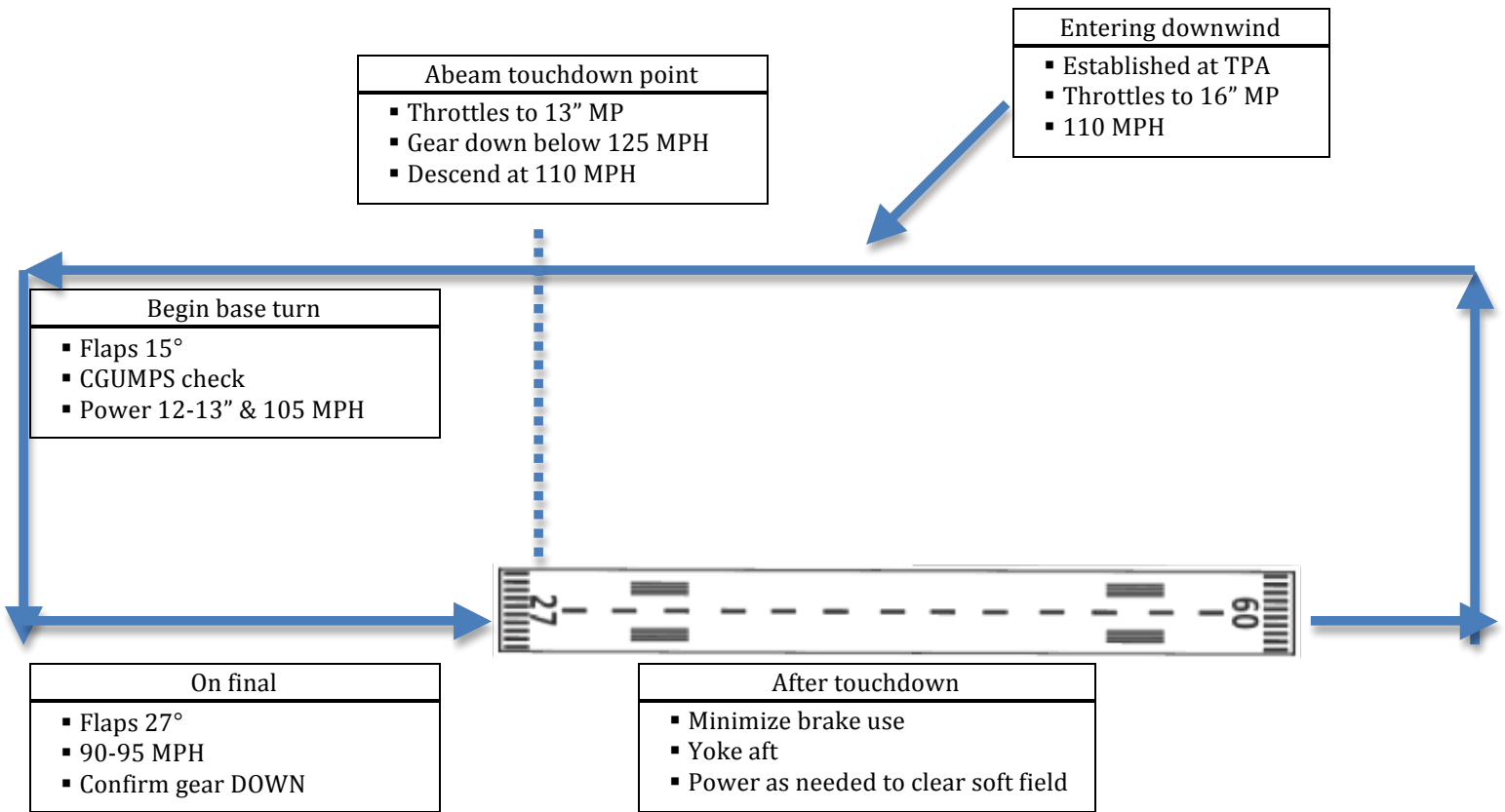
- 500' AGL
- Confirm gear & flaps up
- Fuel pumps off one at a time
- Complete climb checklist



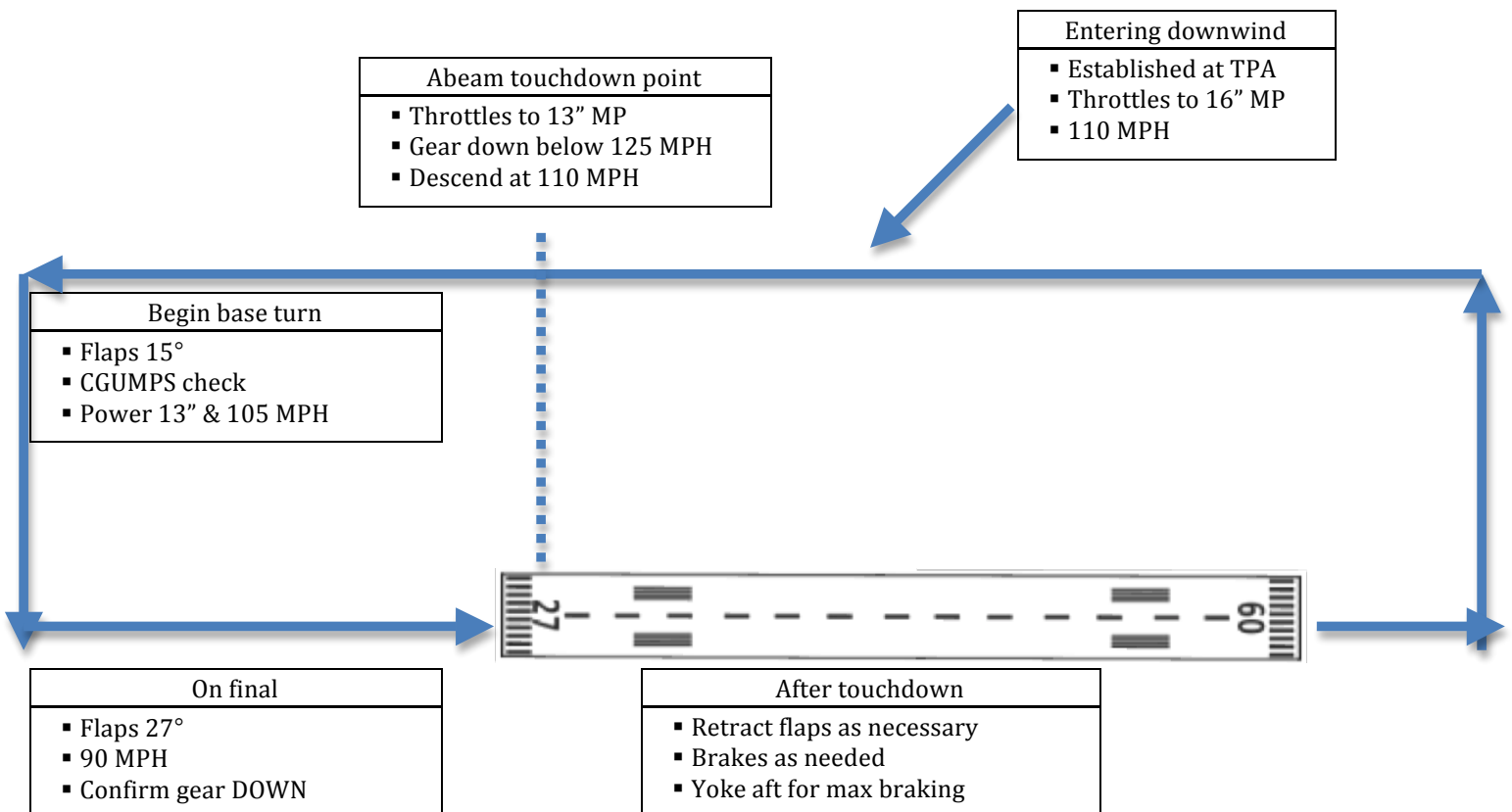
- Before Takeoff*
- Takeoff checklist
 - Flaps 15°

- If decision to abort takeoff
- Throttles idle
 - Brakes as necessary
 - Inform tower when able

Soft-Field Approach & Landing



Short-Field Approach & Landing



Slow Flight

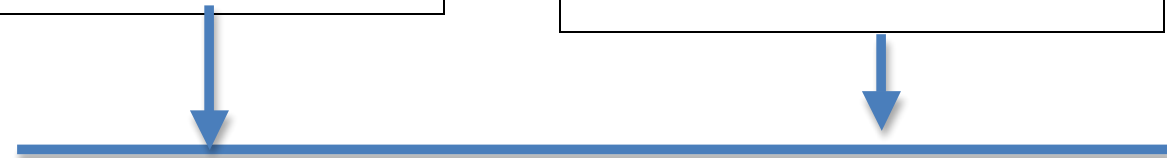
CHAPS checklist

- Clear the area
- Heading – select reference
- Altitude – not below 3000' AGL at any time
- Place to land – select emergency landing site
- Setup – Complete Before Landing Checklist

- Throttles to 12" MP & 2400 RPM
- Gear DOWN below 125 MPH
- Flaps down below 100 MPH
- Airspeed 80 MPH (stall light)
- Approx 16" MP to hold altitude

Recovery

- Reduce pitch and apply 24" MP
- Reduce flaps to takeoff position
- Positive rate, Gear UP
- Flaps UP
- Complete Cruise Checklist



Power-off Stall (approach to landing stall)

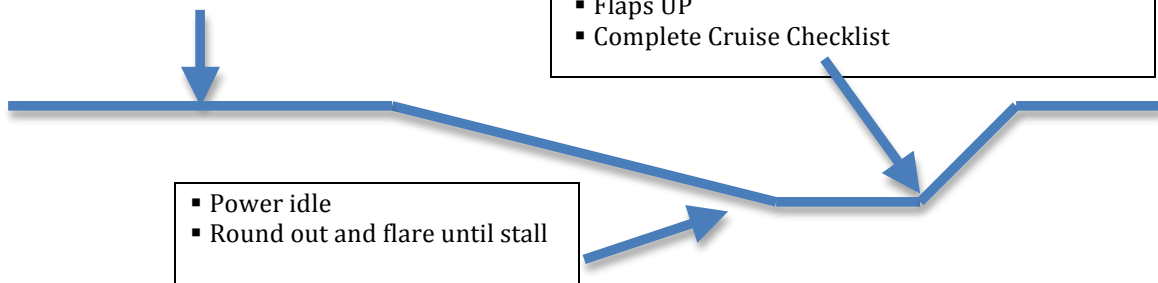
CHAPS checklist

- Clear the area
- Heading – select reference
- Altitude – not below 3000' AGL at any time
- Place to land – select emergency landing site
- Setup – Complete Before Landing Checklist

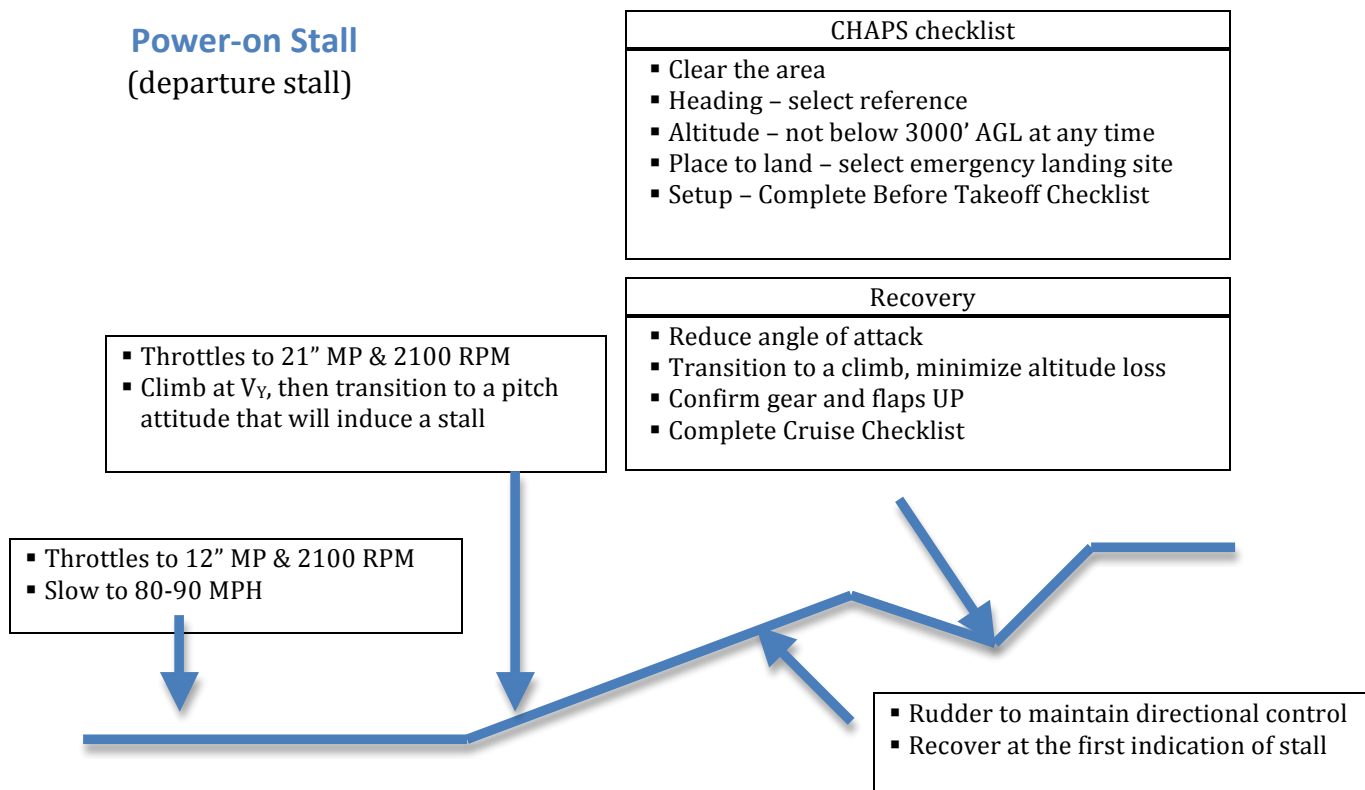
- Throttles to 12" MP & 2400 RPM
- Gear DOWN below 125 MPH
- Flaps down below 100 MPH
- Descend at 95 MPH

Recovery

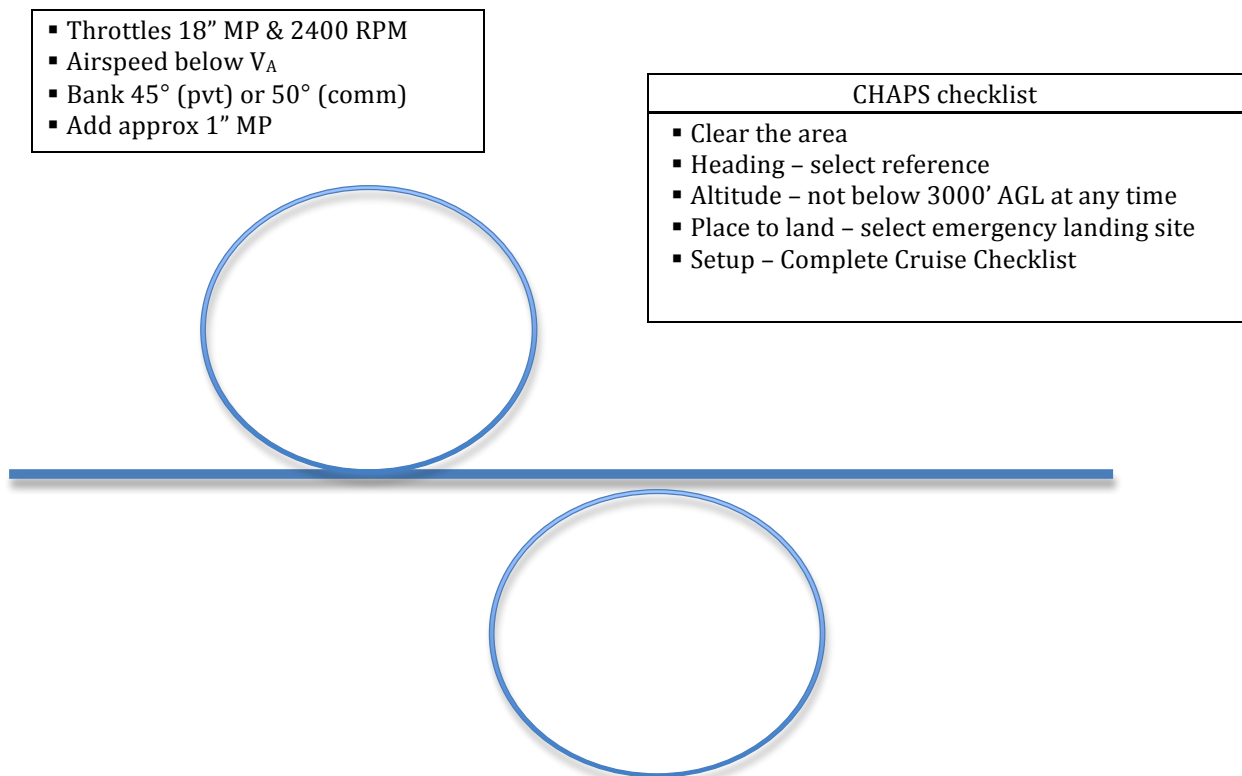
- Reduce angle of attack
- Apply full power
- Pitch for climb, minimize altitude loss
- Reduce flaps to takeoff position
- Positive rate, Gear UP
- Flaps UP
- Complete Cruise Checklist



Power-on Stall (departure stall)



Steep Turns

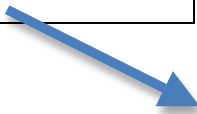


V_{MCA} Demo

- Throttles to 12" MP
- Mixtures RICH
- Props FULL FWD
- Left throttle IDLE
- Right throttle FULL FWD



- Slowly increase pitch to decelerate
- Max 5 bank into operating engine



First indication of loss of directional control or stall

- Reduce angle of attack & operating throttle
- Once above redline, full throttle on operating engine
- Recover to blue line or level flight
- Complete Cruise Checklist



CHAPS checklist

- Clear the area
- Heading – select reference
- Altitude – not below 3000' AGL at any time
- Place to land – select emergency landing site
- Setup – Complete Before Takeoff Checklist

Emergency Descent

- Seatbelts & Harnesses
- Throttles IDLE
- Props FULL FWD
- Cowl flaps CLOSED
- Gear DOWN below 150 MPH



- Descend w/airspeed below 150 MPH
- Use bank as appropriate to spoil vertical lift

CHAPS checklist

- Clear the area
- Heading – select reference
- Altitude – not below 3000' AGL at any time
- Place to land – select emergency landing site
- Setup – Complete Appropriate Checklist
- Sim Eng Fire, Oxygen Failure, etc.

Recovery (w/operating engines)

- Wings level
- Gear UP
- Mixtures RICH
- Throttles SLOWLY INCREASE
- Cowl flaps OPEN
- Complete Cruise Checklist

