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- Bookings, Questions

#### Review

- How do we establish a nose-up/down attitude?
- What external references change how?
- Which instruments change how?
- How do we maintain heading in straight flight?
- How do we maintain altitude in level flight?

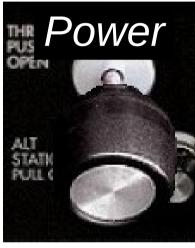
## Part I – Basic Climbing and Descending

- Attitude, Power, Trim (APT)
- Basic Climbs and Leveling Off
- Power, Attitude, Trim (PAT)
- Basic Power-off Descents and Leveling Off
- Instruments



#### Establishing a Basic Climb







- In cruise-attitude lookout ahead and above
- Establish nose-up attitude
- Apply full power maintaining nose-up attitude
- Keep straight and control yaw with rudder
- Trim and continue to monitor airspeed and altitude



## Maintaining a Basic Climb





- Adjust attitude to attain desired climb airspeed
- Re-trim after complete attitude adjustment



### Leveling Off from a Basic Climb



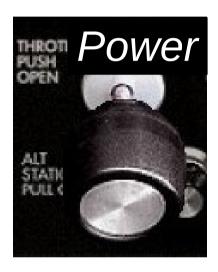




- Establish cruise attitude at desired target altitude
- Accelerate to cruise airspeed
- Reduce power maintaining cruise attitude
- Keep straight and control yaw with rudder
- Trim and continue to monitor airspeed and altitude



### Establishing a Basic Descent







- In cruise attitude lookout ahead and below
- Reduce power to idle
- Keep straight and control yaw with rudder
- Decelerate to descent airspeed maintaining attitude
- Establish nose-down attitude and trim



#### Maintaining a Basic Descent





- Adjust attitude to attain desired descent airspeed
- Re-trim after complete attitude adjustment



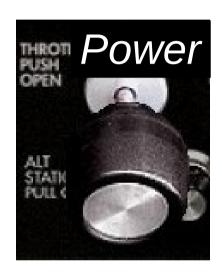
#### Estimating the Glide Path



- References that move up cannot be overflown
- References that move down can be overflown
- References that remain steady are on glide path



### Leveling Off from a Basic Descent







- In nose-down attitude lookout ahead and above
- Increase power to cruise power setting
- Establish cruise attitude and accelerate to cruise airspeed
- Keep straight and control yaw with rudder
- Trim and continue to monitor airspeed and altitude



#### Instruments







- Airspeed is the main reference instrument
- Monitor airspeed, vertical speed and altitude



# Summary / Quiz

- Mentally perform a basic climb and level off and state all required actions.
- Mentally perform a basic power-off descent and level off and state all required actions.



# Pre-Flight Briefing