

Basic Attitude Instrument (BAI) Outline:

Maneuver	Scan Technique	Control Description (Pitch, Bank, Power)
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Straight and Level

Entry	Pitch/Performance	Pitch $\sim 2^\circ$, Power 2300rpm
Maintain	Primary/Supporting	Altimeter, Heading, Tach
Recovery	Pitch/Performance	N/A

Airspeed Changes in Level Flight

Entry	Pitch/Performance	Slowing Down: Power 1500rpm, Pitch increase steadily, add trim nose-up Speeding Up: Power FULL, Pitch decrease steadily, add trim nose-down
Maintain	Primary/Supporting	Altimeter, Heading, Airspeed 110 KIAS – 2450rpm 100 KIAS – 2300rpm 90 KIAS – 2150rpm 80 KIAS – 2000rpm 70 KIAS – 1850rpm
Recovery	Pitch/Performance	Pitch smoothly $\sim 2^\circ$, Power 2300rpm

Standard Rate Turns

Entry	Pitch/Performance	Bank increase to 15° , pitch increase slightly
Maintain	Primary/Supporting	Altimeter, TC, Tach
Recovery	Pitch/Performance	Roll out smoothly $\frac{1}{2}$ bank angle before assigned heading

Constant Airspeed Climb

Entry	Pitch/Performance	Pitch increase, Power FULL 62 KIAS – 12° Pitch up (V_X) 74 KIAS – 10° Pitch up (V_Y) 85 KIAS – 8° Pitch up ($V_{\text{Cruise Climb}}$)
Maintain	Primary/Supporting	Airspeed, Heading, Tach
Recovery	Pitch/Performance	Pitch steadily reduce to $\sim 2^\circ$, Power 2300rpm

Constant Rate Climb

Entry	Pitch/Performance	Pitch increase 5° , Power FULL
Maintain	Primary/Supporting	VSI, Heading, Tach
Recovery	Pitch/Performance	Pitch steadily reduce to $\sim 2^\circ$, Power 2300rpm

Constant Airspeed Turning Climbs

Entry	Pitch/Performance	Pitch increase, Bank increase to 10° 62 KIAS – 12° Pitch up (V_X) 74 KIAS – 10° Pitch up (V_Y) 85 KIAS – 8° Pitch up ($V_{Cruise\ Climb}$)
Maintain	Primary/Supporting	Airspeed, TC, Tach
Recovery	Pitch/Performance	Roll out smoothly ½ bank angle before assigned heading, Pitch steadily reduce to ~2°, Power 2300rpm

Constant Rate Turning Climbs

Entry	Pitch/Performance	Pitch increase 5°, Bank increase to 10°, Power FULL
Maintain	Primary/Supporting	VSI, TC, Tach
Recovery	Pitch/Performance	Roll out smoothly ½ bank angle before assigned heading, Pitch steadily reduce to ~2°, Power 2300rpm

Constant Airspeed Descent

Entry	Pitch/Performance	Pitch -1°, Power 1800 - 1900rpm
Maintain	Primary/Supporting	Airspeed, Heading, Tach
Recovery	Pitch/Performance	Pitch steadily increase to ~2°, Power 2300rpm

Constant Rate Descent

Entry	Pitch/Performance	Pitch -1°, Power 1800 - 1900rpm
Maintain	Primary/Supporting	VSI, Heading, Tach
Recovery	Pitch/Performance	Pitch steadily increase to ~2°, Power 2300rpm

Constant Airspeed Turning Descent

Entry	Pitch/Performance	Pitch -1°, Bank 15°, Power 1800 - 1900rpm
Maintain	Primary/Supporting	Airspeed, TC, Tach
Recovery	Pitch/Performance	Roll out smoothly ½ bank angle before assigned heading, Pitch steadily increase to ~2°, Power 2300rpm

Constant Rate Turning Descent

Entry	Pitch/Performance	Pitch -1°, Bank 15°, Power 1800 - 1900rpm
Maintain	Primary/Supporting	VSI, TC, Tach
Recovery	Pitch/Performance	Roll out smoothly ½ bank angle before assigned heading, Pitch steadily increase to ~2°, Power 2300rpm