

Exercise 7 - Climbing

Aim: To learn how to climb at a given speed,

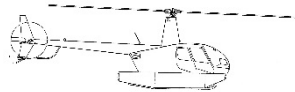
T.E.M.: Lookout, Carb Heat, T's & P's, Direction, Control Handover



CLIMBING

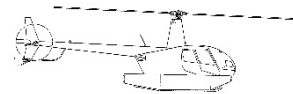
Optimum Climb Speed
Best Rate of Climb Speed
Best Angle of Climb Speed

60 knots
55 knots
as required



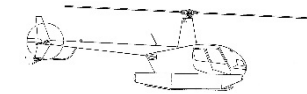
Before Climb

80 knots, 21" M.A.P.
Straight & Level
Lookout Above



Climb

70 knots 23" MAP.
Attitude – Cyclic Aft to 70 knots
Power – Collective Up to 23" MAP.
Trim – Left Pedal to maintain heading



Level Off

Anticipate 10% Rate of Climb
80 knots 21" MAP
Attitude – Cyclic Forward to 80 knots
Power – Collective Down to 21" MAP.
Trim – Right Pedal to maintain heading

ATTITUDE

POWER

TRIM

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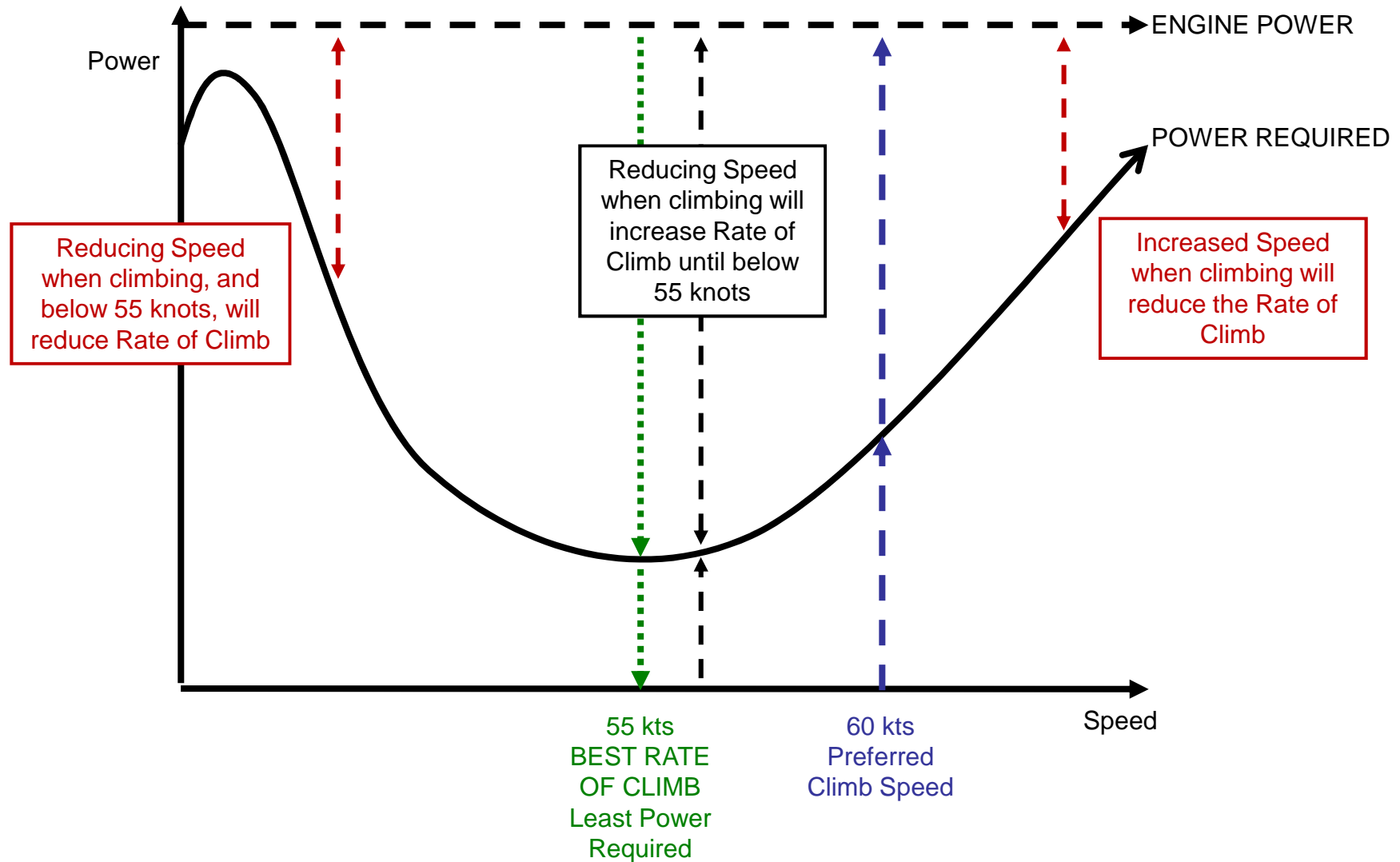
Aim: To learn how to climb at a given speed,
Instruments



Exercise 7 - Climbing

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Airmanship: Lookout, Carb Heat, T's & P's, Direction, Control Handover





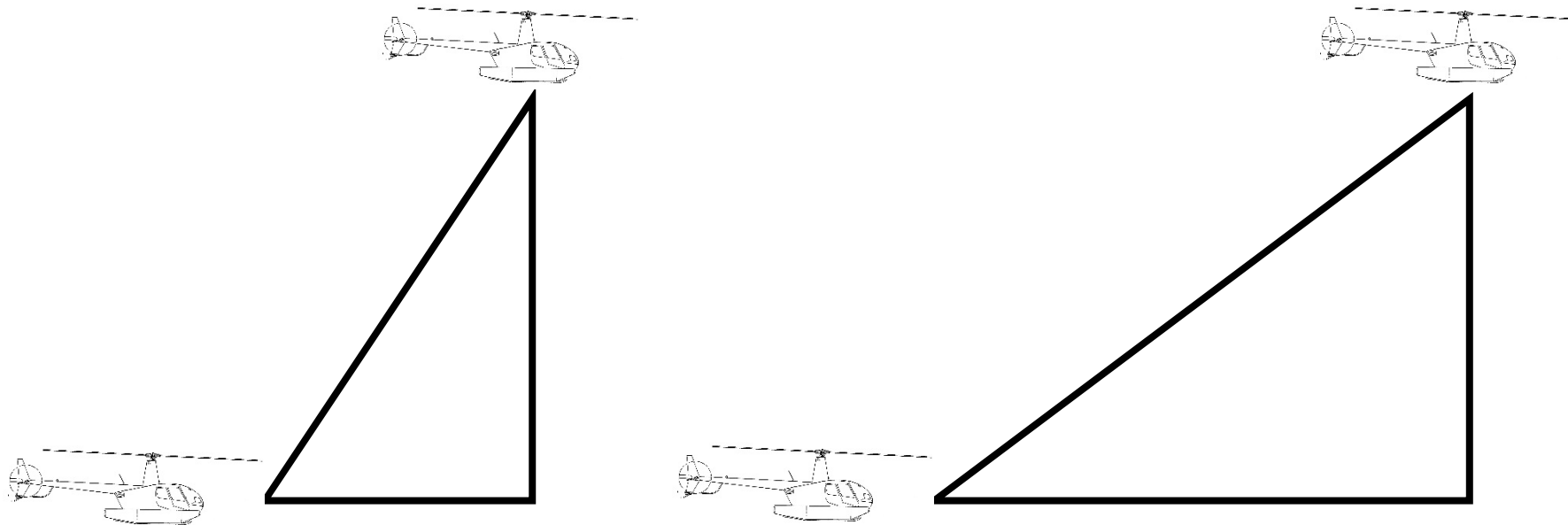
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Changes in Rate of Climb:

Turning whilst climbing will reduce Rate of Climb



Best Angle of Climb – the SHORTEST distance over the ground to reach a certain altitude.

Dependant on difference between power available and power required.

Best Rate of Climb – the TIME to reach a certain altitude

R44 Best Rate of Climb Speed = 55 kts



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PPL (H) Test Tolerances & Standards – Document 19H

PPL (H) TEST TOLERANCES

HEIGHT: +/- 150 ft
HEADING: +/- 10°
SPEED: +/- 15 KTS

SECTION 4:

(b) Climbing and descending turns to specified headings

- * *Establish climb/descent and rate 1 turns onto nominated height and headings*
- * *Control helicopter altitude, and heading using visual attitude flying techniques*
- * *Maintain directional control and balance throughout*
- * *Complete all necessary checks and drills throughout*
- * *Maintain lookout throughout*



Climbing – Common Errors

- LOOKING INSIDE TOO MUCH – Use the outside horizon and visual clues.
- Chasing the instruments – this happens when you look inside too much!!!
- Balance & Yaw – Slow feet