



VICTORIA FLYING CLUB

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# Part I – Gentle and Medium Turns

- Review Banked Attitudes
- Motivation and Definition
- Initiating, Maintaining and Recovering Coordinated **Gentle** and **Medium Level Turns**
- Summary and Questions
- Pre-Flight Briefing



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# Review Banked Attitudes

- Mentally establish a **banked attitude** and state all required actions.
- How do we maintain **coordinated** flight while in a banked attitude?
- What is **adverse yaw** and how is it caused?



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# Gentle and Medium Level Turns



- **Gentle** level turns – up to **15°** bank angle
- **Medium** level turns – **15°** up to **30°** bank angle
- **Heading** changes maintaining a **constant altitude**



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# Initiating a Coordinated Level Turn



- Perform **lookout** in **cruise attitude** before initiating a turn
- Establish (roll into) a **banked attitude** using **aileron**
- Apply **rudder** *as required* to remain **coordinated**
- Center **aileron** after **banked attitude** is established





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# Maintaining a Coordinated Level Turn

*Corrections*



*References*

*Lookout*



- Apply **elevator** as required to maintain constant **pitch attitude**
- Apply **aileron** as required to maintain constant **bank attitude**
- Apply **rudder** as required to maintain **coordinated turn**
- Establish cockpit references for distances and intersections



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# External References



- Continue to **lookout** and observe **references** during turn
- **Horizon** remains the primary attitude reference
- Nose moves *steadily* along the horizon neither rising or falling
- **Landmarks** can be used to establish headings



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# Recovering a Coordinated Level Turn



- Continue to **lookout** observing **references** during recovery
- Turns need to be recovered **anticipatory** – *half the bank angle*
- Establish (roll back into) **cruise attitude** using **aileron**
- Control **yaw** with **rudder** as *required* to remain **coordinated**
- Adjust **cruise attitude** and **trim**





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# Instruments

*Attitude Indicator*

*Airspeed Indicator*

*Altitude Indicator*



*Turn Coordinator*

*Vertical Speed Indicator*

*Heading Indicator*

- **Turn coordinator** and **heading indicator** indicate turning
- **Vertical speed indicator** and **altimeter** remain *steady*
- **Airspeed indicator** decreases *slightly*
- **Attitude indicator** confirms outside reference (angle markings)



## Summary / Quiz

- What controls are to be used to maintain a coordinated level turn and what do they achieve individually?
- Mentally perform the entry to a medium (30° bank angle) coordinated level turn describing all required actions.
- Mentally perform the recovery from a medium (30° bank angle) coordinated turn describing all required actions.
- Why does the amount of rudder application change depending on the angle of bank during turns?



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# Pre-Flight Briefing

- Exercise
- Training Area
- Departure and Arrival Procedures
- Weather Briefing / NOTAMs
- Aircraft and Documents
- Time and Fuel Requirements
- Safety Considerations and Responsibilities



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# Additional Materials

- Additional materials for turns
- Flight Instructor Guide – Exercise 9, Lesson Plans 2, 7, 8





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# Overbanking

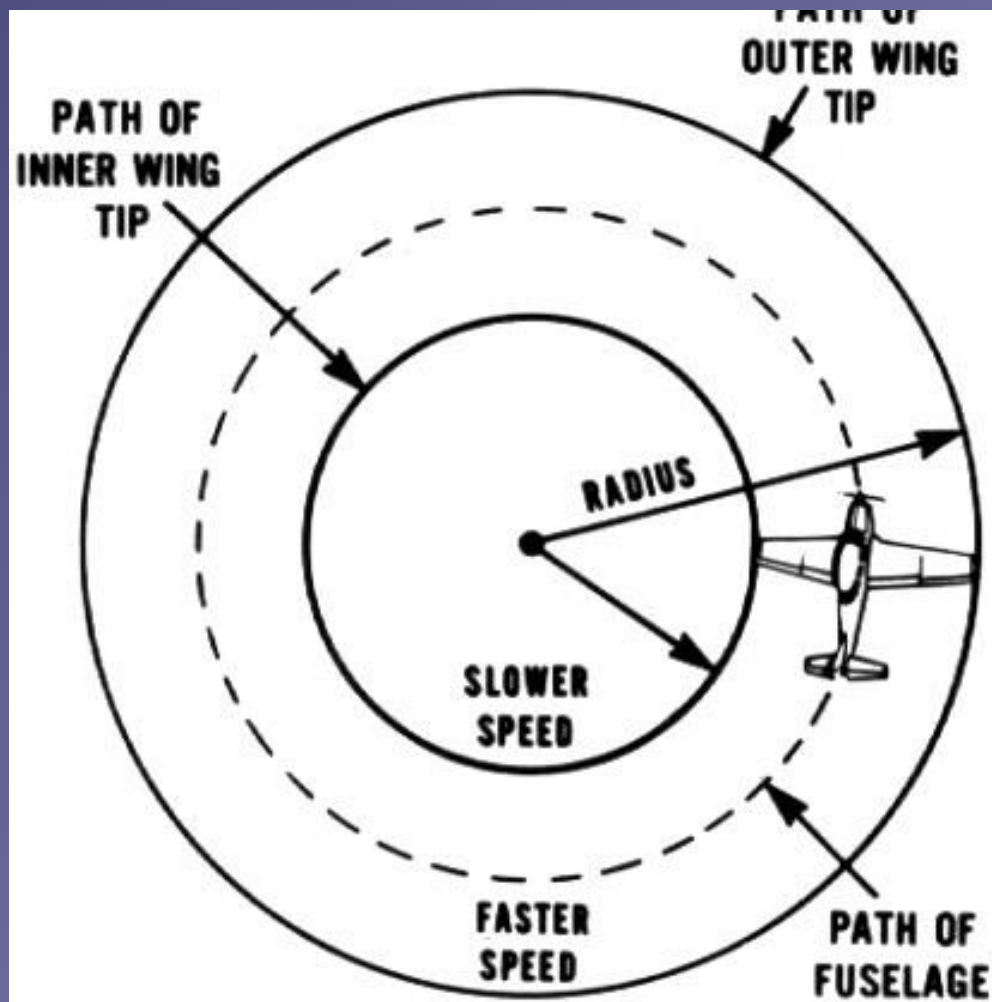


Figure 6-7 Cause of Overbanking Tendency