Contact Information

- Stephan Heinemann
- SMS: +1 (250) 891-5446
- Email: stephan.heinemann@hotmail.com
- Bookings, Questions

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

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?



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



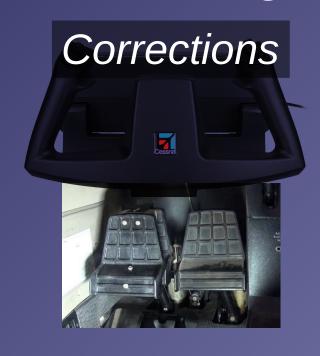
Initiating a Coordinated Level Turn





- 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

Maintaining a Coordinated Level Turn





- 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



External References





- Continue to lookout and observe references during turn
- Horizon remains the primary attitude reference
- Nose moves steadily along the horizon neither rising nor falling
- Landmarks can be used to establish headings

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

Instruments

Attitude Indicator

Airspeed Indicator

Turn Coordinator



Altitude Indicator

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?

Pre-Flight Briefing

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

Additional Materials

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

Overbanking

