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Abbreviations:

AFH – Airplane Flying Handbook
A/FD – Airport/Facility Directory
CPT – Cockpit Procedures Trainer
FAR – Federal Aviation Regulations
PCATD – PC-based Aviation Training Device
PTS – Practical Test Standards
POH – Pilot’s Operating Handbook

Unit 6. Ground. Basic Aerodynamics, Stability, Stalls, Slow Flight, Spins

References:

Jeppesen Ch. 3B, 8B

POH

PTS

Course Materials

Quiz # 3 Grade:

| | Date |
|---|------|
| Stability | |
| Static Stability | |
| Dynamic Stability | |
| | |
| Wing Stability | |
| | |
| Airplane Balance in Flight | |
| Longitudinal Balance, Effect of CG and Power (Thrust Line Relatively To CG, Propwash) | |
| Lateral Balance, Effect of Fuel Load | |
| | |
| Stability in Flight | |
| Longitudinal Stability | |
| Lateral Stability | |
| Dihedral | |
| Keel Effect | |
| Sweepback | |
| Directional Stability | |
| | |
| Stability vs. Controllability | |
| | |
| Slow Flight | |
| Backside of Power Curve | |
| Speed Instability | |
| | |
| Performing Stalls | |
| Types of Stalls | |
| Power-Off Stall | |
| Power-On Stall | |
| Secondary Stall | |
| Elevator Trim Stall | |
| Accelerated Stall | |
| Crossed-Control Stall | |
| Procedures for Power-Off and Power-On Stalls | |

continued

Unit 15. Flight 5. Dual – Local. Communication, Slow Flight, Power-on Stalls

Complete

Reference:

AFH – Ch. 4. Power-on Stalls

Objective: Practice and improve communication skills and division of attention. Bring power-off stalls and slow flight to the PTS standards. Familiarize the student with power-on stalls.

| Briefing (0.5 hr): | Date | Date |
|--------------------------------|------|------|
| Review of Unit 12 as needed | | |
| Local communication procedures | | |
| Power-on stall | | |

Flight (1.5 hrs)

Review:

| | | |
|---------------------------------------|--|--|
| Normal or cross-wind takeoff | | |
| Collision avoidance procedures | | |
| Power-off stalls | | |
| Slow flight | | |
| Changing configuration in slow flight | | |
| After landing procedures | | |
| Post-flight procedures | | |

Introduction:

| | | |
|--------------------------------|--|--|
| Local communication procedures | | |
| Reporting points | | |
| Power-on stalls | | |

Completion Standards:

Power-off stalls and slow flight: to PTS standards

Power-on stalls: Heading: $\pm 20^\circ$

Instructor's comments: