

Commercial Pilot Stage 1 (Intermediate Flight)

Preparation. Students must have a completed Nav Log, Flight Plan, Weight and Balance, Performance Data, and all planning information completed and on-hand prior to Stage 1 Check scheduled time.

1-1) Cross Country Flight Planning

- Navigation Log Completion / Calculations
- 91.151 VFR Flight Fuel Requirements
- 91.159 Hemispherical Rule
- All Symbolology on Sectional Chart
- Demonstrate use of AFD
- Obtaining NOTAMs
- Obtaining Weather Briefing
- ~~Radio Facility Shutdown~~
- High Density Altitude Operations

1-2) Cross Country Flight

- Pilotage and Dead Reckoning
- Lost Procedures
- Diversion Procedures
- Non-towered Airport Procedures
- Low fuel Supply
- Radio and Instrument Failure

1-3) POH Emergency Procedures

- Complete understanding of POH Section 3

1-4) 61.133 & AC 120-12A Commercial Pilot Privileges / Limitations

- Holding out

1-5) 91.3 Pilot In Command (PIC) Responsibilities

1-6) 91.103 Preflight Actions

- N W K R A F T
- AIM 7-1-20 & 30 Weather Products – obtain and decipher each
- METAR
- TAF
- FA
- PIREP
- Winds Aloft

1-7) 91.126 Class G Airspace

Dimensions / Knowledge / Sectional Chart Depiction
Limitations
91.155 VFR Minimums
Radio Procedures
Required Equipment

1-8) 91.127 Class E Airspace

Dimensions / Knowledge / Sectional Chart Depiction
Limitations
91.155 VFR Minimums
Radio Procedures
Required Equipment

1-9) 91.129 Class D Airspace

Dimensions / Knowledge / Sectional Chart Depiction
Limitations
91.155 VFR Minimums
Radio Procedures
Required Equipment

1-10) 91.130 Class C Airspace

Dimensions / Knowledge / Sectional Chart Depiction
Limitations
91.155 VFR Minimums
Radio Procedures
Required Equipment

1-11) 91.131 Class B Airspace

Dimensions / Knowledge / Sectional Chart Depiction
Limitations
91.155 VFR Minimums
Radio Procedures
Required Equipment

1-12) 91.135 Class A Airspace

Dimensions / Knowledge / Sectional Chart Depiction
Limitations
Radio Procedures
Required Equipment

1-13) 91.205 VFR Required Equipment

Day

A T O M A T O F F L A M E S

Night

F L A P S

1-14) 91.213 Inoperative Instruments and Equipment

Minimum Equipment Lists

Operations with inoperative instruments and equipment

1-15) AIM 1-1-7 Global Positioning System (GPS)

Basic Structure

RAIM

Demonstrate Proficiency for VFR navigation

1-16) AIM 4-3-* Airport Operations

91.125 Light Gun Signals

Airport Markings and Signs

Runway Incursion / Hot Spots

Wind Shear Avoidance (PHAK 11-11 and AC00-50A)

AC 90-23G Wake Turbulence Avoidance

1-17) AIM 3-4-1 Special Use Airspace

Prohibited Areas

Restricted Areas

Warning Areas

Alert Areas

MOAs

Controlled Firing Areas

National Security Areas

AIM 3-5-3 Temporary Flight Restrictions (TFRs)

AIM 5-6-2 Basic Intercept Procedures

1-18) PHAK Aircraft Systems Descriptions (pgs. 6-7 – 6-11, 6-32 – 6-40)

Pressurized Cabin

Oxygen Systems

Engine De-icing Systems

Airframe De-icing Systems

1-19) PHAK Radio Navigation – VOR (pgs. 15-21 – 15-31)

Tune / Identify

Intercept / Tracking Direct to a VOR

Errors and Limitations

Voice over VOR procedures

Commercial Pilot Stage 2 (Complex Aircraft)

All areas in Stage 1 are inclusive. Students must have a completed Weight and Balance, Performance Data, and all planning information completed and on-hand prior to Stage 2 Check scheduled time.

2-1) POH Limitations and Capacities

Weight
Capacities
Fuel Grade (and colors)

2-2) POH Aircraft V Speeds and Definitions

V_{SO}	V_X	V_G
V_{S1}	V_Y	V_A
V_R	V_{FE}	V_{NO}
Liftoff	V_{LO} (extend)	V_{NE}
V_{LE}	V_{LO} (retract)	

2-3) POH Weight and Balance / Performance data

Demonstrate Calculations – Retractable Landing Gear
Power Settings

2-4) POH Aircraft Systems Descriptions (Special Attention Areas)

Landing gear
Constant Speed Propeller
High Tech Cockpit - Avidyne

2-5) 61.3 Required Pilot Documents

2-6) 61.23 Medical Certificates

Classes
Durations
Privileges

2-7) 91.417 Maintenance Records

Propeller Inspections

2-8) AFH & POH Emergency Operations (AFH Ch. 16)

Inflight Fire
Landing Gear Malfunctions
Primary Flight Display Failure

Commercial Pilot Stage 3 (EOC)

All areas in Stage 1 and 2 are inclusive. Students must have a completed Weight and Balance, Performance Data, and all planning information completed and on-hand prior to Stage 3 Check scheduled time. The EOC is performed in accordance with the current revision of the FAA Commercial PTS, and the listed stage 3 items are mentioned for study purposes only. The items listed below are items that are meant to be tested *in addition to* the items listed in Stage 1 and Stage 2.

The Practical Test Standards

Obtain and have on-hand

3-1) POH Aircraft Systems Descriptions

Complete understanding of POH Section 7

3-2) 61.51 Pilot Logbooks

Aeronautical experience
Solo time
Pilot In Command time
Logging as Safety Pilot (91.109)

3-3) 61.31 Pilot Endorsements (High Performance, High Altitude, Tail wheel)

3-4) 91.409, 91.411, 91.413 Aircraft Airworthiness Inspections

A V 1 A T E A

3-5) AIM 8-1-1 Aeromedical – Fitness For Flight

Personal Checklist – IM SAFE
Illness
Medication
Stress
Alcohol
Fatigue
Emotion
Motion Sickness (PHAK 16-11)
Dehydration (PHAK 16-12)

3-6) AIM 8-1-2, 3, 4 Aeromedical – Effects of Altitude

Hypoxia

 Hypoxic (PHAK 16-12)

 Hypemic (PHAK 16-12)

 Histotoxic (PHAK 16-13)

 Stagnant (PHAK 16-13)

Middle Ear and Sinus Factors

Effects of SCUBA diving

Hyperventilation

CO Poisoning

3-7) AIM 8-1-5 Illusions in Flight

Spatial Disorientation (PHAK 16-5)

Vestibular Disorientation

 Leans

 Coriolis Illusion

 Somatogravic Illusion

 Inversion Illusion

 Graveyard Spiral

Autokinesis

False Horizons

Landing Illusions

3-8) PHAK Special Flight Permit (pg. 8-12)

3-9) PHAK Airworthiness Directives (pg. 8-12 – 8-13)