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INSTRUMENT PILOT SYLLABUS

Study Materials

Instrument Flying Handbook (FAA-H8083-15)
Aviation Weather (AC006A)
Gleim Instrument Pilot Test Guide
Jeppesen Airway Manual (local)
FAR/AIM

Self Study 1

Instrument Flying Handbook

- Chapter 1 Human Factors
- Chapter 2 Aerodynamic Factors
- Chapter 3 The Flight Instruments
- Chapter 4 Attitude instrument Flying
- Chapter 5 Basic Flight Manuevers

Gleim instrument Pilot

- Chapter 1 Airplane Instruments
- Chapter 2 Attitude Instrument Flying and Aerodynamics

Ground 1 (1.5 hr)

1. Theory of instrumentation
 - a. mag compass, pitot static & gyro instrument mechanics
 - b. malfunctions.
2. Instrument scanning
 - a. FOE errors
 - b. pitch vs power vs bank inst.
 - c. primary & supporting inst.
 - d. control vs performance inst.

FLIGHT TASK GROUPING 1

1. BAI
 - a. Instrument climb, turns, descents, straight and level
 - b. multitasking radios, checklists
2. Intercept, track, step down on cue
 - a. VOR
 - b. GPS
 - c. LOC
 - d. ILS

Self Study 2

Instrument Flying Hand book

- Chapter 6 Holding and Instrument Approaches
- Chapter 7 Navigation Systems
- Chapter 8 The National Airspace System
- Chapter 9 The ATC System

Gleim Instrument Pilot

- Chapter 3 Navigation Systems
- Chapter 6 Holding and Instrument Approaches

Ground 2 (2.0 hours)

1. Plate symbology
2. How to brief an approach
3. Course reversals
4. Circling apps
5. Missed approaches
6. Holds

Ground 3 (1.5 hours)

1. ATC system
 - a. clearances, flight plans
 - b. who's who
2. GPS Operations
3. NDB Operations

FLIGHT TASK GROUPING 2

1. Instrument departure
2. VOR approach guided introduction
 - a. terminal
 - b. nonterminal
3. GPS approach guided introduction
4. ILS approach guided introduction
5. Localizer approach guided introduction

Self study 3

Instrument Flying handbook

Chapter 10 IFR Flight

Gleim

Chapter 4 Federal Aviation Regulations
 Chapter 5 Air Traffic Control and Airspace
 Chapter 10 IFR En Route

Ground 4 (3 hr)

1. Alphabet soup
 MDA/DA, MDH/DH, MA, MVA, MEA, MOCA, COP, MCA, MRA, MORA,
 Grid MORA, OROCA
2. Low enroute symbology
3. VOR nav aids
 - a. infrastructure
 - b. use
4. ILS
 - a. infrastructure
 - b. use
5. descending below DA/MDA
6. alternate
 - a. filing
 - b. authorization
 - c. app/wx mins
 - d. diversion and use
7. special clearances
 - a. visual vs contact app
 - b. side step
 - c. converging ILS
 - d. LAHSO
 - e. cruise, block and VFR on top clearances
 - f. SIDS/STARS, AP/DP
8. lost coms

9. IFR equipment, inspections, and currency

FLIGHT TASK GROUPING 3

1. Instrument departure
2. VOR approach Supervised practice
3. GPS approach Supervised practice
4. ILS & Localizer approach Supervised Practice

Self Study 4

Instrument Flying Handbook

Chapter 11 Emergency Operations

Gleim instrument Pilot

Chapter 7 Aeromedical

Chapter 11 IFR Flights

Ground 5 (1.0hr)

1. mag compass error reveiw
2. partial panel technique
3. compass vs timed turns
4. DME ARcs
5. unusual attitudes
6. aeromedical

FLIGHT TASK GROUPING 4

1. Long local & short crosscountry IFR trips
VOR, GPS, ILS apps
2. Partial panel local approaches

FLIGHT TASK

1. Long IFR cross country

Self Study 5

Aviation Weather

Chapter 8 Air Masses and Fronts

Chapter 9 Tubulence

Chapter 10 Icing

Chapter 11 Thunderstorms

Chapter 12 Common IFR producers

Gleim Instrument Pilot

Chapter 8 Aviation Weather

Chapter 9 Aviation Weather Services

Ground 6 (1.5 hr)

1. Wx services
2. Hazards

REVIEW FLIGHT TASK GROUPING

Full and Partial Panel Precision and nonprecision approach
Holds
DME Arcs
Instrument steep turns
Unusual attitudes