

Instrument Competency Check Plan And Checklist

Pilot Information

Name: _____ Pilot Certificate No: _____

Certificate and Rating: _____

Date of Last Check: _____

Class of Medical: _____

Total Time: _____ Time in Type Aircraft: _____

Total Instrument Time: _____ Simulated: _____ Actual: _____ Simulator: _____

Aircraft to be Used: _____ Registration No. _____

Location of Check : _____

Knowledge Portion Outline

- When is an instrument rating required?
 - Class A Airspace
 - IMC Conditions
 - IFR Flight Rules
- IFR recency-of-experience requirements
- IFR Fuel Requirements
 - 45 minutes to destination. If alternate is required to destination then to alternate plus 45 minutes at cruise power
- IFR Aircraft Equipment (grab card)
 - Generator, Radios, Altimeter, Ball and skip indicator, clock with second hand, AI, rate of turn indicator, DG
- NOTAMs
- Systems
 - Pitot Static
 - Altimeter
 - Theory of operation
 - Errors
 - Allowable error for IFR flight (+/- 75ft)
 - Airspeed indicator
 - Theory of operation
 - VSI
 - Theory of operation
 - Errors (lags)
 - Vacuum System
 - Which instrument operate on vacuum

- Electric Gyro
 - Which instruments operate on electricity
- Magnetic Compass
 - UNOS
 - ANDS
- GPS
 - Theory of operation
 - RAIM (*Receiver Autonomous Integrity Monitoring*)
 - 4 to compute position solution
 - 5 to find fault
 - 6 to isolate fault
 - IFR updates
- Weather
 - How to obtain a weather briefing
 - in flight
 - Fronts
 - Icing
 - types
 - frost, rime, clear, mix
 - avoidance
 - escaping
 - tailplane icing symptoms and recovery
 - wing icing symptoms and recovery
- Flight Plan
- Getting an IFR clearance
 - Airport with tower

- ♦ Clearance Delivery, Ground, Tower
- From FSS with an RCO
- From FSS via telephone
 - ♦ Void time
- Airborne clearance when in class E airspace while remaining IFR
- Things that must be reported to ATC during flight
 - Loss of any Nav Equipment
 - Loss of radio
 - Changing altitudes (including VFR on top)
 - When unable to climb at 500fpm
 - Missed approach
 - Changes of filed airspeed of more than 5% or 10knts
 - Time and altitude after reaching a hold point
 - Leaving a hold point
 - Hazardous or unforecast weather
 - When not in radar contact
 - ♦ Leaving final approach fix inbound (non-precision) or outer marker (precision)
 - ♦ ETA error of 3min
- Alternate airport requirements (1-2-3)
 - 1 hour before and after planned ETA, less than 2000ft ceiling, visibility less than 3SM
 - Alternate airport minimums:
 - ♦ Published alternate minimums
 - ♦ With precision approach: forecast 600ft ceiling, 2SM visibility
 - ♦ Without precision approach: forecast 800ft ceiling, 2SM visibility
 - ♦ No instrument approach, VFR descent and land from MEA

- DP/STAR
 - How to read
 - How to avoid one
 - What is needed to accept one
 - Takeoff minimums
 - Part 135, 121, 129
 - ≤ 2 engines 1Sm
 - >2 engines $1/2$ Sm
 - Standard Gradient in DPs
 - 200ft/NM
 - How to calculate
- VOR accuracy
 - ± 4 degrees on VOT, ground check, dual check
 - ± 6 degrees on airborne checks
 - Where to record
- MEA MOCA
 - If not published: 2000ft within 4NM in mountainous terrain; otherwise 1000ft within 4NM
- Altitudes (ONE)
 - 0 to 179 Odd thousands
 - 180 to 359 Even thousand
- VFR on top
 - Why?
 - Highest altitude
 - Use VFR altitudes
 - Comply with MEA

- Holding
 - Types
 - EFC
 - Standard direction and length
- Loss of Communication procedures
 - Continue on flight plan
 - If in VMC, land
 - Squawk 7600
- Contact Approach
 - 1SM visibility
 - 1SM at destination
 - Requested by the pilot
- *Enroute charts*
- IAP
 - Reading
 - DME Arcs
 - Lead radial
 - GPS substitution for compass locator
 - NDB approach
 - MDA
 - DH
 - VDP
 - Straight in minimum
 - 30 degrees from runway heading
 - If visual contact is lost during circling approach
 - Make a turn towards the runway

Instrument Competency Check

- ♦ establish course on the missed approach and
 - ♦ execute missed approach
- Inoperative components
- No Gyro (ASR) Approach

Skill Portion

- Instrument cockpit check
 - Intercepting/Tracking VOR *Location* _____
 - Steep Turns
 - Recovery from Unusual Attitudes
 - Basic Attitude Instrument Flying
 - VOR Approach *Location* _____
 - NDB/GPS Approach *Location* _____
 - ILS Approach *Location* _____
 - Partial Panel Non-Precision Approach *Type* _____ *Location* _____
 - Holding Procedures *Location* _____
 - Missed Approach Procedures
 - Circling Approaches
 - Simulated Engine-outs (multi-engine only)
 - Other:
-

Overall Completion of Competency Check

Ground Portion : _____

Simulator Time : _____

Flight Time : _____

Remarks:

Signature of CFI

Date

Certificate No.

Expiration Date

I have received an instrument competency check which consisted of the knowledge and skill demonstration of the procedures noted.

Signature of the Pilot

Date