

# AFI INSTRUMENT PROFICIENCY CHECK

WHEN ONCE YOU HAVE TASTED FLIGHT, YOU WILL FOREVER WALK THE EARTH WITH YOUR EYES TURNED SKYWARD, FOR THERE YOU HAVE BEEN, AND THERE YOU WILL ALWAYS WANT TO BE.

LEONARDO DAVINCI



flyafi.com 714 773.0741

Customer Name: \_\_\_\_\_

IPC Instructor: \_\_\_\_\_

Aircraft to be used: \_\_\_\_\_

Customer Information:

Total Time: \_\_\_\_\_

Time in Model of Aircraft: \_\_\_\_\_

Current Ratings Held: \_\_\_\_\_

\_\_\_\_\_

Current Medical Certificate: \_\_\_\_\_

Last Flight Date: \_\_\_\_\_



## **Before you start your training...**

Thanks for choosing AFI for your IPC. It is our intent to provide you with the best instruction possible and to help you walk away with a full understanding of instrument procedures. We are proud of our safety record and quality of training and we are convinced that you too will think these are important. We are glad you have chosen fly with us here at AFI, we hope you enjoy your experience.

In this packet of information you will find a suggested student schedule. Schedule your instructor and aircraft in accordance with this outline unless your instructor tells you otherwise. We assume that it has been a while since you have done any instrument flying. If you are reasonably current VFR, you should expect that this endorsement will take you between 10-15 hours instruction including ground, simulator and flight time. There is no FAA mandated requirement, however, we find that in this complex airspace in which we live, it usually takes about this long for you to feel competent again. If you come prepared for each flight you will get the most out of each session.

On your scheduled lesson day, please arrive 30 minutes early. This will allow time for you to obtain the current weather, fill out your dispatch sheet, and complete any other preparations needed for the flight. At around 20 minutes before the hour, your airplane will arrive from its previous lesson. You will then be able to go to your airplane and begin the preflight check. This will take about 15 minutes so you should be ready to meet your instructor at the appointed time.

When you fly, you will be billed for three things. First, the time the airplane engine is running which is taken from the hour meter inside the airplane known as the Hobbs meter. Next, you will also be billed for the time the instructor is available to you. This will of course include the time that he is flying with you and providing flight instruction. This is called dual time. However, it also includes all the other required time, such as the pre-flight briefing, the post flight discussion and paperwork as well as just the logistics of getting to and from the airplane. All of this additional non-flying time will be described as Instructor Time. In addition to the flight instruction, you will also be billed for one or two additional ground sessions, in which your instructor will cover and essential information pertaining to the endorsement.

Now before your first lesson, take some time to read over the material in this packet. We understand that everyone has a different opinion on which sources may be most beneficial. We encourage you to find an accredited publication to help assist you in understanding the material required in the following packet. Complete this packet before your first session and be sure to write down any questions to discuss with your instructor. Your instructor will use this to review as a basis for ground training.

Enjoy your learning!

Jeff Chandler  
Chief Flight Instructor

## **IPC Ground Discussion**

### **Flight Planning**

- Instrument Currency
- Required Equipment
- Fuel requirements
- Required Preflight Action
- Alternate Requirements
- Weather Theory and Weather Services

### **Departure**

- Clearances (Controlled and Uncontrolled Airports)
- Departure Procedures (SID's and DP's)
- Instrument Taxi Checks

### **Enroute**

- Navigation
- IFR Charts (symbology and altitudes)
- Lost Communications
- Required Reports

### **Holding Procedures**

- Types of Holds
- Holding Entries

### **Arrival Procedures**

- STAR's
- Types of Approaches
- Approach Charts
- Approach Regulations

## IPC Flight Items

*The following is a list of items that must be performed during the flight portion of the Instrument Proficiency Check:*

- Preflight\*
- Taxi Check
- IFR Departure
- DP/SID
- Attitude Instrument Flying
- Recovery from Unusual Attitudes
- Intercepting/Tracking Nav Courses
- Holding Procedures
- DME Arcs
- STAR
- Precision Approach
  - ILS
- Non-precision Approaches
  - VOR
  - LOC
  - GPS/WAAS if Equipped\*\*
  - Circle to Land Approach\*
- Missed Approach Procedures

\*-Must be performed in the aircraft

\*\* - Must be performed in the aircraft or G1000 Simulator

# FLIGHT PLANNING

1. What are the recency-of-experience requirements to be PIC of a flight under IFR?

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2. If a pilot allows his/her instrument currency to expire, what can be done to become current again?

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3. Define “appropriately rated safety pilot?”

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4. What are the fuel requirements for flight under IFR conditions?

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5. What aircraft instruments/equipment are required for IFR operations?

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6. What are the required tests and inspections of aircraft and equipment to be legal for IFR flight?

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7. What documents must be on board an aircraft to make it legal for IFR flight?

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,  
and \_\_\_\_\_.

8. What are the alternate airport requirements?

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9. What minimums are to be used on arrival at the alternate?

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10. What instrument/s are affected when the pitot tube ram air inlet and drain hole freeze?

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11. What instruments are affected when the static port freezes?

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12. What corrective action is needed if the pitot tube freezes? If the static port freezes?

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13. What are the various compass errors?

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14. What conditions are necessary for structural icing to occur and name the different types of structural icing?

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15. What factors must be present to form a thunderstorm? How far away should you fly from a thunderstorm?

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16. What is EFAS?

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17. Decode this METAR

KLFT 012043Z AUTO 33037G56KT 1SM 31L/3000V5000FT -RA BR BKN008 OVC014 23/ A2862 RMK AO2  
PK WND 35064/2028 RAB42 PRESFR P0107 \$

18. Decode this TAF

KPHX 161728Z 1618/1718 33005KT P6SM -SHRA SCT010 BKN020 OVC040  
TEMPO 1619/1623 2SM RA SCT007 BKN012  
FM170200 27005KT P6SM VCSH SCT025 BKN050 OVC080  
FM171400 13007KT P6SM -SHRA SCT020 BKN035 OVC060

## DEPARTURES

1. What are tower enroute clearances? When would you request one and where can they be found?

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2. What minimums are necessary for IFR takeoff under 14 CFR Part 91?

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3. What does "clearance void time" mean?

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4. What are the two types of DPs and why are they necessary?

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5. Must you accept a DP if assigned one?

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6. What are the different methods for checking the accuracy of VOR equipment and how often must it be done?

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7. What records must be kept concerning VOR checks?

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8. Where is altitude encoding transponder required?

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9. What color are runway edge lights?

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10. What are the following transponder codes?

1200 - \_\_\_\_\_

7500 - \_\_\_\_\_

7600 - \_\_\_\_\_

7700 - \_\_\_\_\_

11. Is an ATC clearance an authorization for a pilot to deviate from any rule, regulation or minimum altitude?

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12. What does the operation of a rotating beacon at a controlled airport during daylight hours mean?

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13. How can an IFR clearance be obtained?

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# ENROUTE

1. Define the following

MEA- \_\_\_\_\_

MOCA- \_\_\_\_\_

MCA- \_\_\_\_\_

MRA- \_\_\_\_\_

MAA- \_\_\_\_\_

MVA- \_\_\_\_\_

MORA/OROCA- \_\_\_\_\_

2. Concerning two-way radio communication failure in VMC and IMC conditions, what is the procedure for altitude, route, leaving holding fix, descent for approach, and approach selection?

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3. What is the purpose of “RAIM”?

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4. Can handheld GPS receivers and GPS systems certified for VFR operations be used for IFR operations?

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5. What is the difference between a GPS fly-by and a GPS flyover?

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6. What are the altitudes and lateral limits of low altitude federal airways?

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7. What is a changeover point?

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8. Are the courses depicted on an Enroute Low Altitude Chart magnetic or true courses?

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9. What does the term “pilot’s discretion” mean in an ATC clearance?

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10. When may a pilot operate an aircraft below the published MEA?

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11. What reports should be made to ATC at all times without a specific request?

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12. What reports are required when not in radar contact?

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13. Explain the terms “maintain” and “cruise” as they pertain to an IFR altitude?

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14. What is standard versus a no standard holding pattern and what are the maximum holding speeds?

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# ARRIVAL

1. What is a STAR, and if issued one, must you accept it?

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2. When being radar vectored for an approach, at what point may you descent from your last assigned altitude to a lower altitude if “cleared for the approach” has been issued?

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3. When is a procedure turn not required?

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4. What procedure is to be used when the clearance “cleared for the visual” is issued?

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5. Describe both visual and aural indications that a pilot would receive when crossing the outer, middle, and inner marker of a standard ILS?

Outer	Middle	Inner
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

6. When flying an instrument approach procedure, when can the pilot descend below the MDA or DA?

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7. What is a “no gyro” approach?

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8. Define VDP?

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9. What are circle to land approaches and why do some airports only have circle to land minimums?

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10. While circling to land you lose visual contact with the runway environment. At the time visual contact is lost, your approximate position is a base leg at the circling MDA. What procedure should be followed?

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11. When must a pilot execute a missed approach?

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12. Where is the localizer and glide slope antenna located?

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13. What is the GPS overlay program?

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14. What is WAAS?

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