

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
IFR PILOT EXAM-O-GRAM* NO. 31

IS YOUR INSTRUMENT FLIGHT REALLY LEGAL?

More than an ATC clearance is required to make an IFR flight legal. Written test results indicate that many currency requirements, items of equipment, and equipment checks are often overlooked by pilots preparing for IFR flights. In this Exam-O-Gram, let's consider a trip in an AIRPLANE on which passengers are NOT carried "for hire." Commercial operators should consult the appropriate regulations for requirements applicable to their specific operation.

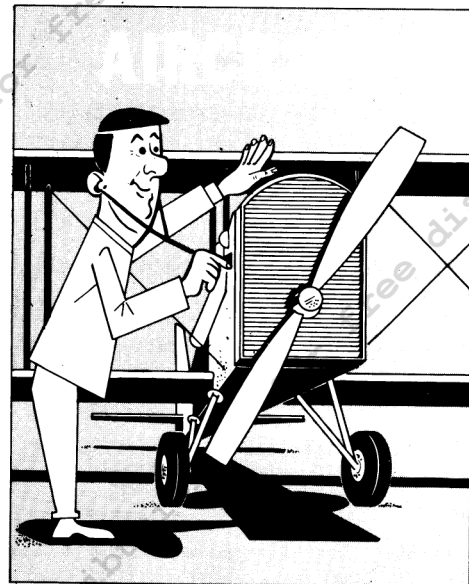
FIRST, LET'S EXAMINE YOU, THE PILOT.

1. Valid Pilot Certificate, Appropriate Ratings, and FCC Permit? Do you have an Instrument Rating? Are you rated for the Category (example-Airplane) and Class (example-Multiengine Land) to be used for this flight?
2. Current Medical? If a 2nd class medical is required, was it issued within the preceding 12 months? If a 3rd class is sufficient, was it issued within the preceding 24 months?
3. Current in Class? Have you made 3 takeoffs and landings in an airplane of the same class within the preceding 90 days? If any part of this flight will be conducted at night (one hour after sunset to one hour before sunrise), have you made 3 night takeoffs and landings to a full stop in an airplane of the same class during the preceding 90 days?
4. Current for Instrument? Within the preceding 6 months, have you passed an instrument competency check in an airplane or had 6 hours of instrument time and made 6 instrument approaches? At least three hours of the instrument time must be in flight in an airplane.



NOW, LET'S LOOK AT THE AIRPLANE.

1. Maintenance Inspection? Like the pilot, the airplane must have a current "physical." Has this "physical" (the annual inspection) been completed within the preceding 12 months?
2. Required Documents? Are the airworthiness and Registration Certificates, Weight and Balance data, approved Airplane Flight Manual or required Placards, and the FCC Radio Transmitter License all available in the airplane?
3. Altimeter System Tests and Inspections? Has each static system and altimeter been tested and inspected within the preceding 24 months in accordance with Part 91.170?
4. VOR Receiver Check? Have the VOR receivers been checked for accuracy within the preceding 10 days and the preceding 10 hours of flight time?
5. Installed Instruments, Equipment, and Systems? Are all of the required items installed or available in the airplane and in good working order?

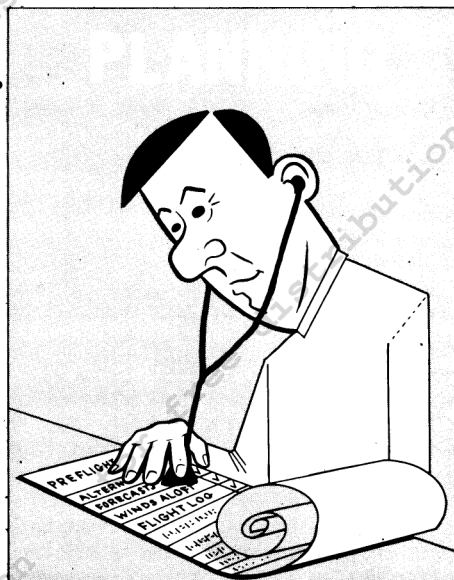


* Exam-O-Grams are non-directive in nature and are issued solely as an information service to individuals interested in Airman Written Examinations.

- a. Airspeed indicator.
- b. Sensitive Altimeter adjustable for barometric pressure.
- c. Magnetic direction indicator.
- d. Gyroscopic direction indicator (directional gyro or equivalent).
- e. Gyroscopic bank and pitch indicator (artificial horizon).
- f. Gyroscopic rate of turn indicator (see FAR 91.33(d)(3) for exceptions).
- g. Slip-skid indicator.
- h. Clock with sweep-second hand.
- i. Engine instruments appropriate to the type of engine(s) installed.
- j. Fuel gauge indicating quantity of fuel in each tank.
- k. Landing gear position indicator if the airplane has retractable gear.
- l. Approved safety belts for all occupants.
- m. Approved position lights if any part of the flight will be between sunset and sunrise.
- n. Two-way radio communications system and navigation equipment appropriate to the ground facilities to be used.
- o. Transponder, if the flight originates or terminates at the primary airport in a Terminal Control Area, at a designated high density airport, or will enter the Positive Control Area.
- p. DME, if the flight will operate at or above FL 240 using VOR navigation.
- q. One spare set of fuses, or three spare fuses of each kind required.
- r. Generator of adequate capacity.
- s. Oxygen equipment, if required for the altitude to be flown.

FINALLY, LET'S LOOK AT THE PREFLIGHT PLANNING.

1. Weather Reports and Forecasts? Have you checked the existing and forecast weather for your route of flight, destination, and if required, alternate airport? Have you selected an "ESCAPE ROUTE" to use in the event of complete radio failure, or other enroute emergency?
2. Maps and Charts? Do you have current enroute, area, and instrument approach procedures charts for the route, destination, alternate, and possible diversion areas and airports? Have you studied the instrument approach charts?
3. Fuel Quantity and Grade? Have you considered known traffic delays in computing the required fuel? Is the airplane serviced with the proper grade of fuel?
4. Weight and Balance? Is the airplane loaded within the prescribed weight and CG limits? Will the landing weight and CG be within limits?
5. Airplane Performance Data? Do you know the distance required for the airplane to takeoff and clear a 50-foot obstacle under the weather and load conditions that exist for this departure? Is the altitude required for this flight within the operating limits of the airplane? Will you be able to land and stop SAFELY within the available runway limits at your destination?



If you can answer "YES" to these questions, you are ready to file your flight plan and get your ATC clearance.

References: FAR Part 61, Part 91, Part 93, AC 61-27B, AC 91-23, and AIM, Part 1.

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