PREFLIGHT PLANNING AND DEPARTURE

PREFLIGHT PLANNING

Certificates And Ratings Required

The pilot in command must be instrument rated:

- on an IFR flight plan under instrument weather conditions, including a “VFR on TOP” clearance;
- in weather conditions less than minimum prescribed for VFR flight;
- in Class A airspace;
under a special VFR clearance at night;
- when, as a commercial pilot, carrying passengers for hire on cross country flights of more than 50 NM, or at night, regardless of distance.

Recent Flight Experience

No person may act as a pilot in command under IFR of fly in weather conditions that are less than those required for VFR, unless within the preceding 6 calendar months, that person has performed and logged under actual or simulated instrument conditions:

1. At least 6 instrument approaches;
2. Holding procedures: and
3. Intercepting and tracking courses through the use of navigation systems.

These requirements must be met in the category for which the instrument rating is held. For example, an airplane rated instrument pilot must meet these requirements in an airplane or approved airplane ground training device.

If your instrument recency of experience has lapsed, but for less that 6 calendar months, you may either obtain the 1FR experience listed above, or pass an IFR competency check. If it has lapsed for more than 6 calendar months, you must pass an IFR competency before acting as pilot in command under IFR.

Logging Of Flight Time

You may log as instrument time only the flight time you are controlling the airplane solely by reference to flight instruments.

An instrument flight instructor (CFII) may log as instrument time all the time during which he acts as instructor in actual instrument weather conditions.

Logging Of Flight Time (Cont)

The safety pilot who occupies the other control seat during simulated instrument flight must be appropriately rated (have a category and class rating for the aircraft being flown).

The logbook entry for simulated instrument conditions must include the place and type of each instrument approach completed and the name of the safety pilot.

Preflight Action For The Flight

The pilot in command is responsible for determining that an aircraft is safe for flight.

Before beginning any flight under an IFR clearance, you must check:

- weather reports and forecasts,
- runway length at airports of intended use,
- alternatives available if the flight cannot be completed.

Fuel Requirements

You must have:

- Fuel to first airport of intended landing, plus
- Fuel to alternate, if required, plus
- 45 minutes reserve at normal cruise.

Equipment Required For IFR Flight

To fly IFR, your aircraft must be equipped with navigational equipment appropriate to the ground facilities being used and appropriate communication equipment.

A gyroscopic direction indicator is required.

DME is required at or above 24,000 MSL when VOR navigational equipment is used.

In Class B or C airspace, or operating at or above 10,000 MSL and above 2,500 AGL your airplane must be equipped with a transponder having Mode C capability (altitude reporting).

If not transponder equipped, you must request deviation from the Class B transponder requirement at least I hr before proposed flight.

Equipment Required (Cont)

Your transponder must be on Mode C at all times if the equipment has been calibrated, unless requested otherwise by ATC.

Preflight Action For The Aircraft

To fly IFR, the pilot in command must ensure that an aircraft has had the following:

- annual inspection within the last 1 2 calendar months,
- altimeter system check within the last 24 calendar months,
transponder test within the last 24 calendar months (only if a transponder is used or required for the flight), VOR test within the last 30 days.

VOR equipment tolerances are:

- VOT: TO flag, I 80 degrees + /- 4 degrees, FROM flag, 000 degrees + /- 4 degrees.
- VOR designated ground check: + /- 4 degrees of the designated radial with the TO-FROM flag indicating a FROM. Dual VOR system comparison: On the ground or airborne, 4 degrees between the indicated bearings to the station.
- VOR designated airborne check: + /- 6 degrees of the designated radial with the TO-FROM flag indicating a FROM.

VOT frequencies are listed in the Airport/ Facility Directory and on the A/G Voice Communications Panel of Enroute Low Altitude Charts. VOR ground and airborne checkpoints are listed in the Airport/Facility Directory.

A record of the VOR operational check must include the date, place, bearing error, and the person's signature.

Since heading does not effect VOR indicators, it is never necessary to align the aircraft to any specific heading during the check.

Oxygen Requirement

Above 12,500 and up to 14,000 MSL the crew must use oxygen after 30 minutes at that altitude.

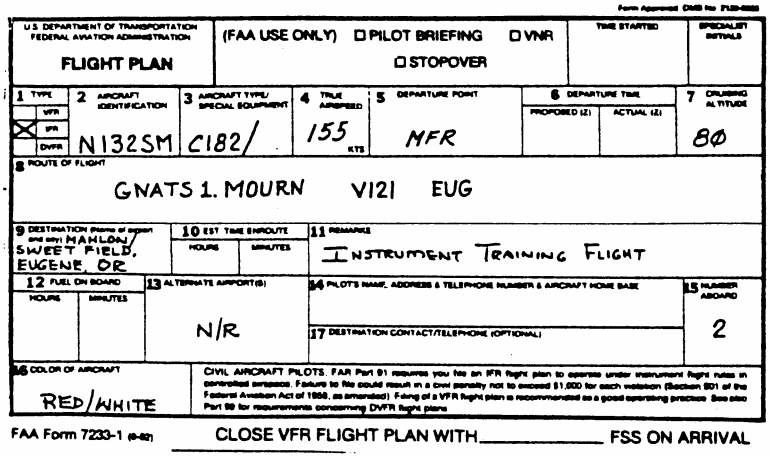
Above 14,000 MSL the crew must use oxygen all the time.

Above 15,000 MSL provide passengers with oxygen, but they are not required to use it.

The IFR Flight Plan

You must file an IFR flight plan and receive appropriate clearance prior to:

- Entering controlled airspace when IFR conditions exist (IMC), or
- Entering Class A airspace in VFR or IFR weather conditions.



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FLIGHT PLAN

(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR ☐ STOPOVER

TIME STARTED | SPECIALIST INITIALS

1 TYPE	2 AIRCRAFT IDENTIFICATION	3 AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4 TRUE AIRSPEED	5 DEPARTURE POINT	6 DEPARTURE TIME PROPOSED (Z)	6 DEPARTURE TIME ACTUAL (Z)	7 CRUISING ALTITUDE
☒ IFR	N132SM	C182/	155 KTS	MFR			80

8 ROUTE OF FLIGHT: GNATS 1. MOURN V121 EUG

9 DESTINATION (Name of airport and city)	10 EST TIME ENROUTE HOURS	10 EST TIME ENROUTE MINUTES	11 REMARKS
MAHLON SWEET FIELD, EUGENE, OR			INSTRUMENT TRAINING FLIGHT

12 FUEL ON BOARD HOURS	12 FUEL ON BOARD MINUTES	13 ALTERNATE AIRPORT(S)	14 PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE	15 NUMBER ABOARD
		N/R	17 DESTINATION CONTACT/TELEPHONE (OPTIONAL)	2

16 COLOR OF AIRCRAFT: RED/WHITE

CIVIL AIRCRAFT PILOTS: FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82) CLOSE VFR FLIGHT PLAN WITH _____ FSS ON ARRIVAL

Notes:

Block 3 - Special equipment, such as DME, transponder, and approved area navigation (RNAV) should be listed here. Specific codes are listed in the appendix.

Block 7 - This is your initial cruising attitude. You need not mention attitudes you plan to use later in flight.

Block 11 - If no DP or STAR is desired, make note of this here, by noting NO DP or NO STAR.

Block 12 - Enter your total usable fuel on board at the beginning of the IFR flight.

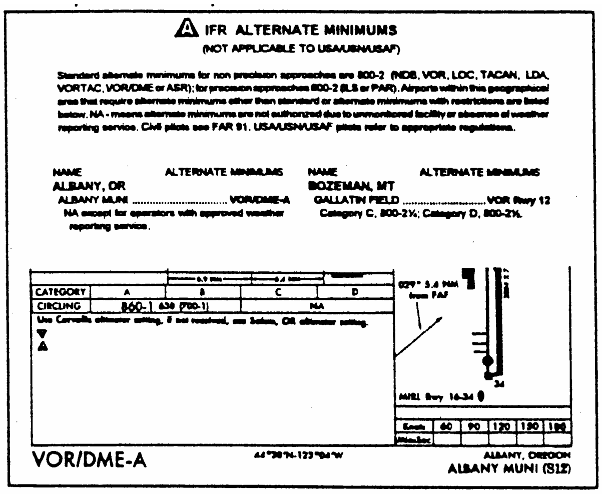
Alternate Airport Requirements

An alternate airport is required if the destination airport has a forecast ceiling of less than 2000 feet or forecast visibility of less than 3 miles within 1 hour before to I hour after the ETA at destination.

Alternate Airport Requirements (Cont)

The forecast weather at the alternate airport (at your ETA) must be:

- with a precision approach, 600 foot ceiling and 2 miles visibility.
- with a nonprecision approach, 800 foot ceiling and 2 miles visibility.
- with no instrument approach available, an adequate ceiling and visibility to allow descent from the MEA, and an approach and landing under basic VFR.
- if nonstandard minimums are listed, adhere to these minimums. Standard minimums apply except for the specific situation listed.


IFR ALTERNATE MINIMUMS
(NOT APPLICABLE TO USA/USN/USAF)

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME or ASR); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. USA/USN/USAF pilots refer to appropriate regulations.

NAME	ALTERNATE MINIMUMS	NAME	ALTERNATE MINIMUMS
ALBANY, OR		BOZEMAN, MT	
ALBANY MUNI	VOR/DME-A	GALLATIN FIELD	VOR Rwy 12
NA except for operators with approved weather reporting service.		Category C, 800-2¼; Category D, 800-2½.	

Composite Flight Plan

A composite flight plan is both a VFR and IFR flight plan filed on one flight plan form. It may be filed anytime a part of the flight will be in VFR conditions.

Both VFR and IFR boxes are marked in Block 1 (type of flight plan), and the entire route is listed. This route should include all points of transition from one airway to another, fixes defining direct route segments, and the clearance limit fix.

If the first half of the flight is VFR, takeoff and activate your VFR flight plan with FSS. Before reaching the point for Change to IFR, contact the nearest FSS, Close your VFR flight plan and request your IFR clearance.

Preferred IFR Routes

Preferred routes are published to minimize the route changes and to aid in the systematic flow of traffic.

PREFERRED IFR ROUTES

From LA GUARDIA only

Albany	(60-170 incl) MARES V467 SEAMO V91 PWL V487 CANAN V130	1100-0300
Baltimore	(90-170 incl) SBJ V3 V93 JARET	1000-0300
Boston	(130-170 incl. Turbojets and Heavy props) MARES V475 PVD V139 HTM	1100-0300
Boston	(60-170 incl. all other types) MARES V475 ORW V16	1100-0300
Bradley	(60-170 incl) MARES V467 BDR014 JUDDS	

Routes beginning or ending with a fix indicate that aircraft will be routed to the fix via a DP, radar vectors, or a STAR.

Airport/Facility Directory

The most current en route and destination flight information should be obtained from the FSS.
Look at the Airport/Facility Directory to find availability of FSS, frequencies for communication, frequency and hours of operation of control tower or ATIS, which enroute low attitude chart is applicable for your route of flight, and restrictions to NAVAIDs.

Flight Data Center NOTAMS

Flight Data Center Notams (FDC) advise of changes in flight data which affect IFR approach procedures, aeronautical charts, and flight restrictions prior to normal publications.

TEXAS

FDC 5/171 FI/T MILLER INTERNATIONAL MCALLEN TX. LOC/BC RWY 31 ORIG NA.

FDC 6/232 FI/T SAN ANTONIO INTERNATIONAL SAN ANTONIO TX. SI MINS NA FOR NDB RWY 30L /ILS RWY 30L/LOC RWY 30L/RNAV RWY 30L/NDB RWY 12R/ILS RWY 12R/LOC RWY 12R.

Distant (D) And Local (L) NOTAMS

The latest status of airport conditions (e.g. runway closures, runway lighting, snow conditions) is found in the Airport Facility Directory, Distant (D) NOTAMS, and Local (L) NOTAMS.

THE IFR DEPARTURE

Authority Of Pilot In Command

The pilot in command may deviate in an emergency, from any Part 91 FAR to the extent necessary to meet the emergency.

If you deviate from an ATC clearance in an emergency, you must notify ATC of the deviation as soon as possible.

ATC may request a detailed report of an emergency even though a rule has not been violated when priority has been given over another aircraft.

ATIS (Automatic Terminal Information Service)

ATIS broadcasts are updated upon receipt of any official weather, regardless of content change or reported values.

The absence of sky condition and visibility implies that the ceiling is more than 5000 feet and the visibility is 5 miles or more.

The Clearance

Read back parts of ATC clearances containing altitude assignments or vectors, or any part requiring verification.

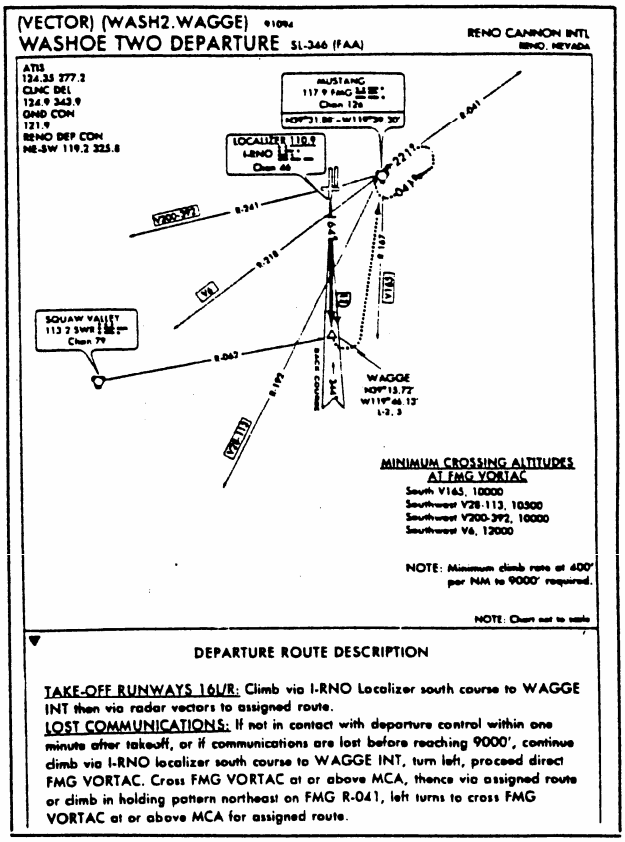
An abbreviated clearance (cleared as filed) indicates the route cleared is identical to that which you requested. it always includes the name of destination airport and a specified altitude, and DP name, number and transition, if appropriate.

When departing from an airport not served by a control tower, the issuance of a clearance may be given by telephone, and will contain a "void time." The pilot must advise ATC as soon as possible, but not later than 30 minutes, of his intentions, if not off by the void time.

Instrument Departure Procedures (DP) and Standard Terminal Arrival Routes (STAR's)

DP's and STAR's are ATC coded departure and arrival routings established to simplify departure and arrival clearance delivery problems.
The basic DP terminates, and the transition begins, at the end of the heavy black line. On a STAR, the arrival begins at the beginning of the heavy black line.

You may be issued a clearance for a DP or a STAR by ATC unless you have indicated (in the remarks section of you flight plan form) that you want "NO DP" or "NO STAR". If a DP is accepted, the pilot must possess at least the textual description.



Departure Control

After takeoff, departure control should be contacted when advised by the control tower.

When given clearance to a new altitude, maintain an optimum climb or descent without intermediate level-offs until within 1, 000 feet of assigned attitude, then between 500 and 1,500 FPM until reaching the assigned altitude.

When climbing to your assigned altitude on an airway, Climb on the centerline of the airway except when maneuvering to avoid other aircraft, or making clearing turns while in VFR conditions, or when authorized by ATC

ATC Traffic Information

You are responsible for avoiding other aircraft when weather conditions permit regardless of whether operating IFR or
VFR.

"Traffic at 2 o'clock 5 miles southbound"
Indicates traffic 60 degrees to the right of your direction of travel and five miles away. If holding a 20-degree right crab, look 40 degrees to the right of the nose.

VFR Operations On An IFR Flight Plan

A VFR-On-Top clearance may be requested if you are enroute and wish to maintain your IFR flight plan and clearance, but fly at a VFR altitude of your choice.

When flying VFR-On-Top:

- Follow VFR and IFR rules.
- maintain a VFR altitude (if your magnetic course is 0 to 179, fly odd thousands plus 500 feet; magnetic course of 1 80 to 359, fly even thousands plus 500 feet airway direction is given in magnetic course) between the MEA and below Class A airspace.
Highest allowable altitude is 16,500 westbound and 17,500 eastbound.
-Maintain VFR distances from clouds. Below 1,000 MSL 3 miles visibility, 500 below, 1000 above, 2000 horizontally from clouds.
If in uncontrolled airspace during daylight hours, you need 1 mile visibility.
At 10,000 MSL or above, 5 miles visibility, 1 000 below and above clouds, 1 mile horizontally.
- make the same compulsory reports that are required for an IFR flight at IFR altitudes.
- report changes in altitudes.
- follow the same procedure in the event of loss of communication.
- realize that no traffic separation is provided.

Request a clearance "to VFR-On-Top" to climb through a cloud layer and then continue the flight VFR.

ATC will issue a VFR restriction to an IFR flight when the pilot requests it.

Loss Of Communications

Squawk 7600 on your transponder.

In VFR conditions, including VFR-On-Top, continue the flight under VFR and land as soon as practical (not as soon as possible).

Loss Of Communications (Cont)

In IFR conditions, continue on the route specified in your clearance. Fly at your assigned altitude, unless the MEA is higher, or unless given an expected further clearance to climb to a higher altitude.

If in a holding pattern, leave the holding pattern at the EFC (expected further clearance) time.

Malfunction Reports

You must report immediately to ATC:

- complete loss of VOR, TACAN (DME), or ADF capability;
- complete or partial loss of ILS capability; loss of DME if at or above FL 240 (notify ATC, then continue to your destination airport as cleared where repairs can be made).

4002. A24 IRA
What limitation is imposed on a newly certificated commercial airplane pilot if that person does not hold an instrument pilot rating?

A) The carrying of passengers or property for hire on cross-country flights at night is limited to a radius of 50 nautical miles (NM).
B) The carrying of passengers for hire on cross-country flights is limited to 50 NM for night flights, but not limited for day flights.
C) The carrying of passengers for hire on cross-country flights is limited to 50 NM and the carrying of passengers for hire at night is prohibited.

4003. B08 IRA
Before beginning any flight under IFR, the pilot in command must become familiar with all available information concerning that flight. In addition, the pilot must

A) be familiar with all instrument approaches at the destination airport.
B) list an alternate airport on the flight plan and confirm adequate takeoff and landing performance at the destination airport.
C) be familiar with the runway lengths at airports of intended use, and the alternatives available if the flight cannot be completed.

4005.
During your preflight planning for an IFR flight in an airplane you determine that the first airport of intended landing has no instrument approach prescribed in 14 CFR part 97. The weather forecast for one hour before through one hour after your estimated time of arrival is 3000' scattered with 5 miles visibility. To meet fuel requirements for this flight you must be able to fly to the first airport of intended landing

A) and then fly for 45 minutes at normal cruising speed.
B) then to the alternate airport, and then for 45 minutes at normal cruising speed.
C) then to the alternate airport, and then for 30 minutes at normal cruising speed.

4007.
If the aircraft's transponder fails during flight within Class B airspace,

A) the pilot should immediately request clearance to depart the Class B airspace.
B) ATC may authorize deviation from the transponder requirement to allow aircraft to continue to the airport of ultimate destination.
C) aircraft must immediately descend below 1,200 feet AGL and proceed to destination.

4008.
If a pilot enters the condition of flight in the pilot logbook as simulated instrument conditions, what qualifying information must also be entered?

A) Place and type of each instrument approach completed and name of safety pilot.
B) Number and type of instrument approaches completed and route of flight.
C) Name and pilot certificate number of safety pilot and type of approaches completed.

4009. A20 IRA
What portion of dual instruction time may a certificated instrument flight instructor log as instrument flight time?

A) All time during which the instructor acts as instrument instructor, regardless of weather conditions.
B) All time during which the instructor acts as instrument instructor in actual instrument weather conditions.
C) Only the time during which the instructor flies the aircraft by reference to instruments.

4010. A20 IRA
Which flight time may be logged as instrument time when on an instrument flight plan?

A) All of the time the aircraft was not controlled by ground references.
B) Only the time you controlled the aircraft solely by reference to flight instruments.
C) Only the time you were flying in IFR weather conditions.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4011. B08 IRA
What are the minimum qualifications for a person who occupies the other control seat as safety pilot during simulated instrument flight?

A) Private pilot certificate with appropriate category and class ratings for the aircraft.
B) Private pilot with instrument rating.
C) Private pilot with appropriate category class, and instrument ratings.

4012.
The minimum instrument time required, within the last 6 months, to be current for IFR is

A) six instrument approaches, holding procedures, and intercepting and tracking courses.
B) six hours in the same category aircraft.
C) six hours in the same category aircraft, and at least 3 of the 6 hours in actual IFR.

4013. A20 IRA
After your recent IFR experience lapses, how much time do you have before you must pass an instrument competency check to act as pilot in command under IFR?

A) 6 months.
B) 90 days.
C) 12 months.

4014. A20 IRA
An instrument rated pilot, who has not logged any instrument time in 1 year or more, cannot serve as pilot in command under IFR, unless the pilot

A) completes the required 6 hours and six approaches, followed by an instrument competency check given by an FAA-designated examiner.
B) passes an instrument competency check in the category of aircraft involved, given by an approved FAA examiner, instrument instructor, or FAA inspector.
C) passes an instrument competency check in the category of aircraft involved, followed by 6 hours and six instrument approaches, 3 of those hours in the category of aircraft involved.

4015.
A pilot's recent IFR experience expires on July 1 of this year. What is the latest date the pilot can meet the IFR experience requirement without having to take an instrument competency check?

A) December 31, this year.
B) June 30, next year.
C) July 31, this year.

4017. A20 IRA
What minimum conditions are necessary for the instrument approaches required for IFR currency?

A) The approaches may be made in an aircraft, approved instrument ground trainer, or any combination of these.
B) At least three approaches must be made in the same category of aircraft to be flown.
C) At least three approaches must be made in the same category and class of aircraft to be flown.

4020.
How may a pilot satisfy the recent instrument experience requirement necessary to act as pilot in command in IMC in powered aircraft?

A) Log six instrument approaches, holding procedures, and intercepting and tracking courses using navigational systems.
B) Log six instrument approaches and 3 hours under actual or simulated IFR conditions within the last 6 months; three of the approaches must be in the category of aircraft involved.
C) Log 6 hours of instrument time under actual or simulated IFR conditions within the last 3 months, including at least six instrument approaches of any kind. Three of the 6 hours must be in flight in any category aircraft.

4021.
How long does a pilot remain current for IFR flight after successfully completing an instrument competency check if no further IFR flights are made?

A) 90 days.
B) 6 months.
C) 12 months.

4023.
What recent instrument flight experience requirements must be met before you may act as pilot in command of an airplane under IFR?

A) A minimum of six instrument approaches in an airplane, or an approved simulator (airplane) or ground trainer, within the preceding 6 calendar months.
B) A minimum of six instrument approaches in an aircraft at least three of which must be in the same category within the preceding 6 calendar months.
C) A minimum of six instrument approaches at least three of which must be in an aircraft within the preceding 6 calendar months.

4024.
Under which condition are you required to have an instrument rating for flight in VMC?

A) Flight through an MOA.
B) Flight into an ADIZ.
C) Flight into class A airspace.

4025.
The pilot in command of a civil aircraft must have an instrument rating only when operating

A) under IFR in controlled airspace and in a positive control area or positive control route segment.
B) under IFR, in weather conditions less than the minimum for VFR flight, and in Class A airspace.
C) in weather conditions less than the minimum prescribed for VFR flight.

4026.
What additional instrument experience is required for you to meet the recent flight experience to act as pilot in command of an airplane under IFR?
Your present instrument experience within the preceding 6 calendar months is:

1. three hours with holding, intercepting, and tracking courses in an approved airplane flight simulator.
2. two instrument approaches in an airplane.

A) Four instrument approaches in an approved flight simulator that is representative of the airplane category.
B) Three hours of simulated or actual instrument flight time in a helicopter and two instrument approaches in an airplane or helicopter.
C) Three instrument approaches in a helicopter.

4027.
To meet the minimum required instrument experience to remain current for IFR operations, you must accomplish during the past 6 months at least six instrument approaches including

A) holding procedures intercepting and tracking courses through the use of navigation systems.
B) and 6 hours of instrument time in any aircraft.
C) three of which must be in the same category and class of aircraft to be flown, and 6 hours of instrument time in any aircraft.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4028.
A certificated commercial pilot who carries passengers for hire in an airplane at night is required to have at least

A) an associated type rating if the airplane is of the multiengine class.
B) a First-Class Medical Certificate.
C) an airplane instrument pilot rating.

4029. A20 IRA
You intend to carry passengers for hire on a night VFR flight in a single engine airplane within a 25 mile radius of the departure airport. You are required to possess at least which rating(s)?

A) A Commercial Pilot Certificate with a single engine land rating.
B) A Commercial Pilot Certificate with a single engine and instrument (airplane) rating.
C) A Private Pilot Certificate with a single engine land and instrument airplane rating.

4031.
Under which condition must the pilot in command of a civil aircraft have at least an instrument rating?

A) When operating in class E airspace.
B) For a flight in VFR conditions while on an IFR flight plan.
C) For any flight above an altitude of 1,200 feet AGL, when the visibility is less than 3 miles.

4032. B10 IRA
What are the minimum fuel requirements in IFR conditions, if the first airport of intended landing is forecast to have a 1,500 foot ceiling and 3 miles visibility at flight-planned ETA? Fuel to fly to the first airport of intended landing,

A) and fly thereafter for 45 minutes at normal cruising speed.
B) fly to the alternate, and fly thereafter for 45 minutes at normal cruising speed.
C) fly to the alternate, and fly thereafter for 30 minutes at normal cruising speed.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4033.
Before beginning any flight under IFR, the pilot in command must become familiar with all available information concerning that flight. In addition, the pilot must

A) list an alternate airport on the flight plan and become familiar with the instrument approaches to that airport.
B) list an alternate airport on the flight plan and confirm adequate takeoff and landing performance at the destination airport.
C) be familiar with the runway lengths at airports of intended use, and the alternatives available if the flight cannot be completed.

4034.
Which limitation is imposed on the holder of a Commercial Pilot Certificate if that person does not hold an instrument rating?

A) That person is limited to private pilot privileges at night.
B) The carrying of passengers or property for hire on cross-country flights at night is limited to a radius of 50 NM.
C) The carrying of passengers for hire on cross-country flights is limited to 50 NM and the carrying of passengers for hire at night is prohibited.

4035.
To carry passengers for hire in an airplane on cross-country flights of more than 50 NM from the departure airport, the pilot in command is required to hold at least

A) a Category II pilot authorization.
B) a First-Class Medical certificate.
C) a Commercial Pilot Certificate with an instrument rating.

4036. B10 IRA
When must an operational check on the aircraft VOR equipment be accomplished when used to operate under IFR?

A) Within the preceding 10 days or 10 hours of flight time.
B) Within the preceding 30 days or 30 hours of flight time.
C) Within the preceding 30 days.

4037. B11 IRA
In the 48 contiguous states, excluding the airspace at or below 2,500 feet AGL, an operable coded transponder equipped with Mode C capability is required in all controlled airspace at and above

A) 12,500 feet MSL.
B) 10,000 feet MSL.
C) Flight level (FL) 180.

4038.
A coded transponder equipped with altitude reporting capability is required in all controlled airspace

A) at and above 10,000 feet MSL, excluding at and below 2,500 feet AGL.
B) at and above 2,500 feet above the surface.
C) below 10,000 feet MSL, excluding at and below 2,500 feet AGL.

4039. B07 IRA
Who is responsible for determining that the altimeter system has been checked and found to meet 14 CFR part 91 requirements for a particular instrument flight?

A) Owner.
B) Operator.
C) Pilot-in-command.

4042. B11 IRA
If an unpressurized aircraft is operated above 12,500 feet MSL, but not more than 14,000 feet MSL, for a period of 2 hours 20 minutes, how long during that time is the minimum flightcrew required to use supplemental oxygen?

A) 2 hours 20 minutes.
B) 1 hour 20 minutes.
C) 1 hour 50 minutes.

4044. B10 IRA
Which data must be recorded in the aircraft log or other appropriate log by a pilot making a VOR operational check for IFR operations?

A) VOR name or identification, date of check, amount of bearing error, and signature.
B) Place of operational check, amount of bearing error, date of check, and signature.
C) Date of check, VOR name or identification, place of operational check, and amount of bearing error.

4045. B11 IRA

What is the maximum cabin pressure altitude at which a pilot can fly for longer than 30 minutes without using supplemental oxygen.

A) 10,500 feet.
B) 12,000 feet.
C) 12,500 feet.

4046.
What record shall be made in the aircraft log or other permanent record by the pilot making the VOR operational check?

A) The date, place, bearing error, and signature.
B) The date, frequency of VOR or VOT, number of flight hours since last check, and signature.
C) The date, place, satisfactory or unsatisfactory, and signature.

4047. B13 IRA
Your aircraft had the static pressure system and altimeter tested and inspected on January 5, of this year, and was found to comply with FAA standards. These systems must be reinspected and approved for use in controlled airspace under IFR by

A) January 5, next year.
B) January 5, 2 years hence.
C) January 31, 2 years hence.

4048.
Which checks and inspections of flight instruments or instrument systems must be accomplished before an aircraft can be flown under IFR?

A) VOR within 30 days, altimeter systems within 24 calendar months, and transponder within 24 calendar months.
B) ELT test within 30 days, altimeter systems within 12 calendar months, and transponder within 24 calendar months.
C) VOR within 24 calendar months, transponder within 24 calendar months, and altimeter system within 12 calendar months.

4049.
An aircraft altimeter system test and inspection must be accomplished within

A) 12 calendar months.
B) 18 calendar months.
C) 24 calendar months.

4050. B11 IRA
Where is DME required under IFR?

A) At or above 24,000 feet MSL if VOR navigational equipment is required.
B) In positive control airspace.
C) Above 18,000 feet MSL.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4051. B11 IRA
An aircraft operated under 14 CFR part 91 IFR is required to have which of the following?

A) Radar altimeter.
B) Dual VOR system.
C) Gyroscopic direction indicator

4052.
What is the maximum IFR altitude you may fly in an unpressurized aircraft without providing passengers with supplemental oxygen?

A) 12,500 feet.
B) 14,000 feet.
C) 15,000 feet.

4053.
What is the oxygen requirement for an unpressurized aircraft at 15,000 feet?

A) All occupants must use oxygen for the entire time at this altitude.
B) Crew must start using oxygen at 12,000 feet and passengers at 15,000 feet.
C) Crew must use oxygen for the entire time above 14,000 feet and passengers must be provided supplemental oxygen only above 15,000 feet.

4054. B10 IRA
When making an airborne VOR check, what is the maximum allowable tolerance between the two indicators of a dual VOR system (units independent of each other except the antenna)?

A) 4° between the two indicated bearings of a VOR.
B) Plus or minus 4° when set to identical radials of a VOR.
C) 6° between the two indicated radials of a VOR.

4055. B11 IRA
What minimum navigation equipment is required for IFR flight?

A) VOR/LOC receiver, transponder, and DME.
B) VOR receiver and, if in ARTS III environment, a coded transponder equipped for altitude reporting.
C) Navigation equipment appropriate to the ground facilities to be used.

4059. J15 IRA
When may a pilot file a composite flight plan?

A) When requested or advised by ATC.
B) Any time a portion of the flight will be VFR.
C) Any time a landing is planned at an intermediate airport.

4060.
When filing a composite flight plan where the first portion of the flight is IFR, which fix(es) should be indicated on the flight plan form?

A) All points of transition from one airway to another, fixes defining direct route segments, and the clearance limit fix.
B) Only the fix where you plan to terminate the IFR portion of the flight.
C) Only those compulsory reporting points on the IFR route segment.

4061. J15 IRA
What is the recommended procedure for transitioning from VFR to IFR on a composite flight plan?

A) Prior to transitioning to IFR, contact the nearest FSS, close the VFR portion, and request ATC clearance.
B) Upon reaching the proposed point for change to IFR, contact the nearest FSS and cancel your VFR flight plan, then contact ARTCC and request an IFR clearance.
C) Prior to reaching the proposed point for change to IFR, contact ARTCC, request your IFR clearance, and instruct them to cancel the VFR flight plan.

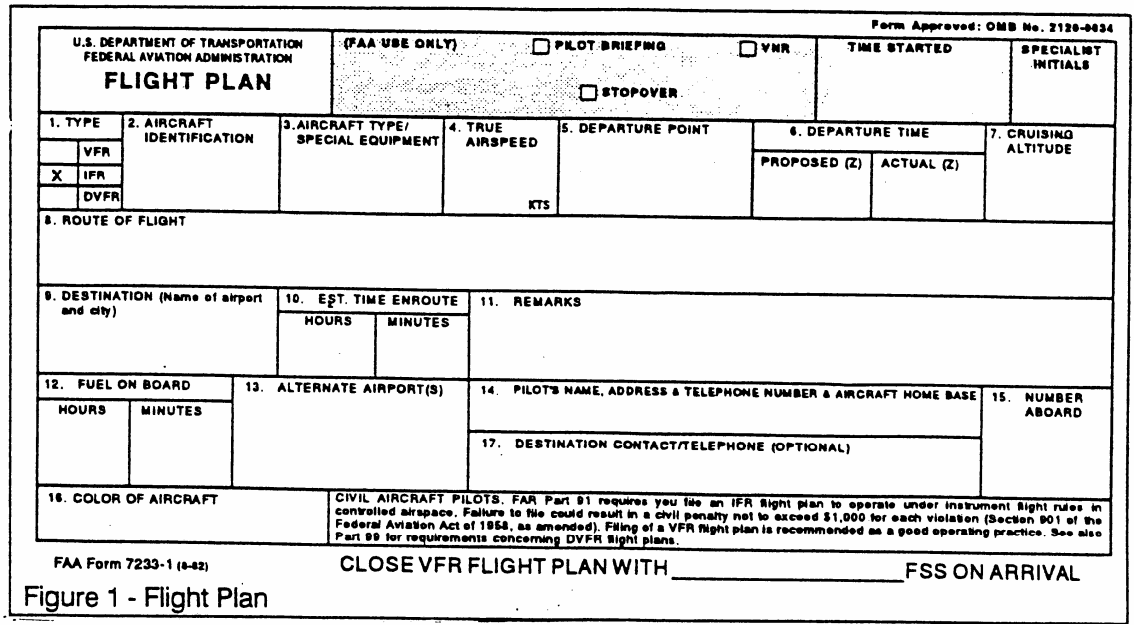
4062. B10 IRA
When is an IFR flight plan required?

A) When less than VFR conditions exist in either Class E or Class G airspace and in Class A airspace.
B) In all Class E airspace when conditions are below VFR, in Class A airspace, and in defense zone airspace.
C) In Class E airspace when IMC exists or in Class A airspace.

4063.
Prior to which operation must an IFR flight plan be filed and an appropriate ATC clearance received?

A) Flying by reference to instruments in controlled airspace.
B) Entering controlled airspace when IMC exists.
C) Takeoff when IFR weather conditions exist.

NOTE: CORRECT ANSWER IN BOLD ITALICS



Form Approved: OMB No. 2120-0026

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FLIGHT PLAN

(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR ☐ STOPOVER | TIME STARTED | SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME		7. CRUISING ALTITUDE
VFR			KTS		PROPOSED (Z)	ACTUAL (Z)	
X IFR							
DVFR							

8. ROUTE OF FLIGHT

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE	15. NUMBER ABOARD
			17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	

16. COLOR OF AIRCRAFT

CIVIL AIRCRAFT PILOTS, FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82) CLOSE VFR FLIGHT PLAN WITH _____ FSS ON ARRIVAL

Figure 1 - Flight Plan

4064.
To operate under IFR below 18,000 feet, a pilot must file an IFR flight plan and receive an appropriate ATC clearance prior to

A) entering controlled airspace.
B) entering weather conditions below VFR minimums.
C) takeoff.

4065.
To operate an aircraft under IFR, a flight plan must have been filed and an ATC clearance received prior to

A) controlling the aircraft solely by use of instruments.
B) entering weather conditions in any airspace.
C) entering controlled airspace.

4066.
When is an IFR clearance required during VFR weather conditions?

A) When operating in the Class E airspace.
B) When operating in a Class A airspace.
C) When operating in airspace above 14,500 feet.

4067. Operation in which airspace requires filing an IFR flight plan?

A) Any airspace when the visibility is less than 1 mile.
B) Class E airspace with IMC and positive control area.
C) Positive control area, Continental Control Area, and all other airspace, if the visibility is less than 1 mile.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4068. B10 IRA
When departing from an airport located outside controlled airspace during IMC, you must file an IFR flight plan and receive a clearance before

A) takeoff.
B) entering IFR conditions.
C) entering Class E airspace.

4070. J34 IRA
Preferred IFR routes beginning with a fix, indicate that departing aircraft will normally be routed to the fix by

A) the established airway(s) between the departure airport and the fix.
B) an instrument departure procedure (DP), or radar vectors.
C) direct route only.

4072.
(Refer to figure 1.) Which item(s) should be checked in block 1 for a composite flight plan?

A) VFR with an explanation in block 11.
B) IFR with an explanation in block 11.
C) VFR and IFR.

4073.
(Refer to figure 1.) The time entered in block 12 for an IFR flight should be based on which fuel quantity?

A) Total fuel required for the flight.
B) Total useable fuel on board.
C) The amount of fuel required to fly to the destination airport, then to the alternate, plus a 45-minute reserve.

4074.
(Refer to figure 1.) What information should be entered in block 7 of an IFR flight plan if the flight has three legs, each at a different altitude?

A) Altitude for first leg.
B) Altitude for first leg and highest altitude.
C) Highest altitude.

4075. J15 IRA
(Refer to figure 1.) Which equipment determines the code to be entered in block 3 as a suffix to aircraft type on the flight plan form?

A) DME, ADF, and airborne radar.
B) DME, transponder, and ADF.
C) DME, transponder, and RNAV.

4079. J34 IRA
Which sources of aeronautical information, when used collectively, provide the latest status of airport conditions (e.g., runway closures, runway lighting, snow conditions)?

A) Aeronautical Information Manual, aeronautical charts, and Distant (D) Notice to Airmen (NOTAM's).
B) Airport Facility Directory, FDC NOTAM's, and Local (L) NOTAM's.
C) Airport Facility Directory, Distant (D) NOTAM's, and Local (L) NOTAM's.

4080. J06 IRA
What is the purpose of FDC NOTAMs?

A) To provide the latest information on the status of navigation facilities to all FSS facilities for scheduled broadcasts.
B) To issue notices for all airports and navigation facilities in the shortest possible time.
C) To advise of changes in flight data which affect instrument approach procedure (IAP), aeronautical charts, and flight restrictions prior to normal publication.

4081. B10 IRA
What minimum weather conditions must be forecast for your ETA at an alternate airport, that has only a VOR approach with standard alternate minimums, for the airport to be listed as an alternate on the IFR flight plan?

A) 800 foot ceiling and 1 statute mile visibility.
B) 800 foot ceiling and 2 statute miles visibility.
C) 1,000 foot ceiling and visibility to allow descent from minimum en route altitude (MEA), approach, and landing under basic VFR.

4082.
Is an alternate airport required for an IFR flight to ATL (Atlanta Hartsfield) if the proposed ETA is 1930Z?
TAF
KATL l2l720Z 121818 20012KT 5SM HZ BKNO3O
FM2000 3SM TRSA OVCO25CB
FM2200 33015G20KT P6SM BKN015 OVC040
BECMG 0608 02008KT BKN040 BECMG 1012 00000KT P6SM CLR=

A) Yes, because the ceiling could fall below 2,000 feet within 2 hours before to 2 hours after the ETA.
B) No, because the ceiling and visibility are forecast to remain at or above 1,000 feet and 3 miles, respectively.
C) No, because the ceiling and visibility are forecast to be at or above 2,000 feet and 3 miles within 1 hour before to 1 hour after the ETA.

4083. B10 IRA
What minimum conditions must exist at the destination airport to avoid listing an alternate airport on an IFR flight plan when a standard IAP is available?

A) From 2 hours before to 2 hours after ETA, forecast ceiling 2,000, and visibility 2 and 1/2 miles.
B) From 2 hours before to 2 hours after ETA, forecast ceiling 3,000, and visibility 3 miles.
C) From 1 hour before to 1 hour after ETA, forecast ceiling 2,000, and visibility 3 miles.

4085.
What standard minimums are required to list an airport as an alternate on an IFR flight plan if the airport has VOR approach only?

A) Ceiling and visibility at ETA, 800 feet and 2 miles, respectively.
B) Ceiling and visibility from 2 hours before until 2 hours after ETA, 800 feet and 2 miles, respectively.
C) Ceiling and visibility at ETA, 600 feet and 2 miles, respectively.

4086. B10 IRA
What are the minimum weather conditions that must be forecast to list an airport as an alternate when the airport has no approved IAP?

A) The ceiling and visibility at ETA, 2,000 feet and 3 miles, respectively.
B) The ceiling and visibility from 2 hours before until 2 hours after ETA, 2,000 feet and 3 miles, respectively.
C) The ceiling and visibility at ETA must allow descent from MEA, approach, and landing, under basic VFR.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4087.
What minimum weather conditions must be forecast for your ETA at an airport that has a precision approach procedure, with standard alternate minimums, in order to list it as an alternate for the IFR flight?
A) 600-foot ceiling and 2 SM visibility at your ETA.
B) 600-foot ceiling and 2 SM visibility from 2 hours before to 2 hours after your ETA.
C) 800-foot ceiling and 2 SM visibility at your ETA.

4266. J15 IRA
(Refer to figure 27.) What aircraft equipment code should be entered in block 3 of the flight plan?
A) T.
B) U.
C) A.

4271. J40 IRA
(Refer to figure 30.) Which restriction to the use of the OED VORTAC would be applicable to the (GNATS1.MOURN) departure?

A) R 333 beyond 30 NM below 6,500 feet.
B) R 210 beyond 35 NM below 8,500 feet.
C) R 251 within 15 NM below 6,100 feet.

4273. J01 IRA
(Refer to figures 27 and 30.) To which maximum service volume distance from the OED VORTAC should you expect to receive adequate signal coverage for navigation at the flight planned altitude?

A) 100 NM.
B) 80 NM.
C) 40 NM.

4275. J34 IRA
(Refer to figure 29.) What are the hours of operation (local standard time) of the control tower at Eugene/Mahlon Sweet Field?
A) 0800 2300.
B) 0600 0000.
C) 0700 0100.

4279.
Which sources of aeronautical information, when used collectively, provide the latest status of airport conditions (e.g., runway closures, runway lightning, snow conditions)?
A)Airman's Information Manual, aeronautical charts, and Distant (D) Notice to Airman (NOTAM's).
B) Airport Facility Directory, FDC NOTAM's, and Local (L) NOTAM's
C) Airport Facility Directory, Distant (D) NOTAM's, and Local (L) NOTAM's.

4280. J35 IRA
(Refer to figure 34.) At which altitude and location on V573 would you expect the navigational signal of the HOT VOR/DME to be unreliable?

A) 3,000 feet at APINE intersection.
B) 2,600 feet at MARKI intersection.
C) 4,000 feet at ELMMO intersection.

4286. J41 IRA
(Refer to figures 35 and 35A.) At which point does the BUJ.BUJ3 arrival begin?

A) At the TXK VORTAC.
B) At BOGAR intersection.
C) At the BUJ VORTAC.

4288.
(Refer to figure 38.) What aircraft equipment code should be entered in block 3 of the flight plan?

A) C
B) I
C) A

4292.
(Refer to figures 41 and 41A.) At which point does the AQN.AQN2 arrival begin?

A) ABI VORTAC.
B) ACTON VORTAC.
C) CREEK intersection.

4294. J41 IRA
(Refer to figures 41 and 41A.) On which heading should you plan to depart CREEK intersection?

A) 010°.
B) 040°.
C) 350°.

4300.
(Refer to figure 44.) What aircraft equipment code should be entered in block 3 of the flight plan?

A) A
B) C
C) I

4305. J34 IRA
(Refer to figure 46.) What are the hours of operation (local time) of the ATIS for the Yakima Air Terminal when daylight savings time is in effect?

A) 0500 to 2100 local.
B) 0600 to 2200 local.
C) 0700 to 2300 local.

4312.
(Refer to figure 50.) What aircraft equipment code should be entered in block 3 of the flight plan?

A) T.
B) U.
C) I

4344.
(Refer to figure 69.) What aircraft equipment code should be entered in block 3 of the flight plan?

A) A.
B) B.
C) U.

4349.
(Refer to figure 72 or 72A.) At which location or condition does the IGN.JUDDS2 arrival begin?

A) JUDDS intersection.
B) IGN VORTAC.
C) BRISS intersection.

4350. J34 IRA
(Refer to figure 72.) How many precision approach procedures are published for Bradley International Airport?

A) One.
B) Three.
C) Four.

4358.
(Refer to figure 74.) What aircraft equipment code should be entered in block 3 of the flight plan?

A) T.
B) U.
C) A.

4361.
(Refer to figure 77.) At which point does the basic instrument departure procedure terminate?

A) When Helena Departure Control establishes radar contact.
B) At STAKK intersection.
C) Over the BOZEMAN VOR.

4362. J01 IRA
(Refer to figure 76.) Which indication would be an acceptable accuracy check of both VOR receivers when the aircraft is located on the VOR receiver checkpoint at the Helena Regional Airport?

A) A.
B) B.
C) C.

4365. J34 IRA
(Refer to figures 76 and 77.) Which en route low altitude navigation chart would cover the proposed routing at the BOZEMAN VORTAC?

A) L 2.
B) L 7.
C) L 9.

4372.
What is the maximum tolerance allowed for an operational VOR equipment check when using a VOT?

A) Plus or minus 4°.
B) Plus or minus 6°.
C) Plus or minus 8°.

4373. J02 IRA
When is a pilot on an IFR flight plan responsible for avoiding other aircraft?

A) At all times when not in radar contact with ATC.
B) When weather conditions permit, regardless of whether operating under IFR or VFR.
C) Only when advised by ATC.

4375. J08 IRA
The aircraft's transponder fails during flight within Class D airspace.

A) The pilot should immediately request clearance to depart the Class D airspace.
B) No deviation is required because a transponder is not required in Class D airspace.
C) Pilot must immediately request priority handling to proceed to destination.

4376. J01 IRA
When using VOT to make a VOR receiver check, the CDI should be centered and the OBS should indicate that the aircraft is on the

A) 090 radial.
B) 180 radial.
C) 360 radial.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4377. J01 IRA
How should the pilot make a VOR receiver check when the aircraft is located on the designated checkpoint on the airport surface?

A) Set the OBS on 180° plus or minus 4°; the CDI should center with a FROM indication.
B) Set the OBS on the designated radial. The CDI must center within plus or minus 4° of that radial with a FROM indication.
C) With the aircraft headed directly toward the VOR and the OBS set to 000°, the CDI should center within plus or minus 4° of that radial with a TO indication.

4378.
When the CDI needle is centered during an airborne VOR check, the omnibearing selector and the TO/FROM indicator should read

A) within 4° of the selected radial.
B) within 6° of the selected radial.
C) 0° TO, only if you are due south of the VOR.

4379. J12 IRA
What does declaring 'minimum fuel' to ATC imply?

A) Traffic priority is needed to the destination airport.
B) Emergency handling is required to the nearest useable airport.
C) Merely an advisory that indicates an emergency situation is possible should any undue delay occur.

4380. J14 IRA
When ATC has not imposed any climb or descent restrictions and aircraft are within 1,000 feet of assigned altitude, pilots should attempt to both climb and descend at a rate of between

A) 500 feet per minute and 1,000 feet per minute.
B) 500 feet per minute and 1,500 feet per minute.
C) 1000 feet per minute and 2,000 feet per minute.

4381 J21 IRA
During an IFR flight in IMC, a distress condition is encountered, (fire, mechanical, or structural failure). The pilot should

A) not hesitate to declare an emergency and obtain an amended clearance.
B) wait until the situation is immediately perilous before declaring an emergency.
C) contact ATC and advise that an urgency condition exists and request priority consideration.

4382.
(Refer to figure 81.) When checking a dual VOR system by use of a VOT, which illustration indicates the VOR's are satisfactory?

A) 1
B) 2
C) 4

4383.
While airborne, what is the maximum permissible variation between the two indicated bearings when checking one VOR system against the other?

A) Plus or minus 4° when set to identical radials of a VOR
B) 4° between the two indicated bearings to a VOR.
C) Plus or minus 6° when set to identical radials of a VOR.

4384. J01 IRA
How should the pilot make a VOR receiver check when the aircraft is located on the designated checkpoint on the airport surface?

A) With the aircraft headed directly toward the VOR and the OBS set to 000°, the CDI should center within plus or minus 4° of that radial with a TO indication.
B) Set the OBS on the designated radial. The CDI must center within plus or minus 4° of that radial with a FROM indication.
C) Set the OBS on 180° plus or minus 4°; the CDI should center with a FROM indication.

4385.
(Refer to figure 82.) Which is an acceptable range of accuracy when performing an operational check of dual VOR's using one system against the other?

A) 1.
B) 2.
C) 4.

4386.
Where can the VOT frequency for a particular airport be found?

A) On the IAP Chart and in the Airport/Facility Directory.
B) Only in the Airport/Facility Directory.
C) In the Airport/Facility Directory and on the A/G Voice Communication Panel of the En Route Low Altitude Chart.

NOTE: CORRECT ANSWER IN BOLD ITALICS

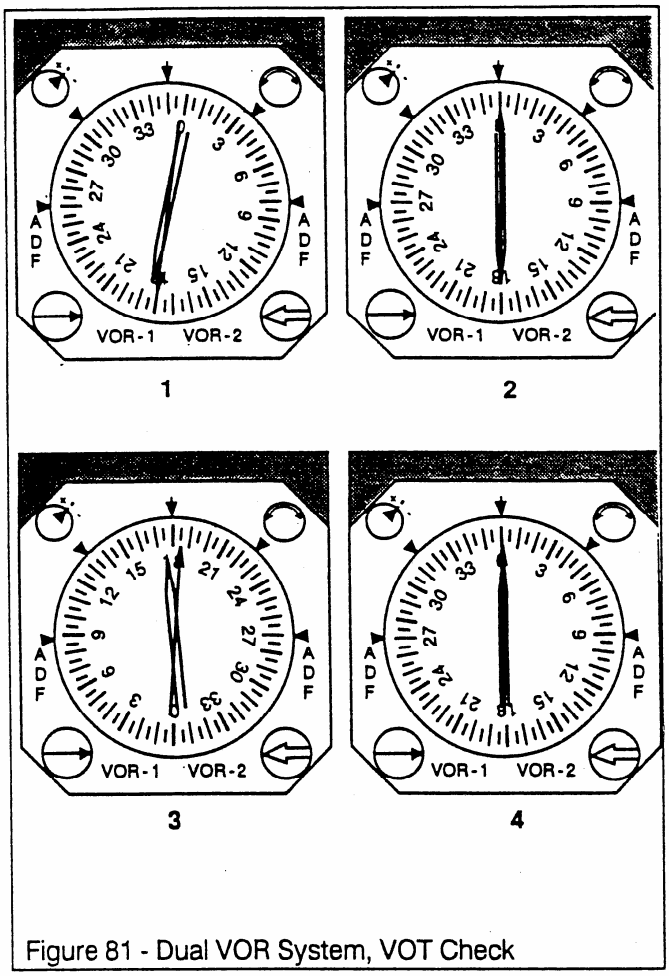


Figure 81 - Dual VOR System, VOT Check

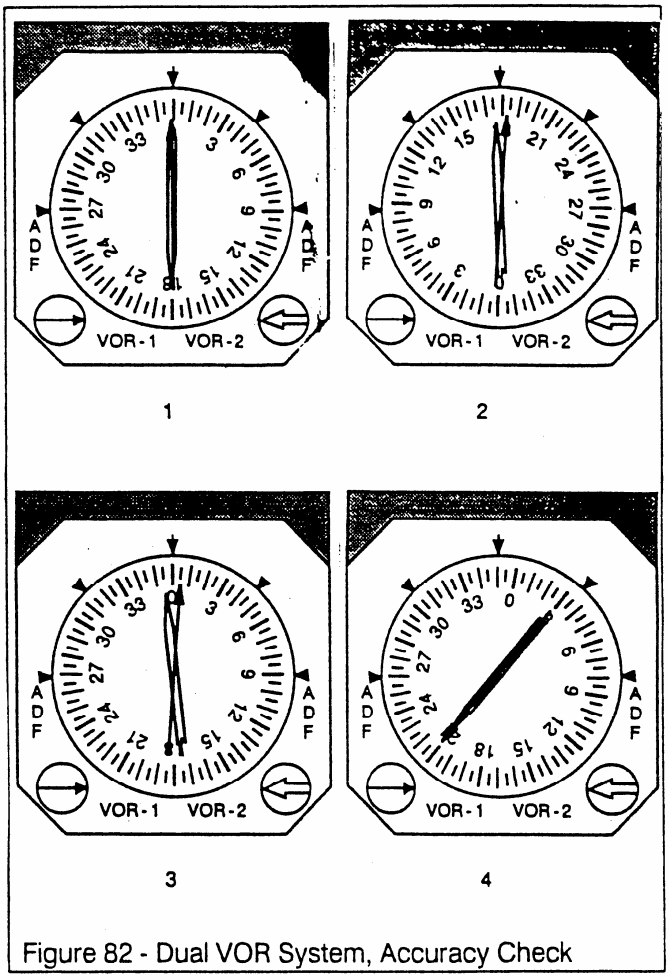


Figure 82 - Dual VOR System, Accuracy Check

4387.
Which indications are acceptable tolerances when checking both VOR receivers by use of the VOT?

A) 360° TO and 003° TO, respectively.
B) 001° FROM and 005° FROM, respectively.
C) 176° TO and 003° FROM, respectively.

4388.
In which publication can the VOR receiver ground checkpoint(s) for a particular airport be found?

A) Airman's Information Manual.
B) En Route Low Altitude Chart.
C) Airport/Facility Directory.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4389.
Which is the maximum tolerance for the VOR indication when the CDI is centered and the airplane is directly over the airborne checkpoint?

A) Plus or minus 6° of the designated radial.
B) Plus or minus 7° of the designated radial.
C) Plus or minus 8° of the designated radial.

4390.
When should your transponder be on Mode C while on an IFR flight?

A) Only when ATC requests Mode C.
B) At all times if the equipment has been calibrated, unless requested otherwise by ATC.
C) When passing 12,500 feet MSL.

4391.
When making an airborne VOR check, what is the maximum allowable tolerance between the two indicators of a dual VOR system (units independent of each other except the antenna)?

A) 4° between the two indicated radials of a VOR.
B) Plus or minus 4° when set to identical radials of a VOR.
C) 6° between the two indicated radials of a VOR.

4393.
What is the recommended climb procedure when a nonradar departure control instructs a pilot to climb to the assigned altitude?

A) Maintain a continuous optimum climb until reaching assigned altitude and report passing each 1,000 foot level.
B) Climb at a maximum angle of climb to within 1,000 feet of the assigned altitude, then 500 feet per minute the last 1,000 feet.
C) Maintain an optimum climb on the centerline of the airway without intermediate level offs until 1,000 feet below assigned altitude, then 500 to 1500 feet per minute.

4394. J16 IRA
When departing from an airport not served by a control tower, the issuance of a clearance containing a void time indicates that

A) ATC will assume the pilot has not departed if no transmission is received before the void time.
B) the pilot must advise ATC as soon as possible, but no later than 30 minutes, of their intentions if not off by the void time.
C) ATC will protect the airspace only to the void time.

4395.
What response is expected when ATC issues an IFR clearance to pilots of airborne aircraft?

A) Read back the entire clearance as required by regulation.
B) Read back those parts containing altitude assignments or vectors and any part requiring verification.
C) Read-back should be unsolicited and spontaneous to confirm that the pilot understands all instructions.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4396.
Which clearance items are always given in an abbreviated IFR departure clearance? (Assume radar environment.)

A) Altitude, destination airport, and one or more fixes which identify the initial route of flight.
B) Destination airport, altitude, DP Name, Number and/or Transition if appropriate.
C) Clearance limit, and DP Name, Number, and/or Transition, if appropriate.

4398. J14 IRA
On the runup pad, you receive the following clearance from ground control:

CLEARED TO DALLAS-LOVE AIRPORT AS FILED - MAINTAIN SIX THOUSAND -SQUAWK ZERO SEVEN ZERO FOUR JUST BEFORE DEPARTURE - DEPARTURE CONTROL WILL BE ONE TWO FOUR POINT NINER.

An abbreviated clearance, such as this, will always contain the

A) departure control frequency.
B) requested enroute altitude.
C) destination airport and route.

4402. H812 IRA
How should you preflight check the altimeter prior to an IFR flight?

A) Set the altimeter to 29.92” Hg. With current temperature and the altimeter indication, determine the true altitude to compare with the field elevation.
B) Set the altimeter first with 29.92” Hg and then the current altimeter setting. The change in altitude should correspond to the change in setting.
C) Set the altimeter to the current altimeter setting. The indication should be within 75 feet of the actual elevation for acceptable accuracy.

4403. J11 IRA
When are ATIS broadcasts updated?

A) Every 30 minutes if weather conditions are below basic VFR; otherwise, hourly.
B) Upon receipt of any official weather, regardless of content change or reported values.
C) Only when the ceiling and/or visibility changes by a reportable value.

4404. J11 IRA
Absence of the sky condition and visibility on an ATIS broadcast specifically implies that

A) the ceiling is more than 5,000 feet and visibility is 5 miles or more.
B) the sky condition is clear and visibility is unrestricted.
C) the ceiling is at least 3,000 feet and visibility is 5 miles or more.

4405. J15 IRA
The most current en route and destination flight information for planning an instrument flight should be obtained from

A) the ATIS broadcast
B) the FSS.
C) Notices to Airmen (Class II)

4406. J15 IRA
From what source can you obtain the latest FDC NOTAM's?

A) In Notices to Airmen (Class II NOTAM's).
B) At an FAA FSS.
C) In the AirportfFacility Directory.

4407. J14 IRA
When may ATC request a detailed report of an emergency even though a rule has not been violated?

A) When priority has been given.
B) Any time an emergency occurs.
C) When the emergency occurs in controlled airspace.

4414. J16 IRA
Which information is always given in an abbreviated clearance?

A) DP or transition name and attitude to maintain.
B) Name of destination airport or specific fix and altitude.
C) Altitude to maintain and code to squawk.

4417. J15 IRA
What action Is recommended if a pilot does not wish to use an instrument departure procedure?

A) Advise clearance delivery or ground control before departure.
B) Advise departure control upon initial contact.
C) Enter "No DP' in the remarks section of the IFR flight plan.

4419. J16 IRA
Which procedure applies to instrument departure procedures?

A) Instrument departure clearances will not be issued unless
requested by the pilot.
B) The pilot in command must accept an instrument departure procedure when issued by ATC.
C) If an instrument departure procedure is accepted, the Pilot must possess at least the textual description.

4420. J16 IRA
During a takeoff into IFR conditions with low ceilings, when should the pilot contact departure control?

A) Before penetrating the clouds.
B) When advised by the tower.
C) Upon completing the first turn after takeoff or upon establishing cruise climb on a straight-out departure.

4421. J11 IRA
During a flight, the controller advises "traffic 2 o'clock 5 miles southbound." The pilot is holding 20° correction for a crosswind from the right. Where should the pilot look for the traffic?

A) 40° to the right of the airplane's nose.
B) 20° to the right of the airplane's nose.
C) Straight ahead.

4426. J08 IRA
In addition to a VOR receiver and two-way communications capability, which additional equipment is required for IFR operation in Class B airspace?

A) Another VOR and communications receiver and a coded transponder.
B) Standby communications receiver, DME, and coded transponder.
C) An operable coded transponder having Mode C capability.

4427. J08 IRA
No person may operate an aircraft in controlled airspace under IFR unless he/she files a flight plan

A) and receives a clearance by telephone prior to takeoff.
B) prior to takeoff and requests the clearance upon arrival on an airway.
C) receives clearance prior the entering controlled airspace.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4439.
Prior to operating an aircraft not equipped with a transponder in Class B airspace, a request for a deviation must be submitted to the

A) FAA Administrator at least 24 hours before the proposed operation.
B) nearest FAA General Aviation District Office 24 hours before the proposed operation.
C) controlling ATC facility at least 1 hour before the proposed flight.

4440.
Which of the following is required equipment for operating an airplane within Class B airspace?

A) A 4096 code transponder with automatic pressure altitude reporting equipment.
B) A VOR receiver with DME.
C) A 4096 code transponder.

4441. B08 IRA
Which procedure is recommended while climbing to an assigned altitude on the airway?

A) Climb on the centerline of the airway except when maneuvering to avoid other air traffic in VFR conditions.
B) Climb slightly on the right side of the airway when in VFR conditions.
C) Climb far enough to the right side of the airway to avoid climbing or descending traffic coming from the opposite direction if in VFR conditions.

4442. J14 IRA
Which clearance procedures may be issued by ATC without prior pilot request?

A) DP's, STAR's and contact approaches.
B) Contact and visual approaches.
C) DP's, STAR's, and visual approaches.

4447.
Where are VFR-on-Top operations prohibited?

A) In Class A airspace.
B) During off-airways direct flights.
C) When flying through Class B airspace.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4448. B08 IRA
What action should you take if your DME fails at FL 240?

A) Advise ATC of the failure and land at the nearest available airport where repairs can be made.
B) Notify ATC that it will be necessary for you to go to a lower altitude, since your DME has failed.
C) Notify ATC of the failure and continue to the next airport of intended landing where repairs can be made.

4449. J14 IRA
Which rules apply to the pilot in command when operating on a VFR-on-Top clearance?

A) VFR only.
B) VFR and IFR.
C) VFR when "in the clear" and IFR when "in the clouds."

4450.
When can a VFR-on-Top clearance be assigned by ATC?

A) Only upon request of the pilot when conditions are indicated to be suitable.
B) Any time suitable conditions exist and ATC wishes to expedite traffic flow.
C) When VFR conditions exist, but there is a layer of clouds below the MEA.

4451.
Which ATC clearance should instrument-rated pilots request in order to climb through a cloud layer or an area of reduced visibility and then continue the flight VFR?

A) To VFR on Top.
B) Special VFR to VFR Over-the-Top.
C) VFR Over-the-Top.

4452.
When on a VFR-on-Top clearance, the cruising altitude is based on

A) true course.
B) magnetic course.
C) magnetic heading.

4453.
In which airspace is VFR-on-Top operation prohibited?

A) Class B airspace.
B) Class E airspace.
C) Class A airspace.

4454. J14 IRA
What cruising altitude is appropriate for VFR on Top on a westbound flight below 18,000 feet?

A) Even thousand-foot levels.
B) Even thousand-foot levels plus 500 feet, but not below MEA.
C) Odd thousand-foot levels plus 500 feet, but not below MEA.

4455. J14 IRA
What reports are required of a flight operating on an IFR clearance specifying VFR on Top in a nonradar environment?

A) The same reports that are required for any IFR flight.
B) All normal IFR reports except vacating altitudes.
C) Only the reporting of any unforecast weather.

4457. J14 IRA
What minimums must be considered in selecting an altitude when operating with a VFR-on-Top clearance?

A) At least 500 feet above the lowest MEA, or appropriate MOCA, and at least 1,000 feet above the existing meteorological condition.
B) At least 1,000 feet above the lowest MEA, appropriate MOCA, or existing meteorological condition.
C) Minimum IFR altitude, minimum distance from clouds, and visibility appropriate to altitude selected.

4459.
What is the procedure when the DME malfunctions at or above 24,000 feet MSL?

A) Notify ATC immediately and request an altitude below 24,000 feet.
B) Continue to your destination in VFR conditions and report the malfunction.
C) After immediately notifying ATC, you may continue to the next airport of intended landing where repairs can be made.

4460. J17 IRA
What action should you take if your No. 1 VOR receiver malfunctions while operating in controlled airspace under IFR? Your aircraft is equipped with two VOR receivers. The No. 1 receiver has Omni/Localizer/Glide Slope capability, and the No. 2 has only Omni.

A) Report the malfunction immediately to ATC.
B) Continue the flight as cleared; no report is required.
C) Continue the approach and request a VOR or NDB approach.

4461. J14 IRA
While on an IFR flight, a pilot has an emergency which causes a deviation from an ATC clearance. What action must be taken?

A) Notify ATC of the deviation as soon as possible.
B) Squawk 7700 for the duration of the emergency.
C) Submit a detailed report to the chief of the ATC facility within 48 hours.

4462.
You enter a holding pattern at a fix, not the same as the approach fix, and receive an EFC time of 1530. At 1520 you experience complete two-way communications failure. Which procedure should you follow to execute the approach to a landing?

A) Depart the holding fix to arrive at the approach fix as close as possible to the EFC time and complete the approach.
B) Depart the holding fix at the EFC time, and complete the approach.
C) Depart the holding fix at the EFC time or earlier ifyour flight planned ETA is before the EFC.

4463. J21 IRA
Which procedure should you follow if you experience two-way communications failure while holding at a holding fix with an EFC time? (The holding fix is not the same as the approach fix.)

A) Depart the holding fix to arrive at the approach fix as close as possible to the EFC time.
B) Depart the holding fix at the EFC time.
C) Proceed immediately to the approach fix and hold until EFC.

4464.
You are in IMC and have two-way radio communications failure. If you do not exercise emergency authority, what procedure are you expected to follow?

A) Set transponder to code 7600, continue flight on assigned route and fly at the last assigned altitude or the MEA, whichever is higher.
B) Set transponder to code 7700 for 1 minute, then to 7600, and fly to an area with VFR weather conditions.
C) Set transponder to 7700 and fly to an area where you can let down in VFR conditions.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4465. J24 IRA
Which procedure should you follow if, during an IFR flight in VFR conditions, you have two-way radio communications failure?

A) Continue the flight under VFR and land as soon as practicable.
B) Continue the flight at assigned altitude and route, start approach at your ETA, or, if late, start approach upon arrival.
C) Land at the nearest airport that has VFR conditions.

4466. J24 IRA
What altitude and route should be used if you are flying in IMC and have two-way radio communications failure?

A) Continue on the route specified in your clearance, fly at an altitude that is the highest of last assigned altitude, altitude ATC has informed you to expect, or the MEA.
B) Fly direct to an area that has been forecast to have VFR conditions, fly at an altitude that is at least 1,000 feet above the highest obstacles along the route.
C) Descend to MEA and, if clear of clouds, proceed to the nearest appropriate airport. If not clear of clouds, maintain the highest of the MEA's along the clearance route.

4470. J16 IRA
What does the symbol T within a black triangle in the minimums section of the IAP for a particular airport indicate?

A) Takeoff minimums are 1 mile for aircraft having two engines or less and ½ mile for those with more than two engines.
B) Instrument takeoffs are not authorized.
C) Takeoff minimums are not standard and/or departure procedures are published.

4471. J19 IRA
What responsibility does the pilot in command of an IFR flight assume upon entering VFR conditions?

A) Report VFR conditions to ARTCC so that an amended clearance may be issued.
B) Use VFR operating procedures.
C) To see and avoid other traffic.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4489. J40 IRA
(Refer to figure 85.) What route should you take if cleared for the Washoe Two Departure and your assigned route is V6?

A) Climb on the LOC south course to WAGGE where you will be vectored to V6.
B) Climb on the LOC south course to cross WAGGE at 9,000, turn left and fly direct to FMG VORTAC and cross at or above 10,000, and proceed on FMG R-241.
C) Climb on the LOC south course to WAGGE, turn left and fly direct to FMG VORTAC. If at 10,000 turn left and proceed on FMG R-241; if not at 10,000 enter depicted holding pattern and climb to 10,000 before proceeding on FMG R-241.

4490. J40 IRA
(Refer to figure 85.) What procedure should be followed if communications are lost before reaching 9,000 feet?

A) At 9,000, turn left direct to FMG VORTAC, then via assigned route if at proper altitude; if not, climb in holding pattern until reaching the proper altitude.
B) Continue climb to WAGGE INT, turn left direct to FMG VORTAC, then if at or above MCA, proceed on assigned route; if not, continue climb in holding pattern until at the proper altitude.
C) Continue climb on LOC course to cross WAGGE INT at or above 9,000, turn left direct to FMG VORTAC to cross at 10,000 or above, and continue on assigned course.

4491.
(Refer to figure 85.) What is- the minimum rate climb per NM to 9,000 feet required for the WASH2 WAGGE Departure?

A) 400 feet.
B) 750 feet.
C) 875 feet.

4500.
While holding at the 10 DME fix east of LCH for an ILS approach to RWY 15 at Lake Charles Muni airport, ATC advises you to expect clearance for the approach at 1015. At 1000 you experience two-way radio communications failure. Which procedure should be followed?

A) Squawk 7600 and listen on the LOM frequency for instructions from ATC. If no instructions are received, start your approach at 1015.
B) Squawk 7700 for 1 minute, then 7600. After 1 minute, descend to the minimum final approach fix altitude. Start your approach at 1015.
C) Squawk 7600; plan to begin your approach at 1015.

4503. B11 IRA
(Refer to figure 89.) What are the oxygen requirements for an IFR flight northeast bound from Bryce Canyon on V382 at the lowest appropriate altitude in an unpressurized aircraft?

A) The required minimum crew must be provided and use supplemental oxygen for that part of the fight of more than 30 minutes.
B) The required minimum crew must be provided and use supplemental oxygen for that part of the flight of more than 30 minutes, and the passengers must be provided supplemental oxygen.
C) The required minimum crew must be provided and use supplemental oxygen, and all occupants must be provided supplemental oxygen for the entire flight above 15,000 feet.

4505.
In the event of two way radio communications failure while operating on an IFR clearance in VFR conditions the pilot should continue

A) by the route assigned in the last ATC clearance received.
B) the flight under VFR and land as soon as practical.
C) the flight by the most direct route to the fix specified in the last clearance.

4510. J35 IRA
(Refer to figure 91.) What are the two limiting cruising altitudes useable on V343 for a VFR-on-Top flight from DBS VORTAC to RANEY intersection?

A) 14,500 and 16,500 feet.
B) 15,000 and 17,000 feet.
C) 15,500 and 17,500 feet.

4513. B11 IRA
(Refer to figure 91.) What are the oxygen requirements for an IFR flight eastbound on V520 from DBS VORTAC in an unpressurized aircraft at the MEA?

A) The required minimum crew must be provided and use supplemental oxygen for that part of the flight of more than 30 minutes.
B) The required minimum crew must be provided and use supplemental oxygen for that part of the flight of more than 30 minutes, and the passengers must be provided supplemental oxygen.
C) The required minimum crew must be provided and use supplemental oxygen.

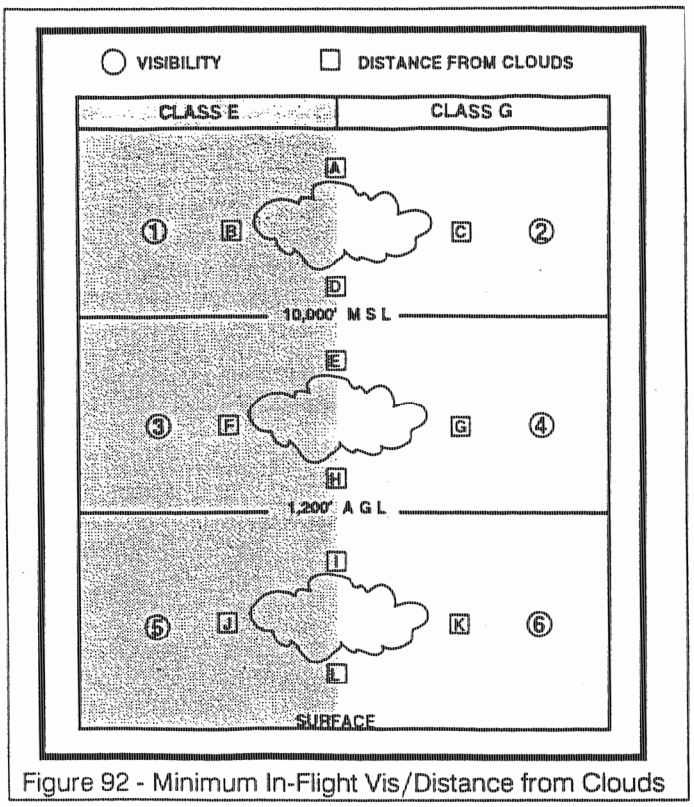


Figure 92 - Minimum In-Flight Vis/Distance from Clouds

4518. B09 IRA
What is the minimum flight visibility and distance from clouds for flight at 10,500 feet with a VFR-on-Top clearance during daylight hours? (Class E airspace.)

A) 3 SM, 1,000 feet above, 500 feet below, and 2,000 feet horizontal.
B) 5 SM, 1,000 feet above, 1,000 feet below, and 1 mile horizontal.
C) 5 SM, 1,000 feet above, 500 feet below, and 1 mile horizontal.

4519. B09 IRA
What is the required flight visibility and distance from clouds if you are operating in Class E airspace at 9,500 feet MSL with a VFR-on-Top clearance during daylight hours?

A) 3 SM, 1,000 feet above, 500 feet below, and 2,000 feet horizontal.
B) 5 SM, 500 feet above, 1,000 feet below, and 2,000 feet horizontal.
C) 3 SM, 500 feet above, 1,000 feet below, and 2,000 feet horizontal.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4520. B09 IRA
(Refer to figure 92.) What is the minimum in-flight visibility and distance from clouds required for a VFR-on-Top flight at 9,500 feet MSL (above 1,200 feet AGL) during daylight hours for area 3?

A) 2,000 feet; (E) 1,000 feet; (F) 2,000 feet; (H) 500 feet.
B) 5 miles; (E) 1,000 feet; (F) 2,000 feet; (H) 500 feet.
C) 3 miles; (E) 1,000 feet; (F) 2,000 feet; (H) 500 feet.

4521. B09 IRA
(Refer to figure 92.) A flight is to be conducted in VFR-on-Top conditions at 12,500 feet MSL (above 1200 feet AGL). What is the in-flight visibility and distance from clouds required for operation in Class E airspace during daylight hours for area 1?

A) 5 miles; (A) 1,000 feet; (B) 2,000 feet; (D) 500 feet.
B) 5 miles; (A) 1,000 feet; (B) 1 mile; (D) 1,000 feet.
C) 3 miles; (A) 1,000 feet; (B) 2,000 feet; (D) 1,000 feet.

4522. B09 IRA
(Refer to figure 92.) What is the minimum in-flight visibility and distance from clouds required in VFR conditions above clouds at 13,500 feet MSL (above 1,200 feet AGL) in Class G airspace during daylight hours for area 2?

A) 5 miles; (A) 1,000 feet; (C) 2,000 feet; (D) 500 feet.
B) 3 miles; (A) 1,000 feet; (C) 1 mile; (D) 1,000 feet.
C) 5 miles; (A) 1,000 feet; (C) 1 mile; (D) 1,000 feet.

4523. B09 IRA
(Refer to figure 92.) What in-flight visibility and distance from clouds is required for a flight at 8,500 feet MSL (above 1,200 feet AGL) in Class G airspace in VFR conditions during daylight hours in area 4?

A) 1 mile; (E) 1,000 feet; (G) 2,000 feet; (H) 500 feet.
B) 3 miles; (E) 1,000 feet; (G) 2,000 feet; (H) 500 feet.
C) 5 miles; (E) 1,000 feet; (G) 1 mile; (H) 1,000 feet.

4524. B09 IRA
(Refer to figure 92.) What is the minimum in-flight visibility and distance from clouds required for an airplane operating less than 1,200 feet AGL during daylight hours in area 6?

A) 3 miles; (I) 1,000 feet; (K) 2,000 feet; (L) 500 feet.
B) 1 mile; (I) clear of clouds; (K) clear of clouds; (L) clear of clouds.
C) 1 mile; (I) 500 feet; (K) 1,000 feet; (L) 500 feet.

4525. B09 IRA
(Refer to figure 92.) What is the minimum in-flight visibility and distance from clouds required for an airplane operating less than 1,200 feet AGL under special VFR during daylight hours in area 5?

A) 1 mile; (I) 2,000 feet; (J) 2,000 feet; (L) 500 feet.
B) 3 miles; (I) clear of clouds; (J) clear of clouds; (L) 500 feet.
C) 1 mile; (I) clear of clouds; (J) clear of clouds; (L) clear of clouds.

4543. B08 IRA
If, while in Class E airspace, a clearance is received to “maintain VFR conditions on top,” the pilot should maintain a VFR cruising altitude based on the direction of the

A) true course.
B) magnetic heading.
C) magnetic course.

4555.
To comply with ATC instructions for altitude changes of more than 1,000 feet, what rate of climb or descent should be used?

A) As rapidly as practicable to 500 feet above/below the assigned altitude, and then at 500 feet per minute until the assigned altitude is reached.
B) 1,000 feet per minute during climb and 500 feet per minute during descents until reaching the assigned altitude.
C) As rapidly as practicable to 1,000 feet above/below the assigned altitude, and then between 500 and 1,500 feet per minute until reaching the assigned altitude.

4633.
Under which ofthe following circumstances will ATC issue a VFR restriction to an IFR flight?

A) Whenever the pilot reports the loss of any navigational aid.
B) When it is necessary to provide separation between IFR and special VFR traffic.
C) When the pilot requests it.

NOTE: CORRECT ANSWER IN BOLD ITALICS

4634. J14 IRA
What is expected of you as pilot on an IFR flight plan if you are descending or climbing in VFR conditions?

A) If on an airway, climb or descend to the right of the centerline.
B) Advise ATC you are in visual conditions and will remain a short distance to the right of the centerline while climbing.
C) Execute gentle banks, left and right, at a frequency which permits continuous visual scanning of the airspace about you.

4638.
Which is true regarding the use of an instrument departure procedure chart?

A) The use of an instrument departure procedure is mandatory.
B) To use an instrument departure procedure, the pilot must possess at least the textual description of the approved standard departure.
C) To use an instrument departure procedure, the pilot must possess both the textual and graphic form of the approved standard departure.

4640.
Which is true regarding STAR's?

A) STAR's are used to separate IFR and VFR traffic.
B) STAR's are established to simplify clearance delivery procedures.
C) STAR's are used at certain airports to decrease traffic congestion.

4694. J42 IRA
(Refer to figure 131.) During a missed approach from the VOR/DME RNAV RWY 4R approach at BOS, what course should be flown to the missed approach holding waypoint.

A) 036°.
B) Runway heading.
C) 033°.

4695. J42 IRA
(Refer to figure 131.) Other than VOR/DME RNAV, what additional navigation equipment is required to conduct the VOR/DME RNAV RWY 4R approach at BOS.

A) None.
B) RNAV.
C) Transponder with altitude encoding and Marker Beacon.

4751. J18 IRA
Under which condition does ATC issue a STAR?

A) To all pilots wherever STAR's are available.
B) Only if the pilot requests a STAR in the "Remarks" section of the flight plan.
C) When ATC deems it appropriate, unless the pilot requests "No STAR."

4760. B10 IRA
What are the alternate minimums that must be forecast at the ETA for an airport that has a precision approach procedure?

A) 400-foot ceiling and 2 miles visibility.
B) 600-foot ceiling and 2 miles visibility.
C) 800-foot ceiling and 2 miles visibility.

4761. B10 IRA
What point at the destination should be used to compute estimated time en route on an IFR flight plan?

A) The final approach fix on the expected instrument approach.
B) The initial approach fix on the expected instrument approach.
C) The point of first intended landing.

4769.
An airport without an authorized IAP may be included on an IFR flight plan as an alternate, if the current weather forecast indicates that the ceiling and visibility at the ETA will

A) be at least 300 feet and 2 miles.
B) be at least 1,000 feet and 1 mile.
C) allow for a descent from the MEA approach, and a landing under basic VFR.

NOTE: CORRECT ANSWER IN BOLD ITALICS