

Federal Aviation Regulations Written Test Guide

FOR PRIVATE, COMMERCIAL AND MILITARY PILOTS

DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

**FEDERAL AVIATION REGULATIONS
WRITTEN TEST GUIDE
for
Private, Commercial, and Military Pilots**



1970

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PREFACE

The Federal Aviation Administration has issued this test guide on Federal Aviation Regulations (FARs) for use by military and civilian pilots and for other interested persons. It outlines the scope of the basic knowledge required of civilian pilots who are studying FARs as they pertain to the regulation terminology; to the certification of private and commercial pilots; to the operation of aircraft in the national airspace; and to the requirements of the National Transportation Safety Board.

This guide includes references recommended for use in a study program aimed at acquiring information in the applicable regulatory areas. It provides sample test items which are typical of the items an applicant may expect to encounter on the test. Correct answers are provided and each item is referenced to a specific Regulation. In some cases, a further explanation is given.

If the military pilot or the civilian pilot will follow the study outline, review the test items, and use the current Regulations as a reference, then the former should be prepared for the test, and the latter should acquire a basic knowledge of Regulations and the type of questions in the tests for private and commercial pilot ratings. This guide replaces the 1967 Federal Aviation Regulations Written Examination Guide, AC 61-34.

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FEDERAL AVIATION REGULATIONS TEST GUIDE

FOR

PRIVATE, COMMERCIAL, AND MILITARY PILOTS

Introduction

Whether a military or a civilian pilot, the student of Federal Aviation Regulations should study this guide. Its contents are important, either to taking the test or to a study program on Federal Aviation Regulations. It is not, however, intended as a quick and easy way to learn the Regulations and the student who uses it with this thought in mind may be disappointed. Rather, this guide is a study tool, and should be used with this understanding. It delineates the appropriate areas of study and provides a foundation in those Regulations established by law as necessary to the safe and orderly conduct of flight operations in the national airspace. Knowledge and understanding of Regulations is important to every airman, be he a professional or a nonprofessional. As in other learning endeavors, one will be informed about Regulations after the study necessary to attain basic knowledge, added effort to improve competence, and continuous review to remain currently informed.

Basis for the Test for Military Pilots

The Federal Aviation Administration recognizes that most rated pilots of the military services have the experience necessary to satisfy the experience and skill requirements for civilian flying. In the area of knowledge as it relates to Regulations, however, the military pilot may not have all the information he needs to operate as a civilian pilot. For this reason, Part 61 of the *Federal Aviation Regulations* sets forth the requirements for qualified persons who wish to obtain a private or commercial certificate. After a study of this material, it will become apparent that the test required by Part 61 is based on knowledge of

the applicable Regulations. Relative to the written test, the requirements are the same, whether the applicant is interested in the private or commercial certificate.

In essence, Part 61.31 states that under the conditions prescribed relative to experience and flying status, military pilots may be certificated as private or commercial pilots if they pass the written test based on test items relating to:

- (a) pilot privileges and limitations,
- (b) general operating and air traffic rules, and
- (c) accident reporting rules.

If the military pilot applicant presents satisfactory evidence of meeting the stipulated requirements for experience and flying status and passes the written test on Regulations, the FAA office where he takes the test will issue him a temporary certificate. A permanent certificate will be sent to him within 90 days.

Nature of the Written Test

As previously indicated, the test for military pilots is concerned entirely with Federal Aviation Regulations and National Transportation Safety Board Safety Investigation Regulations, Part 430. Today, commercial and private pilots may be flying aircraft with performance parameters which, at one time were found only in the larger and more complex air carrier and military aircraft. Flight activities are no longer confined to the local flying area on summer weekends. Consequently, pilots of all experience levels are engaging in flying operations which require knowledge and application of those Regulations which pertain to airman privileges and limitations, as well as to the safety of operations on the ground and in the air. The test

for military pilots is based on multiple-choice test items which may be answered by selecting one response from the four presented. This type of test is used because it can be scored quickly, and through elimination of personal opinion in scoring, provides for a high degree of reliability. In a short test period it can assure comprehensive testing and therefore greater validity. It saves the applicant's time, can be scored objectively, and provides a reliable evaluation of student knowledge. With few exceptions, the test items are applicable to all pilot certificates and aircraft categories. In the interest of safety, however, pilots should be familiar with the few Regulations that are peculiar to a specific aircraft category or pilot certificate. Such test items, germane to knowledge requirements as established by FAR 61.31, are comparatively few in number, and their inclusion should create no problem for the informed applicant.

For certification purposes, civilian pilots are not required, as are military pilots, to take the test based on Regulations alone. For the civilian pilots FAR 61.83 and FAR 61.113 state that applicants for private and commercial pilot certificates must pass a test (which also includes other appropriate subjects) on:

- (a) pilot privileges and limitations,
- (b) general operating and air traffic rules, and
- (c) rules of the National Transportation Safety Board (NTSB) on accident reporting.

From this it can be seen that, *insofar as Regulations alone are concerned*, the aeronautical knowledge requirements are the same for private, commercial, and military pilots. Therefore, this test guide is useful to the military pilot and to the civilian pilot desiring additional guidance in the study of Regulations.

Taking Tests

In addition to being a test of knowledge, understanding, and application of Regulations, tests are, of necessity, an exercise in communications through use of written language. Communication through use of such abstract symbols as words is indeed a complicated endeavor; so complicated in fact, that care must be constantly exercised to prevent a breakdown in the process. The same word may mean

different things to different people. This is especially true of rapid or careless reading which may fail to clearly establish the exact thought context whereby one determines precisely what a phrase or word means. In order to minimize this problem, always bear in mind the following:

1. Follow the directions given in the test booklet.
2. Read the test item carefully. Avoid hasty assumptions.
3. Do not attempt to answer the test item until you understand the question.
4. The answer selected should be the most complete and accurate of the alternatives given. It is important that the applicant understand that even though he feels there is no completely correct answer, he should make his choice based on the alternatives given.
5. It may appear that there is more than one answer. However, there is only one answer that is *correct and complete*. The other answers are either incomplete or are erroneous.
6. Occasionally, a regulation is changed after a test is printed. If so, an applicant will receive proper credit until the affected test item is revised. Answer all test items on the basis of current information.
7. Do not spend too much time on any one item. It may force hurried reading and inaccurate analysis of other items in order to complete the test in the time allotted. Deal with the test items whose answers you know; then, if time permits, reconsider the difficult items.

The military pilot may take the test on Regulations at any FAA Flight Standards General Aviation District Office and most Air Carrier District Offices. The applicant is allowed 2 hours to complete the test. One may not be permitted to start the test if this amount of time is not available. The tests for civilian candidates for private and commercial pilot certificates include many subjects; therefore, more time is allowed. These tests may be taken at all General Aviation District Offices, most Flight Service Stations, and many Air Carrier District Offices.

Scoring Tests

Grading of the test for military pilots is accomplished at the office where administered. If a passing grade of 70 percent is not obtained a "Notice of Disapproval of Application" (FAA Form 666) is issued to the applicant. This form should be presented upon application for re-testing.

The tests taken by civilian applicants are graded at the Aeronautical Center in Oklahoma City. The results and other information are entered on an "Airman Written Test Report" (AC Form 8060-37) and mailed to the applicant as quickly as possible. This form should be retained by the applicant until he passes a practical flight test or until he applies for re-testing.

Recommended Study Materials

An applicant preparing for the test on Regulations or for the test for a private or a commercial pilot certificate, will find the publications listed herein either helpful or essential in a study program. This list does not include all available materials on these subjects. There are many audio-visual training aids and other types of instruction materials which include topics listed in this guide. The applicant can best judge his own needs. It is his responsibility to obtain the study materials appropriate to these needs.

FEDERAL AVIATION REGULATIONS

Part 1—Definitions and Abbreviations

This part places definitions, abbreviations, and rules of construction applicable to Federal Aviation Regulations in one part and makes them apply to all Regulations. In some instances, a Regulation pertaining to one of the three areas for which the military pilot is responsible on the test will make further reference to a Regulation in a different subchapter or part, and therefore requires knowledge of that part or of Part 1, if the pilot is to comply with its provisions. For examples, FAR 91.105 does not define a control zone and FAR 91.97 does not define a positive control area, yet knowledge of those airspace is essential to a meaningful application of either Regulation. FAR 91.105 requires knowledge of Part 1 and

FAR 91.97 requires knowledge of both Part 1 and the appropriate Regulation in that part to which it makes specific reference; i.e., Part 71. Applicants should be aware of this feature of Federal Aviation Regulations.

Part 61—Certification: Pilots and Flight Instructors

This part prescribes the requirements for issuing certain specified pilot and instructor certificates and ratings, the conditions under which those certificates or ratings are necessary, and general rules applicable to the holders of these certificates and ratings. FAR 61.31 states that military pilots must pass a test on pilot privileges and limitations, general operating, air traffic, and accident reporting rules.

Part 71—Designation of Federal Airways, Area Low Routes, Controlled Airspace, and Reporting Points

This part of Federal Aviation Regulations classifies Federal Airways and defines their extent. It also gives several definitions essential to the practical application of many of the flight rules set forth in Part 91. The study outline lists those Regulations in this part with which the applicant should be familiar.

Part 91—General Operating and Flight Rules

This part prescribes rules governing the operation of specified categories of aircraft when (a) within the United States, (b) of U.S. registry over the high seas, and (c) of U.S. registry outside the United States. Since FAR 61.31 requires military pilots to pass a written test which includes knowledge of air traffic and general operating rules, it is apparent that such applicants must be familiar with the VFR rules in Part 91.

NATIONAL TRANSPORTATION SAFETY BOARD REGULATIONS

Part 430—Rules Pertaining to Aircraft Accidents, Incidents, Overdue Aircraft, and Safety Investigations

This part is referred to as NTSB, Part 430. It contains rules pertaining to:

(a) Giving notice of, and reporting aircraft accidents and incidents, and certain other occurrences in the operation of aircraft when

they involve civil aircraft of the United States wherever they occur, or foreign civil aircraft when such events occur in the United States, its territories, or possessions.

(b) Preservation, access to, and release of aircraft wreckage, mail, cargo, and records involving all civil aircraft in the United States, its territories, or possessions.

(c) Investigation of aircraft accidents, certain incidents, and overdue aircraft and special studies and investigations conducted by the Board pertaining to safety in air navigation and the prevention of accidents. FAR 61.31 states that before a military pilot is entitled to a private or commercial certificate, he must pass a written test which includes accident reporting rules.

AIRMAN'S INFORMATION MANUAL

This publication, known as "AIM," provides information for the planning and conduct of flights in the National Airspace System. Many pilots find the "AIM" of value during pre-flight planning and for en route and terminal operations. It is of further value by explaining certain FARs and elaborating on ATC information concerning rules and procedures of flight. Part 1 of "AIM" is an excellent supplemental guide in this respect and should be studied by everyone preparing for an FAA test.

This manual is published and sold in four separate parts. One may subscribe to one or more parts. Highlights of each part are:

Part 1—Basic Flight Manual and ATC Procedures

This part is issued quarterly and contains basic fundamentals required to fly in the National Airspace System; adverse factors affecting Safety of Flight; Health and Medical Facts of interest to pilots; ATC information affecting rules, regulations, and procedures; a Glossary of Aeronautical Terms; Air Defense Identification Zones (ADIZ); Designated Mountainous Areas; SCATANA; and emergency procedures.

Part 2—Airport Directory

This part is issued semiannually and contains a Directory of all Airports, Seaplane Bases, and Heliports in the conterminous

United States, Puerto Rico, and the Virgin Islands which are available for transient civil use. It includes all of their facilities and services, except communications, in codified form. Those airports with communications are also listed in Part 3 which reflects their radio facilities. A list of new and permanently closed airports which updates this part is contained in Part 3.

Included, also, is a list of selected Commercial Broadcast Stations of 100 watts or more of power; U.S. Entry and Departure Procedures, including Airports of Entry and Landing Rights Airports; and a listing of Flight Service Station and Weather Bureau telephone numbers.

Parts 3 and 3A—Operational Data and Notices to Airmen

Part 3 is issued every 28 days and contains an Airport/Facility Directory containing a list of all major airports with communications; a tabulation of Air Navigation Radio Aids and their frequencies; Preferred Routes; Standard Instrument Departures (SIDs); Substitute Route Structures; a Sectional Chart Bulletin, which updates Sectional Charts cumulatively; Special General and Area Notices; a tabulation of New and Permanently Closed Airports, which updates Part 2; and Area Navigation Routes.

Part 3A is issued every 14 days and contains Notices to Airmen considered essential to the safety of flight as well as supplemental data to Parts 3 and 4.

Part 4—Graphic Notices and Supplemental Data

Part 4 is issued semiannually and contains a list of abbreviations used in the AIM; a tabulation of Parachute Jump Areas; locations of VOR Receiver Check Points (both Ground and Airborne); Special Notice—Area Graphics; and Heavy Wagon and Oil Burner Routes. Future editions will be expanded to include additional Terminal Area Graphics and other data not requiring frequent change.

VFR EXAM-O-GRAMS

These synopses analyze and explain topics of importance to safety in flight. They are based on the need, as established by test re-

sults, to clarify certain information and to correct common mistakes and misconceptions.

Moreover, Exam-O-Grams frequently contain information about the FARs. Thus the applicant has another source of knowledge available to him when preparing for an FAA test.

How to Obtain Study Materials

VFR Exam-O-Grams and *IFR Exam-O-Grams* are nondirective in nature, and are issued solely as an information service to individuals interested in Airman Written Tests. They are available *free of charge* (single copy only per request) by ordering from:

Department of Transportation
FAA Aeronautical Center
Flight Standards Technical Division
Operations Branch, AC-240
P.O. Box 25082
Oklahoma City, Oklahoma 73125

(Indicate in your request if you wish to be placed on the mailing list for future issues.)

All other study materials may be obtained by remitting check or money order to the nearest U. S. Government Printing Office Bookstore.

How to Get GPO Publications Promptly

- (1) Use an order form, not a letter, unless absolutely necessary. Order forms, *which may be duplicated by the user*, are included in the catalog "FAA Publications," sent free upon request from:

Distribution Unit, TAD 484.3
Department of Transportation
Washington, D. C. 20590

- (2) Send separate orders for a subscription and a non-subscription item.
- (3) Get the exact name of the publication and the agency number.
- (4) Send a check, not cash. Send the exact amount.
- (5) Enclose a self-addressed mailing label if you have no order blank.
- (6) Use special delivery when needed.
- (7) Use GPO bookstores—they give priority mail order service.

The retail GPO bookstores now in being are located at the following addresses:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

GPO Bookstore
Federal Building
Room 1023
450 Golden Gate Avenue
San Francisco, Calif. 94102

GPO Bookstore
Federal Office Building
Room 1463 14th Floor
219 South Dearborn Street
Chicago, Illinois 60604

GPO Bookstore
Federal Building
300 N. Los Angeles Street
Los Angeles, California 90012

GPO Bookstore
Federal Building
Room 135
601 East 12th Street
Kansas City, Mo. 64106

GPO Bookstore
Room G25
John F. Kennedy Federal Building
Sudbury St.
Boston, Massachusetts 02203

There are many excellent commercially prepared textbooks, audio-visual training aids, and programmed instruction courses, which may be helpful in preparation for the written test.

Study Outline for the Written Test

This outline offers the framework upon which a student may build an organized study program. It includes topics that are basic to adequate knowledge and understanding of those Federal Aviation Regulations which are pertinent to FAA certification of military pilots as private or as commercial pilots. Test items on Regulations may be directly related to one or more of the subjects contained in this outline. The user should understand, however, that the simple rote recall of a Regulation without ability to apply it to an operationally realistic airman activity or situation will not assure knowledge of adequate depth. In most instances, applicants will be concerned with Regulations pertaining to airplanes. If the applicant, however, de-

sires a helicopter rating, he should experience no undue difficulty. In general, the Regulations with which he must be familiar are applicable to all aircraft, and he will need to know additionally only the few flight rules peculiar to this category of aircraft.

FEDERAL AVIATION REGULATIONS

A. FAR Part 1—*Definitions and Abbreviations*. Know the meaning of the following words and terms as used in *Federal Aviation Regulations*:

- | | |
|--------------------------|-----------------------|
| 1. Administrator | 17. Flight Level |
| 2. Air Commerce | 18. Flight Plan |
| 3. Aircraft | 19. Flight Time |
| 4. Airplane | 20. Flight Visibility |
| 5. Airport | 21. Ground Visibility |
| 6. Airport Traffic Area | 22. Helicopter |
| 7. Air Traffic | 23. Large Aircraft |
| 8. Air Traffic Clearance | 24. Maintenance |
| 9. Air Traffic Control | 25. Major Alteration |
| 10. Approved | 26. Major Repair |
| 11. Ceiling | 27. Night |
| 12. Civil Aircraft | 28. Operate |
| 13. Commercial Operator | 29. Pilot in Command |
| 14. Controlled Airspace | 30. Positive Control |
| 15. Crewmember | 31. Prohibited Area |
| 16. Flight Crewmember | 32. Rating |
| | 33. Restricted Area |
| | 34. Route Segment |
| | 35. Small Aircraft |
| | 36. Time in Service |
| | 37. Traffic Pattern |

B. FAR Part 61—*Certification: Pilots and Flight Instructors*. Know and understand the provisions of:

1. FAR 61.1—Applicability.
2. FAR 61.3—Certificates and ratings required.
3. FAR 61.5—Application and issue.
4. FAR 61.7—Temporary certificate.
5. FAR 61.9—Duration of certificate.
6. FAR 61.13—Change of name; replacement of lost or destroyed certificate.
7. FAR 61.15—Aircraft ratings.
8. FAR 61.16—General limitations.
9. FAR 61.27—Retesting after failure.
10. FAR 61.31—Military pilots or former military pilots: special rules.
11. FAR 61.39—Pilot log books: except airline transport pilots.

12. FAR 61.43—Medical certificates: duration.
13. FAR 61.45—Operations during physical deficiency.
14. FAR 61.47—Recent flight experience.
15. FAR 61.48—Applications, certificates, logbooks, reports, and records: falsification, reproduction, or alteration.
16. FAR 61.51—Change of address.
17. FAR 61.101—General privileges and limitations—private pilot.
18. FAR 61.131—General privileges and limitations—commercial pilot.

C. FAR Part 71—*Designation of Federal Airways, Controlled Airspace, and Reporting Points*. It is not necessary that you be familiar with all the Regulations in this part. In some instances, however, FAR 91.105 refers to specific types of controlled airspace which are defined in Part 71. An understanding of these definitions is a prerequisite to the ability to observe the provision of the Regulation. For example, if a pilot cannot identify a control zone or establish its limits, he will be unable to determine if he is complying with restrictions applicable to operations within a control zone. The following study outline identifies the more pertinent of these Regulations:

1. FAR 71.3 —Classification of Federal Airways.
2. FAR 71.5 —Extent of Federal Airways.
3. FAR 71.7 —Control areas.
4. FAR 71.9 —Continental control area.
5. FAR 71.11—Control zones.

D. FAR Part 91—*General Operating and Flight Rules*.

1. Subpart A—General (FAR 91.1 through FAR 91.49).
2. Subpart B—Flight Rules (FAR 91.61 through FAR 91.109).
3. Subpart C—Maintenance, Preventive Maintenance, and Alterations (FAR 91.161 through FAR 91.175).

NATIONAL TRANSPORTATION SAFETY BOARD

Part 430—*Investigation Regulation*. Rules pertaining to aircraft accidents, incidents, overdue aircraft, and safety investigations.

SAMPLE TEST

It should be understood that the test items which follow are representative of the areas of knowledge and types of items the applicant can expect. The few typical test items contained herein are not comprehensive in nature and do not in themselves provide an adequate background of knowledge. Applicants should study Regulations mentioned in this guide. A knowledge of the topics mentioned in this outline—not just the mastery of the sample test items—should be used as the criterion for determining that one is prepared to take the test.

Test Items on Part 1, Federal Aviation Regulations

1. "Flight time" means the time from the moment the aircraft—

- (1) engine is started until it is shut down.
- (2) starts to taxi until it is parked.
- (3) first moves under its own power for the purpose of flight until the moment it first comes to rest at the next point of landing ("block-to-block" time).
- (4) first moves under its own power for the purpose of flight until the moment it lands.

2. "Large aircraft" means aircraft of more than—

- (1) 12,500 pounds empty weight.
- (2) 12,500 pounds maximum certificated takeoff weight.
- (3) 12,500 pounds maximum gross weight only when pilot and co-pilot are required as a minimum crew.
- (4) 60-foot wingspan and 25,000 pounds maximum certificated takeoff weight.

3. The term "Airport Traffic Area" is defined as—

- (1) that airspace within a horizontal radius of 5 statute miles from the

geographical center of any airport at which a control tower is operating, extending from the surface up to, but not including 2,000 feet above the surface.

- (2) in (1) except the airspace extends from the surface up to and including 2,500 feet above the surface.
- (3) in (1) except the horizontal radius extends 10 statute miles from the Airport Traffic Control Tower.
- (4) in (1) except the horizontal radius from the center of the airport is in nautical miles.

4. "Ceiling" means the height above—

- (1) sea level of the lowest or obscuring phenomenon that is broken or "overcast" and not classified as "thin" or "partial."
- (2) the earth's surface of the lowest cloud layer or obscuring phenomenon that *is actually* "broken" or "overcast," and not classified as "thin" or "partial."
- (3) the earth's surface of the lowest cloud layer or obscuring phenomenon that *is reported* as "broken," "overcast," or "obscuration," and not classified as "thin" or "partial."
- (4) the earth's surface of the lowest cloud layer or obscuring phenomenon which covers five-tenths (5/10) or more of the sky.

5. By definition, which of the following would be classified as controlled airspace?

- (1) Continental control area, control area, control zone, and transition area.
- (2) Only control zones and transition areas.
- (3) Only climb corridors, control zones, and extensions thereof.

- (4) Alert, warning, restricted, and prohibited areas.

* * * * *

Test Items on Part 61, Certification: Pilots and Flight Instructors

6. If an applicant takes a written test required for certification as a private or commercial pilot on January 9, and is advised that he failed, he may apply for retesting—

- (1) either on February 8, or after obtaining a minimum of 10 hours of additional instruction.
- (2) only if 30 days have passed since the date he failed that test.
- (3) only upon presenting a statement from a certificated flight instructor with an appropriate category rating, or a certificated ground instructor with an appropriate rating, certifying that he has given additional instruction to the applicant and now considers that he is ready for retesting.
- (4) by observing either of the requirements stated in (2) or (3).

7. Only when specifically authorized to do so by a Flight Standards District Office may any person act as pilot-in-command of a turbojet-powered airplane who does not hold—

- (1) a type rating for that aircraft.
- (2) a commercial pilot certificate.
- (3) an airline transport pilot certificate.
- (4) a Class I medical certificate.

8. The holder of a pilot certificate who has a change in permanent mailing address shall notify—

- (1) the nearest FAA General Aviation District Office either in person or by telephone as soon as possible.
- (2) the Chairman, Civil Aeronautics Board, Washington, D.C.
- (3) in writing and within 30 days after the change, the FAA Airman Certification Branch, Oklahoma City, Oklahoma.
- (4) only the medical examiner at the time the holder's medical certificate is renewed.

9. Excluding the requirement applicable to airline transport pilots, a logbook or some other reliable record of flying time—

- (1) must be maintained only on all flying done for hire.
- (2) is not necessary once a student pilot acquires a pilot certificate.
- (3) must be maintained only for that flying time submitted to document the experience requirements for any pilot certificate or rating, or to meet the recent experience requirements of Part 61, Federal Aviation Regulations.
- (4) must be maintained on all dual, co-pilot, and pilot-in-command flying.

10. Assume that you have a Commercial Pilot Certificate issued February 1, 1971, and a Class II Medical Certificate dated December 2, 1970. Under these circumstances you could continue to exercise the privileges of—

- (1) a commercial pilot until December 2, 1971, and those of a private pilot until December 2, 1972.
- (2) a commercial pilot until January 1, 1972, and those of a private pilot until January 1, 1973.
- (3) either a commercial or private pilot until March 1, 1972.
- (4) neither a commercial nor private pilot after January 1, 1972.

* * * * *

Test Items on Part 91, General Operating and Flight Rules

All regulations in this part, except the instrument flight rules, are pertinent to this test.

11. Certain factors must be considered when selecting a VFR cruising altitude that conforms to Regulations. After determining your true course, which of the following would be *irrelevant* in selecting your cruising altitude?

- (1) The elevation of the terrain over which you will fly.
- (2) The terrain clearance which you plan to maintain.
- (3) Whether or not the flight is conducted on Federal Airways.

- (4) The magnetic variation in the area over which you will fly.

12. A U.S.-certificated pilot operating a foreign civil aircraft in the United States under VFR—

- (1) must file a VFR flight plan.
- (2) must file a VFR flight plan only if he is carrying passengers.
- (3) is not required by Regulations to file any type of flight plan.
- (4) must file an IFR flight plan and conduct all flights along civil airways.

13. If the weather should be reported as a ceiling of 1,000 feet and the visibility as less than 1 mile as you approach an airport within a control zone, you—

- (1) should proceed to another airport within the control zone.
- (2) would not be permitted to fly VFR within the control zone.
- (3) should remain outside the control zone and request a "special VFR clearance."
- (4) must take no special actions because the ceiling is not below VFR minimums.

14. Regulations state that when flying VFR, a pilot on a landing approach to a runway where a visual approach slope indicator (VASI) and traffic control tower are in operation—

- (1) may make an approach utilizing the VASI only if declaration of this intent is communicated to the tower.
- (2) may make an approach using any glide slope desired if the tower gives a landing clearance.
- (3) will be authorized to use the VASI only in conjunction with simulated ILS approaches.
- (4) shall maintain an altitude at or above the VASI glide slope until a lower altitude is necessary for a safe landing, unless otherwise authorized or required by ATC.

15. When applicable, VFR cruising altitudes must be maintained appropriate to the—

- (1) magnetic course being flown.
- (2) magnetic heading being flown.
- (3) compass course being flown.
- (4) compass heading being flown.

16. Regulations pertaining to VFR enroute cruising altitudes apply—

- (1) at all altitudes in controlled airspace only.
- (2) only to VFR flights conducted 3,000 feet or more above the surface.
- (3) only to VFR flights that are conducted along federal airways.
- (4) at all altitudes regardless of whether or not the flight is conducted within controlled airspace.

17. Regulations stipulate that the minimum *basic* flight visibility for VFR operations *more* than 1,200 feet *above* the surface and at or above 10,000 feet MSL is—

- (1) 1 statute mile.
- (2) 3 statute miles.
- (3) 3 miles for helicopters and 5 miles for airplanes.
- (4) 5 statute miles.

* * * * *

Test Items on Part 430 of Investigation Regulations, National Transportation Safety Board

This part to the NTSB Safety Investigation Regulations deals with, among other things, aircraft accidents, incidents, and overdue aircraft. The test items which follow indicate the type of questions an applicant can expect in this area.

18. The operator of an airplane of less than 12,500 pounds (not operating under FAR Part 135) and of U.S. registry is involved in a landing accident in Mexico. The accident results in substantial damage to the airplane, but no injuries to anyone. Under these circumstances, Part 430 of the Safety Investigation Regulations—

- (1) does not require the operator to notify either the Federal Aviation Administration or the NTSB since the accident occurred outside the continental limits of the United States.

- (2) requires the operator to notify the NTSB immediately and submit a report within 10 days to the nearest FAA Flight Standards District Office.
- (3) requires the operator to submit a report to the nearest Bureau of Safety Field Office of the NTSB within 10 days.
- (4) requires the operator to notify the closest U.S. Consular official immediately and to submit a report to him within 7 days.

19. Damage incurred during the operation of an aircraft of more than 12,500 pounds must be reported—

- (1) only if repairs are reasonably estimated to cost \$300 or more.

- (2) only if fire in flight was the primary cause of the damage.
- (3) if major repair or replacement of the affected component would normally be required.
- (4) only for operations conducted under the provisions of FAR Part 135 (Air Taxi Operators and Commercial Operators of Small Aircraft).

20. The NTSB must be notified immediately of incidents which involve—

- (1) unwanted or asymmetrical thrust reversal.
- (2) engine failure.
- (3) in-flight fire.
- (4) rapid decompression.

ANSWERS TO TEST ITEMS

ITEM	ANS.	ITEM	ANS.	ITEM	ANS.	ITEM	ANS.
1-----	(3)	6-----	(4)	11-----	(3)	16-----	(2)
2-----	(2)	7-----	(1)	12-----	(3)	17-----	(4)
3-----	(1)	8-----	(3)	13-----	(2)	18-----	(2)
4-----	(3)	9-----	(3)	14-----	(4)	19-----	(3)
5-----	(1)	10-----	(2)	15-----	(1)	20-----	(3)

EXPLANATION OF ANSWERS TO SELECTED TEST ITEMS

The answers to test items 1 through 5 may be found in FAR Part 1, Definitions and Abbreviations.

- 1.—(3) See Part 1.
- 2.—(2) See Part 1.
- 3.—(1) See Part 1.
- 4.—(3) See Part 1. When two or more layers of clouds are present, it is important that pilots understand that though the upper level by itself may be scattered, it may be *reported* as broken or overcast if the total summation of cloud cover of this and the lower layers give the appearance of broken or overcast conditions to the ground observer.
- 5.—(1) See Part 1.
- 6.—(4) FAR 61.27 states that an applicant may apply for re-testing after failure of a written test either by waiting until 30 days have passed or by presenting a statement from an appropriately qualified person certifying that the applicant is ready for re-testing.
- 7.—(1) FAR 61.16 states that without specific authorization to do so, no person may act as pilot-in-command of a turbojet airplane without a type rating for that aircraft.
- 8.—(3) FAR 61.51 states that within 30 days after any change in his permanent mailing address, the holder of a pilot certificate shall notify the Federal

Aviation Administration, Airman Certification Branch, Oklahoma City, Oklahoma, in writing, of his new address.

- 9.—(3) FAR 61.39 stipulates that there must be a reliable record of the flight time used to meet the experience requirements for any pilot certificate or rating, or to meet recent flight experience requirements. The logging of other flight time is not required except for airline transport pilots.
- 10.—(2) A Commercial Pilot Certificate has no expiration date. The issuance date is irrelevant to this situation. For the certificate to be valid, however, the pilot must possess an appropriate medical certificate. For operations requiring a Commercial Pilot Certificate, the Class II Medical Certificate expires at the *end of the last day of the 12th month after the month in which it is issued*. Thus, commercial pilot privileges may be exercised until January 1, 1972. For operations requiring only a Private Pilot Certificate, a Class II Medical Certificate expires at the *end of the 24th month after the month in which it is issued*. In this case, private pilot privileges may be exercised until January 1, 1973.
- 11.—(3) The Regulation on VFR cruising altitudes is applicable only above 3,000 feet AGL. It applies *every*

where regardless of Federal Airways and is governed by the magnetic course being flown.

- 12.—(3) FAR 91.43 does not require a U.S. certificated pilot to file a flight plan in order to fly under VFR within the United States.
- 13.—(2) Normally, to operate within a control zone under VFR, the ceiling must be at least 1,000 feet and the visibility 3 miles. If either of these conditions does not exist, a special VFR clearance must be obtained prior to operating within the zone. In this instance, the ceiling is not less than basic VFR minimums; however, the visibility is. FAR 91.107 also stipulates that when a person has received appropriate ATC clearance, the flight and ground visibility must be at least 1 mile. Therefore, since the visibility in this case is less than 1 mile, you are not permitted to enter the control zone VFR.
- 14.—(4) FAR 91.87 requires that at those airports where an operating Visual Approach Slope Indicator (VASI) is in use, each pilot of an airplane approaching to land on a runway served by such an indicator shall maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.
- 15.—(1) FAR 91.109 is the applicable Regulation here. It states that the specified altitudes are based on the magnetic course being flown.
- 16.—(2) FAR 91.109 states that each person operating an aircraft VFR in level cruising flight shall maintain a prescribed VFR cruising altitude when 3,000 feet or more above the surface.
- 17.—(4) FAR 91.105 states that with respect to basic weather minimums, no person may operate an aircraft VFR more than 1,200 feet above the surface and at or above 10,000 feet MSL unless the flight visibility is at least 5 miles.
- 18.—(2) Part 430 of Safety Investigation Regulations, NTSB, requires that the NTSB be notified immediately of all occurrences involving substantial damage to U.S.-registered aircraft, regardless of where they occur (430.1). However, since the aircraft was less than 12,500 pounds in authorized maximum takeoff weight, the report on the accident will be submitted to the Federal Aviation Administration within 10 days after the occurrence (430.15).
- 19.—(3) Part 430.2 of Safety Investigation Regulations, NTSB, defines an "aircraft accident" and "substantial damage." Part 430.15 lists those situations relative to accidents and incidents which require reports to the NTSB.
- 20.—(3) Alternate response 3 is the only occurrence of the four responses given which requires immediate notification. Refer to Part 430.5 of Safety Investigation Regulations, NTSB.

ADDITIONAL QUESTIONS

- Must medical certificates be carried on the person while piloting an aircraft? (FAR 61.3.)
- What are the minimum safe altitudes established by the Regulations for flight over a congested area? (FAR 91.79.)
- What is the standard direction for all turns in an airplane approaching to land at an airport without an operating control tower? (FAR 91.89.)
- What do the Regulations require of a helicopter pilot with respect to fixed-wing aircraft traffic when approaching to land at airports without control towers? (FAR 91.89.)
- Are the basic VFR weather minimums the same for all aircraft when operating at more than 1,200 feet above the surface? (FAR 91.105.)
- Is an intentional maneuver with a bank in excess of 60° considered an acrobatic maneuver? (FAR 91.71.)
- What are the restrictions on the proximity of one aircraft to another in flight? (FAR 91.65.)
- At what altitude does the continental control area begin? (FAR 71.9.)
- What is a control zone? (FAR 71.11.)
- At what altitude does a transition area begin when designated in conjunction with airway route structure or segments? (FAR 71.13.)
- What class medical certificate must an applicant hold if he is to be eligible for a commercial pilot certificate? (FAR 61.111.)
- With respect to those Regulations which pertain to certification, ratings, privileges, and limitations of airmen, what do the terms "category," "class," and "type" mean? (FAR 1.)
- For how long a period are private and commercial pilot certificates valid? (FAR 61.9.)
14. May a certificated pilot, who meets recent experience requirements in a small, single-engine land airplane, fly as pilot-in-command of all airplanes in this class? (FAR 61.16.)
 15. What placards, documents, or publications are required on board during the operation of a civil aircraft? (FAR 91.27 and 91.31.)
 16. May civilian pilots operate civil aircraft in formation flight? (FAR 91.65.)
 17. Does an airplane towing a glider have the right-of-way over a glider in free flight? (FAR 91.67.)
 18. May a noninstrument-rated pilot operate an aircraft in a positive control area? (FAR 91.97.)
 19. Are the requirements relative to recency of flight experience the same for all operations conducted for compensation or hire? (FAR 61.47.)
 20. May a commercial pilot exercise the privileges of a private pilot after his Class II medical certificate has expired? (FAR 61.43.)
 21. May a person certificated as a private pilot act as pilot-in-command of an aircraft for compensation or hire? (FAR 61.101.)
 22. Is it mandatory that the pilot keep his seatbelt fastened while at the controls of an aircraft? (FAR 91.7.)
 23. May an aircraft be operated between sunset and sunrise without lighted position lights? (FAR 91.73.)
 24. With respect to center-of-gravity and weight limitations, who is responsible for the proper loading of an aircraft? (FAR 91.29 and FAR 91.31.)
 25. Do Regulations require operational checks of VOR radio navigation equipment in an

airplane which is flown VFR only? (FAR 91.25.)

26. Within the United States, may a pilot-in-command allow a person to make a parachute jump from an aircraft if no emergency exists? (FAR 91.15.)

27. Is it the responsibility of the pilot-in-command to determine that all parachutes carried in an aircraft for emergency use have been packed within the preceding 60 days? (FAR 91.15.)

28. May a pilot carry in a civil aircraft a person who is obviously under the influence of intoxicating liquor? (FAR 91.17.)

29. What followup action is required of a pilot-in-command, who in an emergency deviates from the rules in Part 91, General Operating and Flight Rules? (FAR 91.3.)

30. Is any report required of the pilot-in-command who, in an emergency, is given priority by ATC? (FAR 91.75.)

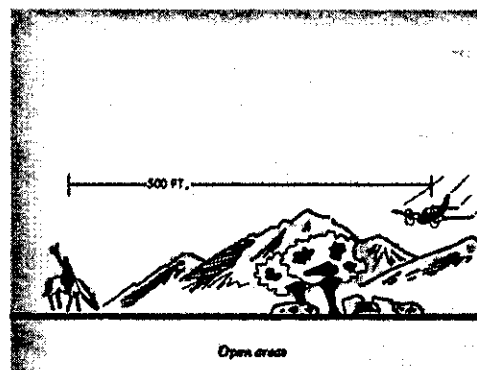
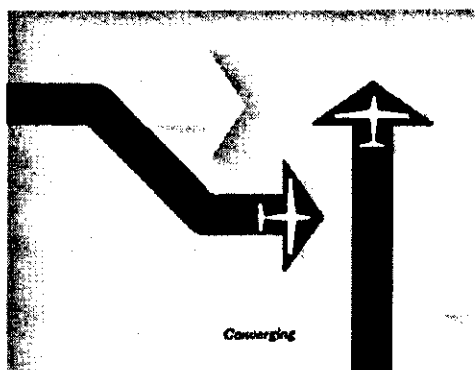
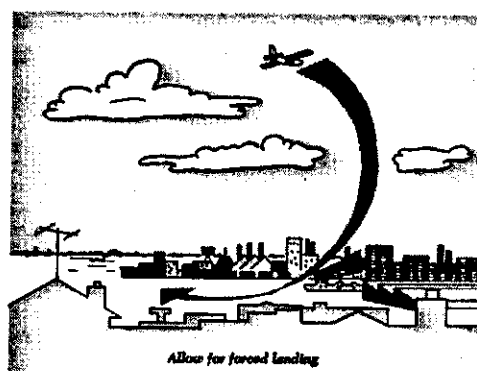
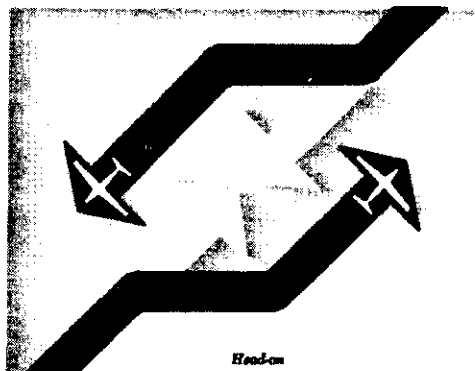
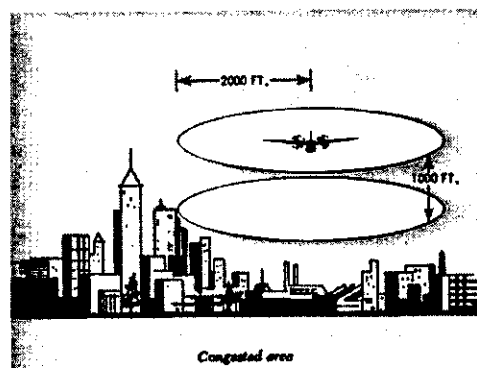
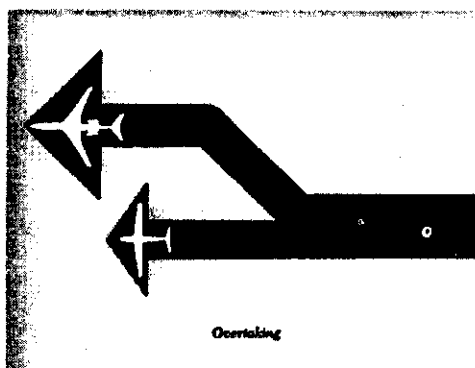


FIGURE 1. Right-of-way.

FIGURE 2. Minimum safe altitude—VFR.

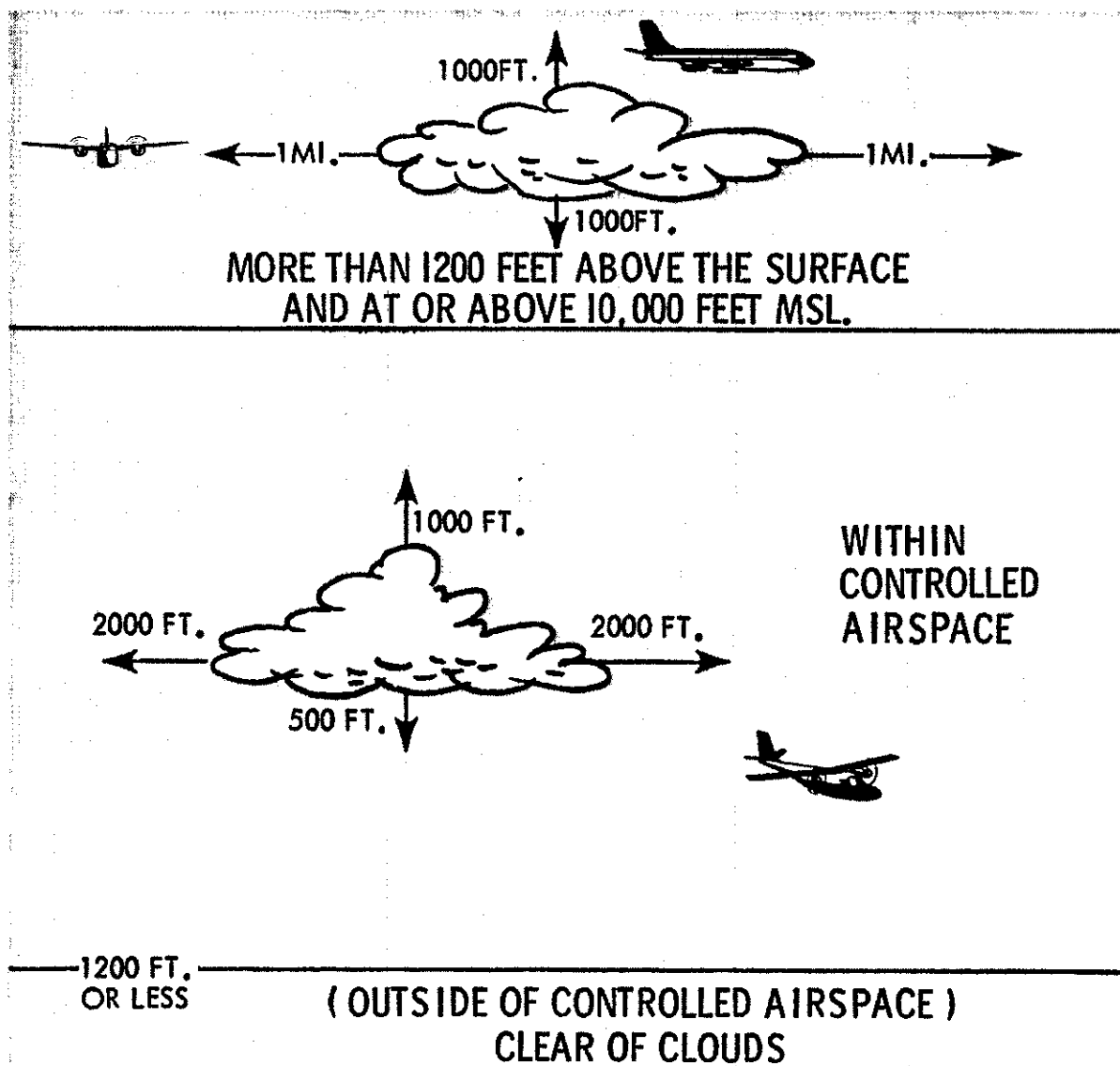


FIGURE 3. Minimum distance from clouds—VFR.

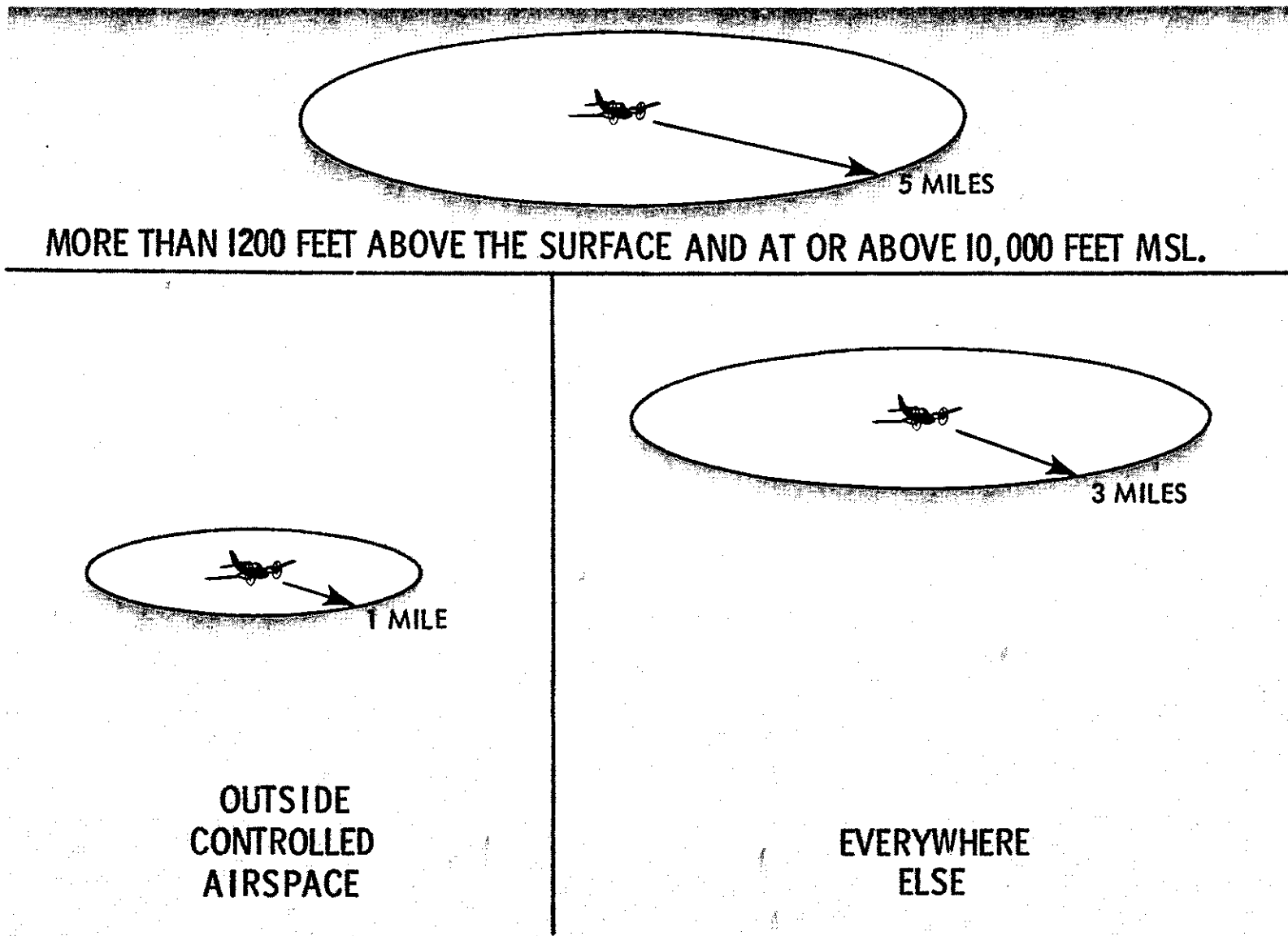


FIGURE 4. Minimum visibility—VFR.

*Must have 2-way radio communication

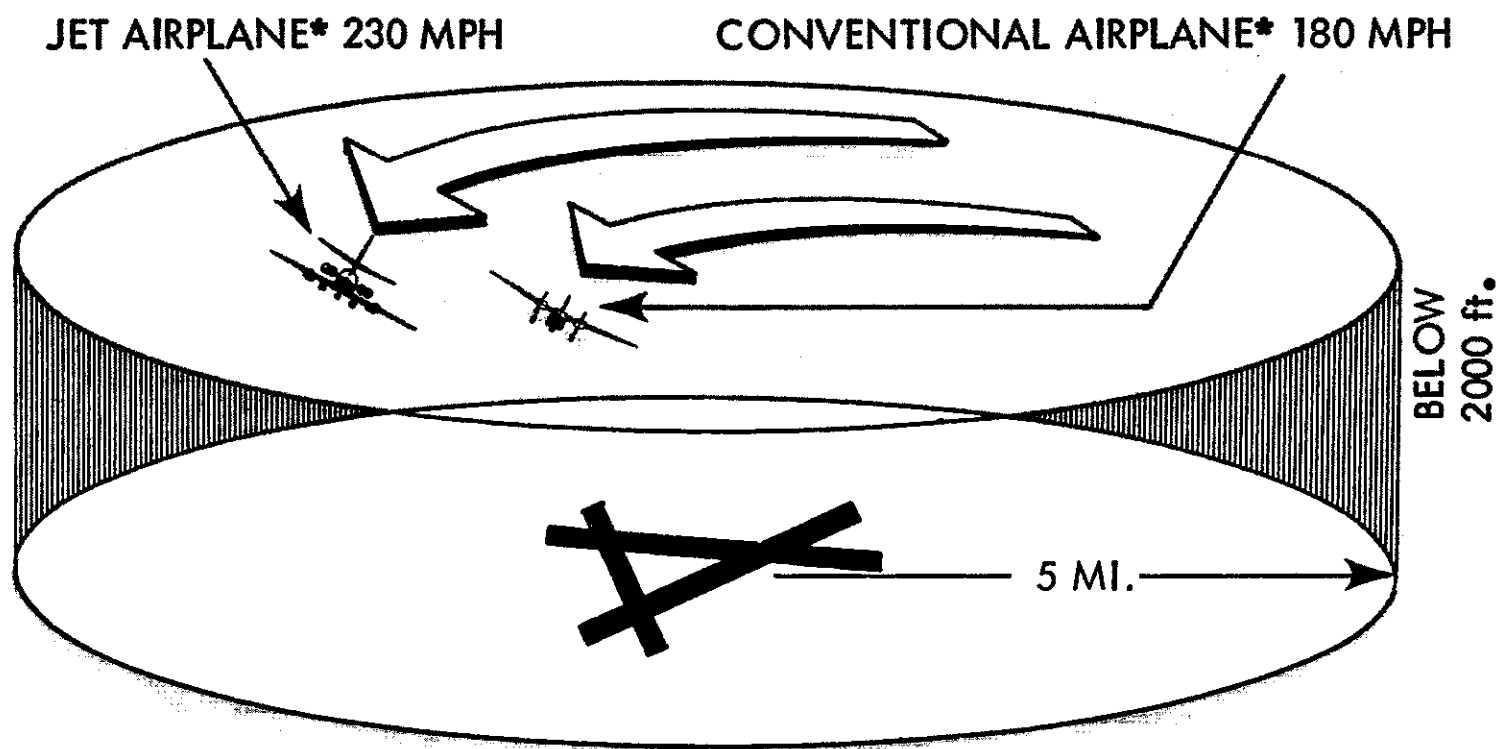
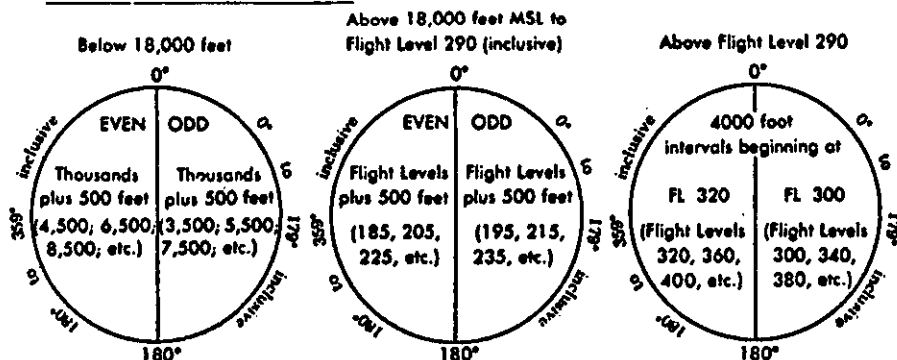


FIGURE 5. Maximum indicated airspeed within an airport traffic area.

VFR ALTITUDES/FLIGHT LEVELS—CONTROLLED AND UNCONTROLLED AIRSPACE

Under Visual Flight Rules (VFR)
At 3,000 feet or more above the surface.

COURSES ARE MAGNETIC



CONTROLLED AIRSPACE

GENERAL

1. Safety, users' needs, and volume of flight operations are some of the factors considered in the designation of controlled airspace. When so designated, the airspace is supported by ground/air communications, navigation aids, and air traffic services.

2. Controlled airspace consists of those areas designated as Continental Control Area, Control Area, Control Zones and Transition Areas, within which some or all aircraft may be subject to Air Traffic Control.

CONTINENTAL CONTROL AREA

The continental control area consists of the airspace of the conterminous United States at and above 14,500 feet MSL and Alaska south of lat. 68°00'N, excluding the Alaska peninsula west of long. 160°00'W, but does not include:

1. The airspace less than 1500 feet above the surface of the earth; or
2. Prohibited or restricted areas, other than restricted area military climb corridors, and the restricted areas listed in Subpart D of Part 71 of the FAR's.

CONTROL AREAS

Control areas consist of the airspace designated as Colored Federal airways, VOR Federal airways, Additional Control Areas, and Control Area Extensions, but do not include the Continental Control Area. Unless otherwise designated, control areas also include the airspace between a segment of a main VOR airway and its associated alternate segments. The vertical extent of the various categories of airspace contained in control areas is defined in FAR Part 71.

POSITIVE CONTROL AREA

1. Positive control area is airspace so designated in Part 71.193 of the Federal Aviation Regulations wherein aircraft are required to be operated under Instrument Flight Rules. Positive control airspace is depicted on enroute high altitude charts. For operations within positive control areas, aircraft must be:

- a. Operated under IFR at specified FL assigned by ATC.
- b. Equipped with instruments and equipment required for IFR operations and flown by a pilot rated for instrument flight;

c. Equipped with a coded radar beacon transponder, having a Mode A (military Mode S) 64 code capability, replying to Mode S/A Interrogation with the code specified by ATC; and

d. Radio equipped to provide direct pilot/controller communication on the frequency specified by ATC for the area concerned.

2. ATC may authorize deviations from the above requirements for operation in a positive control area. In the case of in-flight failure of a radar beacon transponder, ATC may immediately approve operation within a positive control area. In all other cases, requests for an authorization to deviate must be submitted at least four days before the proposed operation, in writing, to the ARTC Center having jurisdiction over the positive control area concerned. ATC may authorize deviations on a continuing basis or for an individual flight, as appropriate.

TRANSITION AREAS

1. Controlled airspace extending upward from 700 feet or more above the surface when designated in conjunction with an airport for which an instrument approach procedure has been prescribed; or from 1,200 feet or more above the surface when designated in conjunction with airway route structures or segments. Unless specifically specified otherwise, transition areas terminate at the base of overlying controlled airspace.

2. The designation of transition areas is a means of ensuring that IFR aircraft can remain within controlled airspace for specific operations.

CONTROL ZONES

1. Controlled airspace which extends upward from the surface and terminates at the base of the continental control area. Control zones that do not underlie the continental control area have no upper limit. A control zone may include one or more airports and is normally a circular area with a radius of 5 statute miles and any extensions necessary to include instrument departure and arrival paths.

Airman's Information Manual (AIM) Excerpt.

VFR PILOT EXAM-O-GRAM® NO. 48

MIDAIR COLLISIONS (Series #3)



JET ON ROTATION



15 SECONDS LATER



60 SECONDS AFTER TAKEOFF AND
PASSING THROUGH 2,000' AGL

Compliance with Flight Rules prescribed in FAR Part 91 and adherence to Good Operating Practices listed in the Airman's Information Manual, will materially reduce the possibility of pilots becoming involved in mid-air collisions. General Aviation Written Tests contain test items on FARs that are related to mid-air collisions. Unfortunately, too many pilots look upon the FARs merely as a disagreeable requirement for passing a written test and do not associate FARs with their everyday flying.

In 1968, 2,230 incidents were reported under the FAA "Near Midair Collision Study Program." Of these, 1,128 were "Hazardous" in that the aircraft missed only by chance or after one or both pilots took evasive action. The present phenomenal growth in number of aircraft and hours flown in U.S. Civil Aviation, is rapidly increasing the midair collision problem.

The National Transportation Safety Board special accident prevention study entitled "Midair Collisions in U.S. Civil Aviation - 1968," lists 38 midair collisions involving 76 aircraft. In preparing this Exam-O-Gram, a study was made of 31 of the General Aviation accident reports of midair collisions that occurred in 1968 and 23 reports of midairs which occurred prior to October in 1969.

This Exam-O-Gram attempts to show pictorially, where and how some midairs have occurred, as well as other places where the midair hazard may strike again. All pilots should become aware of and exercise every precaution against, the midair collision potentials at controlled high density terminal arrival and departure areas. The photographs above show how rapidly a jet on takeoff can become a real hazard to another airplane cruising at 2,000 feet above the ground near a busy airport.

○ ○ ○

WHAT COLLISION PRECAUTIONS SHOULD YOU TAKE FOR CROSS COUNTRY FLIGHTS? In pre-flight planning, check the Special General and Area Notices and Special Graphics Notices of AIM and the aeronautical charts to determine if the proposed route passes through a Restricted Area, Oil Burner Route, Intensive Student Jet Training Area, etc.

Have any fatal mid-air collisions happened as depicted in the illustration to the right? The answer is YES!

Even though the formation of jets is in a steep climb, they are climbing at 365 knots IAS (420 mph).

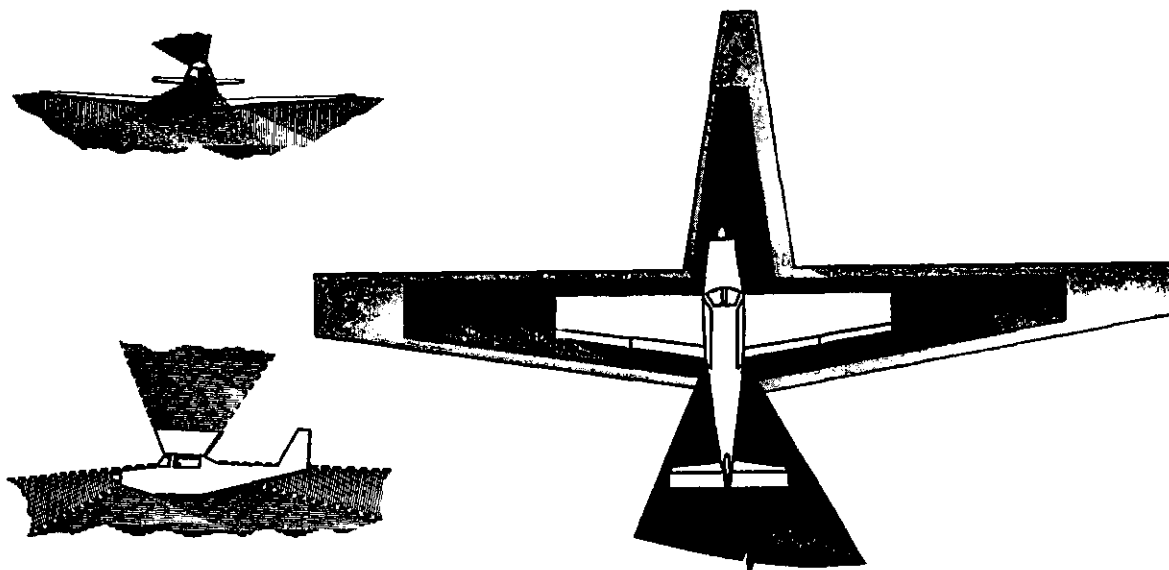
● HEAVY TRAFFIC AROUND MILITARY FIELDS

Pilots are advised to exercise vigilance when in close proximity to most military airports. These airports may have jet aircraft traffic patterns extending up to 2500 feet above the surface. In addition, they may have an unusually heavy concentration of jet aircraft operating within a 25 nautical mile radius and from the surface to all altitudes. This precautionary note also applies to the larger civil airports.

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

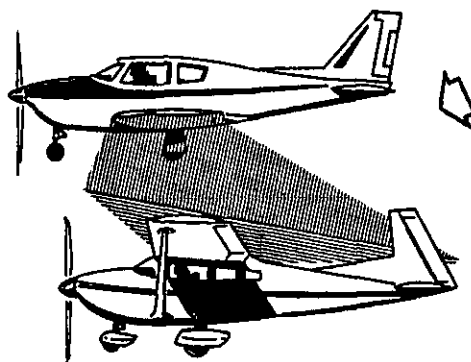


FLYING NEAR A MILITARY AIRFIELD.



THE BLIND SPOTS WIDEN AND EXTEND TO INFINITY AS SHOWN ABOVE

NOTE: When turning a high-wing airplane the pilot lowers the wing and thus hides the area into which he is turning. In a low-wing airplane, the cabin roof hides the area into which the pilot is turning--especially in right turns.



BLIND SPOT OVERLAP

Pilots of high-wing and low-wing airplanes can be in each other's blind spots. Collisions of this type have happened most frequently in the traffic patterns at uncontrolled airports. Collisions like this can occur: (a) on the entry leg of the pattern when the low-wing airplane descends on top of the other airplane; (b) on the downwind leg of the pattern with one of the airplanes flying at an improper pattern altitude--that is, the high-wing airplane climbs or the low-wing airplane descends to return to the desired altitude; (c) on final approach or just before touchdown.

When there is a slower airplane ahead of you in the pattern flying about 100 feet lower than your altitude, it is possible to overtake and never see the slower airplane hidden beneath the nose of your aircraft. Remember, the silhouette of an airplane below the horizon tends to blend with, and be lost in, the surrounding landscape features.

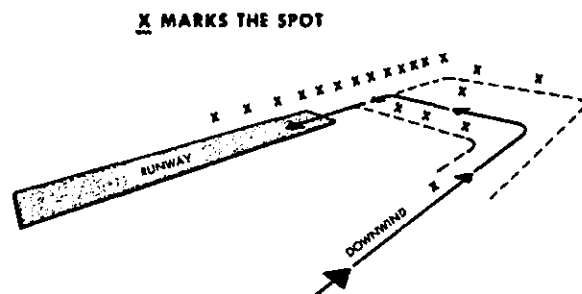
WHEN HAS THIS TYPE COLLISION OCCURRED?

It usually happens when one pilot is flying the traffic pattern in an unauthorized direction. Of the cases studied, there were 3 midairs involved with one of the pilots in each incident flying a right hand pattern while a left hand pattern was in use--and still another midair involved a pilot flying a left hand base leg in noncompliance with the published right hand traffic. The use of UNICOM at uncontrolled airports can make flying around them safer. Even though there is no UNICOM station or Flight Service Station in operation at some of these airports, you can alert other pilots of your presence by announcing your position in the pattern on appropriate frequencies. This subject is covered in Part 1 of AIM under "Traffic Advisories at Nontower Airports."



Of the accident reports studied, there were 8 midairs elsewhere in the pattern (entry, exit, downwind, etc.). One fatal accident occurred when a student and his instructor in a light aircraft were leaving the pattern and collided with a multi-engine aircraft on the downwind leg (as represented by airplanes B and C).

This illustration also shows how an airplane making a pattern entry to the downwind leg could collide head-on with another airplane that has flown a long crosswind leg before making the exit turn. (See airplanes A and C).

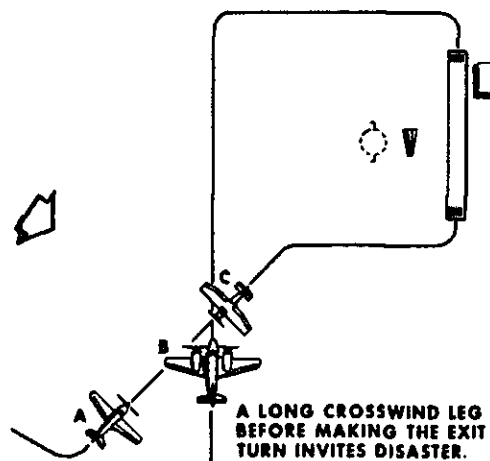


APPROXIMATE POSITION OF MID-AIR COLLISIONS THAT OCCURRED DURING 1948 IN THE DOWN-WIND, BASE-LEG AND FINAL APPROACH.

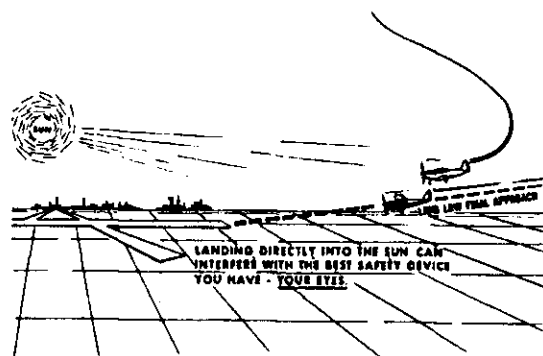
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OTHER ACTUAL MIDAIRS

- 1- Two solo students departed on the same cross-country flight and ran together while looking at their charts.
- 2- One airplane descended on top of a white colored airplane which blended with the snow covered terrain.



A LONG CROSSWIND LEG BEFORE MAKING THE EXIT TURN INVITES DISASTER.

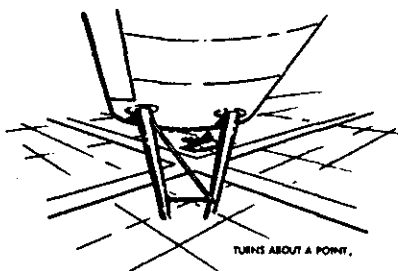


SOME FEDERAL AVIATION REGULATIONS RELATED TO MIDAIR COLLISIONS WITH WHICH PILOTS SHOULD BE THOROUGHLY FAMILIAR AND ADHERE TO, INCLUDE: 91.9, Careless and Reckless Operation; 91.11, Liquor and Drugs; 91.65, Operating Near Other Aircraft; 91.67, Right-of-Way Rules; 91.70, Aircraft Speed; 91.87, Operation at Airports with Operating Control Towers; 91.89, Operation at Airports Without Control Towers; and 61.73, General Limitations.

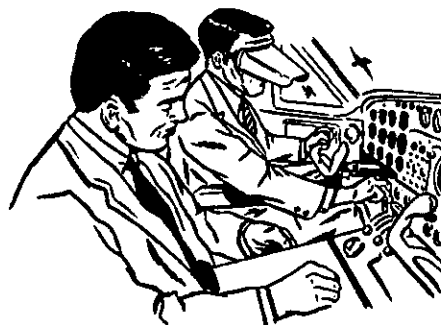
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SITUATIONS CONDUCTIVE TO MIDAIR COLLISIONS

Constant vigilance is a must when practicing pylon 8's, low level ground track maneuvers like "turns about a point," or "S turns across a road."

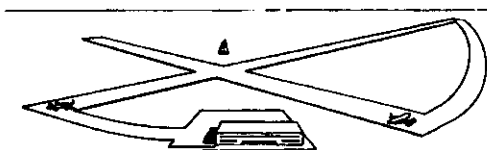


VFR - No. 48

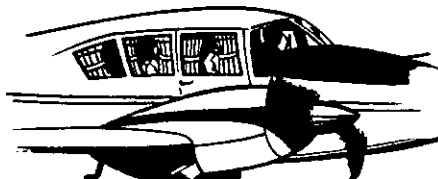


HOW SAFE ARE YOU WITH A SLEEPY SAFETY PILOT?

Situations Conducive to Mid Air Collisions (continued)



OPERATING FROM AN UNCONTROLLED AIRPORT
ON DIFFERENT RUNWAYS.



CLOSED CURTAINS ARE NICE FOR THE PASSENGERS,
BUT THEY DON'T IMPROVE THE VISIBILITY.



VFR AIRCRAFT SKIMMING THE TOPS OF CUMULUS CLOUDS
THAT ARE GRADUALLY LIFTING.

VFR - No. 48

C FAA AC 70-3764

ARE CLEARING PROCEDURES HELPFUL IN REDUCING AIRCRAFT COLLISION POTENTIAL? Yes, pilots should execute gentle banks, left and right, when climbing or descending, rather than spending long periods of time climbing and descending straight ahead. The AIM Good Operating Procedures state in part: "Appropriate clearing procedures should precede the execution of all turns including chandelles, lazy eights, stalls, slow flight, climbs, straight-and-level, spins, and other combination maneuvers." Personnel of the FAA Flight Instructor Refresher Unit, are recommending that trainees of the Flight Instructor Refresher Clinics teach the use of clearing turns prior to the execution of certain maneuvers. They suggest: 90° clearing turns, 180° clearing turns, or whatever clearing is deemed necessary to ascertain that the area is clear before performing any maneuver. They also stress that there should be no delay in entering a maneuver upon completion of the clearing turns. This can be accomplished by performing the necessary conditions of flight (reducing airspeed, adding carburetor heat, etc.) while in the clearing turns.

For several decades military flying schools have taught their pilots to perform at least one 180° clearing turn in each direction before entering such maneuvers as spins, Cuban 8's, Immelmans, etc., where considerable altitude changes are involved.

FAA Aeronautical Center
Flight Standards Technical Division, Operations Branch
P. O. Box 25082
Oklahoma City, Oklahoma 73125

11/69

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GENERAL AVIATION DISTRICT OFFICES (GADO)

The function of GADO office personnel is to assist the Administrator of the FAA in promoting and regulating civil aviation in such a manner as to best foster its development and safety. Specifically, GADO inspectors are called upon to perform a wide variety of job functions. Among other duties, GADO inspectors offer advice and technical assistance to agricultural, industrial, and business aircraft operators; they administer written tests and conduct flight tests; GADO inspectors advise rotorcraft operators, and assist in airshow activities; they issue waivers and authorizations concerning flying operations; inspect airports; and conduct safety education meetings. They investigate general aviation aircraft accidents and incidents. Throughout the nation there are approximately 80 of these offices. The locations are convenient to most people and usually found on or adjacent to an airport. In addition, GADO inspectors periodically visit outlying cities within their districts to administer written tests and to conduct flight tests.

GENERAL AVIATION DISTRICT OFFICES

(Address letters to: Supervising Inspector GADO, Federal Aviation Administration)

<i>State</i>	<i>City</i>	<i>Address</i>	<i>State</i>	<i>City</i>	<i>Address</i>
Alabama ----	Birmingham	6500 43rd Avenue North, Municipal Airport, Birmingham, Ala. 35206	Oakland ----	Oakland	Oakland International Airport, Oakland, Calif. 94614
Alaska -----	Anchorage --	Safeway Hangar Build- ing, Merrill Field, Anchorage, Alaska 99501	Ontario ----	Administration Build- ing, Ontario Interna- tional Airport, On- tario, Calif. 91761	
	Fairbanks --	Administration Build- ing, International Airport, Fairbanks, Alaska 99701	Sacramento -	Executive Airport, Sac- ramento, Calif. 95822	
	Juneau -----	Municipal International Airport, Juneau, Alaska 99801	San Diego --	7841 Balboa Avenue, San Diego, Calif. 92111	
Arizona -----	Phoenix ----	Sky Harbor Airport, Phoenix, Ariz. 85034	San Jose ---	1387 Airport Blvd., San Jose, Calif. 95110	
Arkansas ---	Little Rock --	Terminal Annex Build- ing, Adams Field, Little Rock, Ark. 72202	Santa Monica	Santa Monica Municipal Airport, Santa Mon- ica, Calif. 90405	
California ---	Fresno -----	Government Agency Building, Fresno Air Terminal, Fresno, Calif. 93727	Van Nuys ---	Hathaway Building, Suite 316, 7120 Hay- enhurst Avenue, Van Nuys, Calif. 91408	
	Long Beach -	Long Beach Municipal Airport, Long Beach, Calif. 90806	Colorado ----	Denver -----	Jefferson County Air- port, Broomfield, Colo. 80020
			District of Columbia	Washington, D.C.	West Building, Wash- ington National Air- port, Washington, D.C. 20001

State	City	Address	State	City	Address
Florida	Jacksonville	P.O. Box 35007, Jacksonville, Fla. 32202	Maryland	Baltimore	Friendship International Airport, Baltimore, Md. 21240
	Miami (Kendall Branch)	Tamiami Airport, Miami Kendall Branch, Fla. 33156	Massachusetts	Norwood	Municipal Airport, Norwood, Mass. 02062
	Miami	Opa Locka Airport, Opa Locka, Fla. 33054		Westfield	Barnes Municipal Airport, Westfield, Mass. 01085
	St. Petersburg	St. Petersburg-Clearwater Airport, St. Petersburg, Fla. 33782	Michigan	Detroit	Willow Run Airport, Ypsilanti, Mich. 48197
Georgia	Atlanta	Fulton County Airport, Atlanta, Ga. 30331		Grand Rapids	Kent County Airport, Grand Rapids, Mich. 49508
Hawaii	Honolulu	Terminal Building, Honolulu International Airport, Honolulu, Hawaii 96819	Minnesota	Minneapolis	Wold-Chamberlain Airport, Minneapolis, Minn. 55406
Idaho	Boise	3113 Airport Way, Boise, Idaho 83705	Mississippi	Jackson	Allen C. Thompson Airport, Jackson, Miss. 39208
Illinois	Chicago	DuPage County Airport, P.O. Box 337, West Chicago, Ill. 60185	Missouri	St. Louis	Lambert Field, Berkeley, Mo. 63184
	Springfield	Capital Airport, R.R. #2, Springfield, Ill. 62707	Montana	Billings	Billings Logan Field, Billings, Mont. 59101
				Helena	Helena Airport, Helena, Mont. 59601
Indiana	Indianapolis	Municipal Airport, Indianapolis, Indiana 46241	Nebraska	Lincoln	Lincoln Municipal Airport, Lincoln, Nebr. 68524
	South Bend	St. Joseph County Airport, South Bend, Ind. 46628	Nevada	Las Vegas	Old Airport Terminal Building, Las Vegas, Nev. 89109
Iowa	Des Moines	Des Moines Municipal Airport, Des Moines, Iowa 50321		Reno	2601 E. Plumb Lane, Reno, Nev. 89502
Kansas	Kansas City	Fairfax Airport, Kansas City, Kansas 66115	New Jersey	Teterboro	Teterboro Air Terminal, Teterboro, N. J. 07608
	Wichita	Flight Standards Building, Municipal Airport, Wichita, Kansas 67209	New Mexico	Albuquerque	FAA/Weather Bureau Building, Room 116, Albuquerque, N. Mex. 87119
Kentucky	Louisville	Administration Building, Bowman Field, Louisville, Kentucky 40205	New York	Albany	Albany County Airport, Albany, N. Y. 12211
				Lindenhurst	Zahns Airport, Lindenhurst, N. Y. 11757
				Rochester	Rochester-Monroe County Airport, Rochester, N. Y. 14624
Louisiana	New Orleans	Room 227, New Orleans Lakefront Airport, New Orleans, La. 70120	North Carolina	Charlotte	FAA Building, Municipal Airport Post Office, Charlotte, N.C. 28208
	Shreveport	Administration Building, Downtown Airport, Shreveport, La. 71107		Raleigh	Administration Building, Raleigh-Durham Airport, Raleigh, N.C. 27602
Maine	Portland	Portland Municipal Airport, Portland, Me. 04102	North Dakota	Fargo	Administration Building, Hector Field, Fargo, N. Dak. 58102

<i>State</i>	<i>City</i>	<i>Address</i>	<i>State</i>	<i>City</i>	<i>Address</i>
Ohio -----	Cincinnati --	Lunken Airport, Hangar #5, Cincinnati, Ohio 45226	Tennessee ---	Memphis ----	General Aviation Building (Old Terminal), Winchester Road, Memphis, Tenn. 38118
	Cleveland ---	Building W-11, Cleveland-Hopkins International Airport, Cleveland, Ohio 44135		Nashville ---	Berry Field, Nashville, Tenn. 37217
	Columbus ---	Terminal Building, Box 214, Port Columbus Airport, Columbus, Ohio 43219	Texas -----	Dallas -----	Redbird Airport, Dallas, Texas 75235
Oklahoma ---	Oklahoma City	FAA Building, Wiley Post Airport, Bethany, Okla. 73008		El Paso ----	Room 202, Federal Aviation Building, 6795 Convalr Road, El Paso, Texas 79925
	Tulsa -----	General Aviation Terminal Building, Tulsa International Airport, Tulsa, Okla. 74115		Fort Worth	Administration Building, Room 206, Meacham Field, Fort Worth, Texas 76106
Oregon -----	Eugene -----	1065 High Street, Eugene, Ore. 97501		Houston ----	William P. Hobby Airport, Houston, Texas 77060
	Portland ----	Service Office Building, Portland International Airport, Portland, Ore. 97218		Lubbock ----	Municipal Airport, Lubbock, Tex. 79415
Pennsylvania	Allentown ---	Allentown-Bethlehem-Easton Airport, Allentown, Pa. 18103	San Antonio		Executive Aircraft Terminal, Room 201, International Airport, San Antonio, Tex. 78216
	Harrisburg --	Room 201, Administration Building, Harrisburg-York State Airport, New Cumberland, Pa. 17070			
	Philadelphia	North Philadelphia Airport, Administration Building, First Floor, Philadelphia, Pa. 19114	Utah -----	Salt Lake City	2398 W. North Temple, Salt Lake City, Utah 84116
	Pittsburgh --	Allegheny County Airport, West Mifflin, Pa. 15122	Virginia ----	Richmond ---	Byrd Field, Sandston, Va. 23150
Puerto Rico	San Juan ---	RFD 1, P.O. Box 29A, Lolza Station, San Juan, Puerto Rico 00914	Washington -	Seattle -----	Room 104, FAA Building, Boeing Field, Seattle, Wash. 98108
				Spokane ----	2nd Floor, Administration Building, Felts Field, Spokane, Wash. 99211
South Carolina	Columbia ---	Columbia Metropolitan Airport, Box 200, West Columbia, S.C. 29169	West Virginia	Charleston --	Old Administration Building, Kanawha County Airport, Charleston, W. Va. 25311
			Wisconsin ---	Milwaukee --	FAA/WB Building, General Mitchell Field, Milwaukee, Wis. 53207
South Dakota	Rapid City --	Municipal Airport, Rapid City, S. Dak. 57701	Wyoming ---	Casper -----	FAA/WB Building, Casper Air Terminal, Casper, Wyo. 82601

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Part 45:	Identification and Registration Marking.	
Part 47:	Aircraft Registration.	
Part 49:	Recording of Aircraft Titles and Security Documents.	
Part 183:	Representatives of the Administrator.	
Part 185:	Testimony by Employees and Production of Records in Legal Proceedings.	
Part 187:	Fees.	
Part 189:	Use of Federal Aviation Administration Communications System.	
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Part 25:	Airworthiness Standards: Transport Category Airplanes.	
Part 36:	Noise Standards: Aircraft Type Certification.	

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Part 35:	Airworthiness Standards: Propellers.	
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Part 95:	IFR Altitudes.	
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Part 171:	Non-Federal Navigation Facilities.	