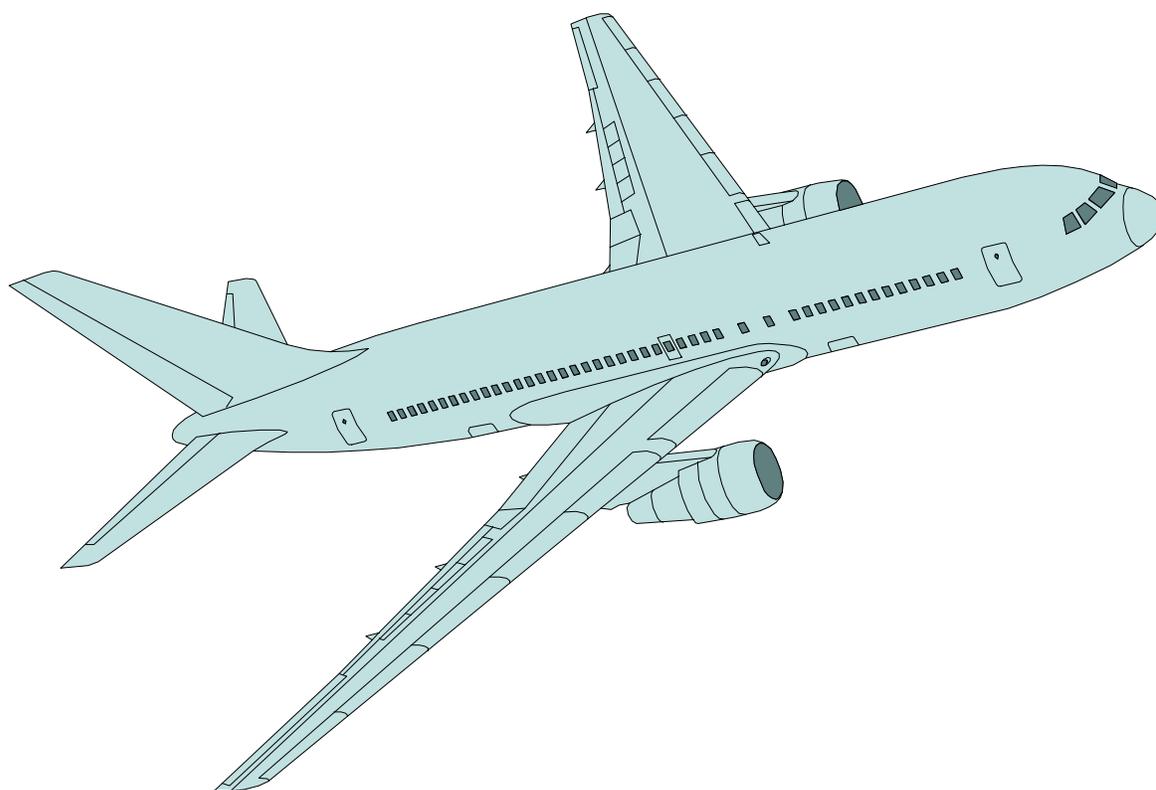


**AIRLINE TRANSPORT PILOT,
AIRCRAFT DISPATCHER,
AND
FLIGHT NAVIGATOR
KNOWLEDGE TEST GUIDE**



U.S. Department of Transportation
Federal Aviation Administration

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AIRCRAFT DISPATCHER,
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1999

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Flight Standards Service

PREFACE

FAA-G-8082-1, Airline Transport Pilot, Aircraft Dispatcher, and Flight Navigator Knowledge Test Guide, provides information for obtaining authorization to take the airline transport pilot, aircraft dispatcher, and flight navigator knowledge tests. Appendix 1 provides lists of reference materials and subject matter knowledge codes, and a list of computer testing designees (CTD's).

Changes to the subject matter knowledge codes will be published in AC 60-25, Reference Materials and Subject Matter Knowledge Codes for Airman Knowledge Testing.

The current Flight Standards Service airman training and testing material, questions banks, and subject matter knowledge codes for all airman certificates and ratings can be obtained from the Regulatory Support Division, AFS-600, home page on the Internet.

The Regulatory Support Division's Internet address is: <http://www.mmac.jccbi.gov/afs/afs600>

FAA-G-8082-1 supersedes Advisory Circular (AC) 61-113, dated 1995, and can be purchased from the Superintendent of Documents, U.S. Government Printing Office (GPO), Washington, DC 20402-9325, or from U.S. Government Bookstores located in major cities throughout the United States. For an explanation of why the Airline Transport Pilot, Aircraft Dispatcher, and Flight Navigator Knowledge Test Guide was taken out of the AC system, refer to AC 60-29, Renumbering of Airman Training and Testing Publications.

Comments regarding this guide should be sent to the Federal Aviation Administration, Airman Testing Standards Branch, AFS-630, Attn: ATP Certification Area Manager, P.O. Box 25082, Oklahoma City, OK 73125.

CONTENTS

Preface	iii
Contents	v
Introduction	1
Knowledge Test Eligibility Requirements	1
Knowledge Areas on the Tests	2
Descriptions of the Tests	2
Process for Taking a Knowledge Test	3
Use of Test Aids and Materials	3
Cheating or Other Unauthorized Conduct	4
Validity of Airman Test Reports	5
Retesting Procedures	5
Sample Test Questions and Answers:	
Airline Transport Pilot—Airplane (14 CFR part 121/ATP)	6
Airline Transport Pilot—Airplane (14 CFR part 135/ATA) or Airline Transport Pilot Added Rating—Airplane (14 CFR part 135/ARA)	7
Airline Transport Pilot—Helicopter (14 CFR part 135/ATH) or Airline Transport Pilot Added Rating—Helicopter (14 CFR part 135/ARH)	8
Airline Transport Pilot—Powered-Lift (14 CFR part 135/ATL)	9
Aircraft Dispatcher (14 CFR part 65/ADX)	10
Flight Navigator (14 CFR part 63/FNX)	11

APPENDIX 1

List of Reference Materials and Subject Matter Knowledge Codes	1-1
Supplemental Study Reference Materials	1-5
Computer Testing Designees	1-6

AIRLINE TRANSPORT PILOT, AIRCRAFT DISPATCHER, AND FLIGHT NAVIGATOR KNOWLEDGE TEST GUIDE

INTRODUCTION

What is required to become a skilled and effective airline transport pilot, aircraft dispatcher, or flight navigator? Although some individuals possess more knowledge and skills than others, no one is a natural-born pilot. Competent airline transport pilots, aircraft dispatchers, and flight navigators become so through study, training, and experience.

This knowledge test guide will answer most of your questions about airline transport pilot, aircraft dispatcher, and flight navigator knowledge tests by covering the following areas: knowledge test eligibility requirements; knowledge areas on the tests; descriptions of the tests; process for taking a knowledge test; use of test aids and materials; cheating or other unauthorized conduct; validity of Airman Test Reports; and retesting procedures.

This guide will help in preparing you to take one or all of the following knowledge tests.

- ➔ Airline Transport Pilot—Airplane (part 121/ATP)
- ➔ Airline Transport Pilot—Airplane (part 135/ATA)
- ➔ Airline Transport Pilot—Airplane—Added Rating (part 135/ARA)
- ➔ Airline Transport Pilot—Helicopter (part 135/ATH)
- ➔ Airline Transport Pilot—Helicopter—Added Rating (part 135/ARH)
- ➔ Airline Transport Pilot—Powered-Lift (part 135/ATL)
- ➔ Aircraft Dispatcher (part 65/ADX)
- ➔ Flight Navigator (part 63/FNX)

This guide is not offered as an easy way to obtain the necessary information for passing the knowledge tests. Rather, the intent of this guide is to define and narrow the field of study to the required knowledge areas included in the tests.

KNOWLEDGE TEST ELIGIBILITY REQUIREMENTS

The general qualifications for an airline transport pilot, aircraft dispatcher, or flight navigator certificate require that you have a combination of experience, knowledge, and skill.

Title 14 of the Code of Federal Regulations (14 CFR) part 61 requires that pilots must be able to read, write, speak, and understand the English language. If you cannot meet these requirements of English fluency, an airman certificate cannot be issued. For medical reasons, an appropriate limitation may be placed on the certificate.

14 CFR part 63 does not require that a limitation be placed on the certificate if a flight navigator cannot read, write, speak, or understand the English language.

14 CFR part 65 requires that an aircraft dispatcher must be able to read, speak, and understand the English language. If unable to do so, an appropriate limitation may be placed on the certificate.

If you are pursuing an airline transport pilot certificate or added rating, you should carefully review the appropriate sections of 14 CFR part 61 for detailed information pertaining to this subject.

If you are pursuing a flight navigator certificate, you should carefully review the appropriate sections of 14 CFR part 63 for detailed information pertaining to this subject.

If you are pursuing an aircraft dispatcher certificate, you should carefully review the appropriate sections of 14 CFR part 65 for detailed information pertaining to this subject.

KNOWLEDGE AREAS ON THE TESTS

The knowledge tests are designed to test your knowledge in many subject areas.

If you are pursuing an airline transport pilot certificate or added rating, you should review the appropriate sections of 14 CFR part 61 for the specific knowledge areas on each test.

Those taking the airline transport pilot (14 CFR part 121) airplane (ATP) test, will be tested on part 121 as one of the knowledge areas.

Those taking the airline transport pilot (14 CFR part 135) airplane (ATA) or powered-lift (ATL) test, will be tested on part 135 as one of the knowledge areas.

All other knowledge areas are not specified as being for part 121 or part 135, and the questions may be used on any of the tests.

If you are pursuing a flight navigator certificate, you should review the appropriate sections of 14 CFR part 63 for the specific knowledge areas on the test.

If you are pursuing an aircraft dispatcher certificate, you should review the appropriate sections of 14 CFR part 65 for the specific knowledge areas on the test. You will be tested on part 121 as one of the knowledge areas. If part 135 commuter operators (as defined in DOT part 298) are required to have aircraft dispatchers in the future, part 135 questions will be added to the test. The aircraft dispatcher applicant is not required to have the flying skills of an airline transport pilot but is expected to have the same knowledge.

DESCRIPTIONS OF THE TESTS

All test questions are the objective, multiple-choice type. Each question can be answered by the selection of a single response. The answer to some questions depend on the response to a previous question to calculate the correct answer. The minimum passing score for each test is 70 percent.

The maximum time allowed for taking each test is either 2.5 or 3 hours, and is based on previous experience and educational statistics. This amount of time is considered more than adequate if you have had proper preparation and instruction.

The following tests each contain 80 questions, and you are allowed 3 hours to complete each test.

- ➔ Airline Transport Pilot—Airplane (part 121/ATP)
- ➔ Airline Transport Pilot—Airplane (part 135/ATA)
- ➔ Airline Transport Pilot—Helicopter (part 135/ATH)
- ➔ Airline Transport Pilot—Powered-Lift (part 135/ATL)
- ➔ Flight Navigator (part 63/FNX)
- ➔ Aircraft Dispatcher (part 121/ADX)

The following tests each contain 50 questions, and you are allowed 2.5 hours to complete each test.

- ➔ Airline Transport Pilot—Airplane—Added Rating (part 135/ARA)
- ➔ Airline Transport Pilot—Helicopter—Added Rating (part 135/ARH)

Communication between individuals through the use of words is a complicated process. In addition to being an exercise in the application and use of aeronautical knowledge, a test is also an exercise in communication since it involves the use of the written language. Since the tests involve written rather than spoken words, communication between the test writer and the person being tested may become a difficult matter if care is not exercised by both parties. Consequently, considerable effort is expended to write each question in a clear, precise manner. You should carefully read the information and instructions given with the tests, as well as the statements in each test item.

When taking a test, keep the following points in mind:

- Answer each question in accordance with the latest regulations and guidance publications.
- Read each question carefully before looking at the possible answers. You should clearly understand the problem before attempting to solve it.
- After formulating an answer, determine which choice corresponds with that answer. The answer chosen should completely resolve the problem.
- From the answers given, it may appear that there is more than one possible answer; however, there is only one answer that is correct and complete. The other answers are either incomplete or are derived from popular misconceptions.

- If a certain question is difficult for you, it is best to mark it for review and proceed to the next question. After you answer the less difficult questions, return to those which you marked for review and answer them. The review marking procedure will be explained to you prior to starting the test. Although the computer should alert you to unanswered questions, make sure every question has an answer recorded. This procedure will enable you to use the available time to the maximum advantage.
- When solving a calculation problem, select the answer closest to your solution. The problem has been checked with various types of calculators; therefore, if you have solved it correctly, your answer will be closer to the correct answer than any of the other choices.

PROCESS FOR TAKING A KNOWLEDGE TEST

The Federal Aviation Administration (FAA) has available hundreds of computer testing centers worldwide. These testing centers offer the full range of airman knowledge tests, except for the flight navigator. The flight navigator knowledge test is given by the Flight Standards District Offices (FSDO). Refer to appendix 1 of this guide for a list of computer testing designees (CTD's).

The first step in taking a knowledge test is the registration process. You may either call the central 1-800 numbers (refer to appendix 1 for 1-800 numbers) or simply use the walk-in basis. If you choose to use the 1-800 number to register, you will need to select a testing center, schedule a test date, and make financial arrangements for test payment. You may register for tests several weeks in advance, and you may cancel your appointment according to the CTD's cancellation policy. If you do not follow the CTD's cancellation policies, you could be subject to a cancellation fee.

The next step in taking a knowledge test is providing proper identification. Although no prior authorization is necessary, except in the case of failure, to take any airline transport pilot, aircraft dispatcher, or flight navigator knowledge test, proper identification is required. Testing center personnel will not begin the test until your identification is verified.

Proper identification contains your photograph, signature, date of birth (must show that you will meet the age requirement for the certificate sought before

the expiration date of the Airman Test Report), and actual residential address, if different from your mailing address.

Before you take the actual test, you will have the option to take a sample test. The actual test is time limited; however, you should have sufficient time to complete and review your test.

Upon completion of the knowledge test, you will receive your Airman Test Report, with the testing center's embossed seal, which reflects your score.

The Airman Test Report lists the subject matter knowledge codes for questions answered incorrectly. The total number of subject matter knowledge codes shown on the Airman Test Report is not necessarily an indication of the total number of questions answered incorrectly. Appendix 1 contains a list of subject matter knowledge codes that refer to the knowledge areas. Study these knowledge areas to improve your understanding of the subject matter.

Your instructor is required to provide instruction on each of these knowledge areas listed on your Airman Test Report and to complete an endorsement of this instruction. The Airman Test Report must be presented to the examiner prior to taking the practical test. During the oral portion of the practical test, the examiner is required to evaluate the noted areas of deficiency.

Should you require a duplicate Airman Test Report due to loss or destruction of the original, send a signed request accompanied by a check or money order for \$1 payable to the FAA. Your request should be sent to the Federal Aviation Administration, Airmen Certification Branch, AFS-760, P.O. Box 25082, Oklahoma City, OK 73125.

USE OF TEST AIDS AND MATERIALS

Airman knowledge tests require applicants to analyze the relationship between variables needed to solve aviation problems, in addition to testing for accuracy of a mathematical calculation. The intent is that all applicants are tested on concepts rather than rote calculation ability. It is permissible to use certain calculating devices when taking airman knowledge tests, provided they are used within the following guidelines. The term "calculating devices" is interchangeable with such items as calculators, computers, or any similar devices designed for aviation-related activities.

1. Guidelines for use of test aids and materials. The applicant may use test aids and materials within the guidelines listed below, if actual test questions or answers are not revealed.

a. Applicants may use test aids, such as scales, straightedges, protractors, plotters, navigation computers, log sheets, and all models of aviation-oriented calculating devices that are directly related to the test. In addition, applicants may use any test materials provided with the test.

b. Manufacturer's permanently inscribed instructions on the front and back of such aids listed in 1(a), e.g., formulas, conversions, regulations, signals, weather data, holding pattern diagrams, frequencies, weight and balance formulas, and air traffic control procedures are permissible.

c. The test proctor may provide calculating devices to applicants and deny them use of their personal calculating devices if the applicant's device does not have a screen that indicates all memory has been erased. The test proctor must be able to determine the calculating device's erasure capability. The use of calculating devices incorporating permanent or continuous type memory circuits without erasure capability are prohibited.

d. The use of magnetic cards, magnetic tapes, modules, computer chips, or any other device upon which prewritten programs or information related to the test can be stored and retrieved are prohibited. Printouts of data will be surrendered at the completion of the test if the calculating device used incorporates this design feature.

e. The use of any booklet or manual containing instructions related to the use of the applicant's calculating device is not permitted.

f. Dictionaries are not allowed in the testing area.

g. The test proctor makes the final determination relating to test materials and personal possessions that the applicant may take into the testing area.

2. Guidelines for dyslexic applicant's use of test aids and materials. A dyslexic applicant may request approval from the local Flight Standards District Office (FSDO) to take an airman knowledge test using one of the three options listed in preferential order:

a. Option One. Use current testing facilities and procedures whenever possible.

b. Option Two. Applicants may use Franklin Speaking Wordmaster® to facilitate the testing process. The Wordmaster® is a self-contained electronic thesaurus that audibly pronounces typed in words and presents them on a display screen. It has a built-in headphone jack for private listening. The headphone feature will be used during testing to avoid disturbing others.

c. Option Three. Applicants who do not choose to use the first or second option may request a test proctor to assist in reading specific words or terms from the test questions and supplement material. In the interest of preventing compromise of the testing process, the test proctor should be someone who is non-aviation oriented. The test proctor will provide reading assistance only, with no explanation of words or terms. The Airman Testing Standards Branch, AFS-630, will assist in the selection of a test site and test proctor.

CHEATING OR OTHER UNAUTHORIZED CONDUCT

Computer testing centers must follow strict security procedures to avoid test compromise. These procedures are established by the FAA and are covered in FAA Order 8080.6, Conduct of Airman Knowledge Tests. The FAA has directed testing centers to terminate a test at any time a test proctor suspects a cheating incident has occurred. An FAA investigation will then be conducted. If the investigation determines that cheating or unauthorized conduct has occurred, then any airman certificate or rating that you hold may be revoked, and you will be prohibited for 1 year from applying for or taking any test for a certificate or rating under 14 CFR part 61.

VALIDITY OF AIRMAN TEST REPORTS

For an Airman Test Report to be valid, it must be dated within the 24-calendar month period preceding the month you complete the practical test. If the Airman Test Report expires before completion of the practical test, you must retake the knowledge test.

The 24-month limitation does not apply if you:

1. are employed as a flight crewmember by a certificate holder under 14 CFR parts 121, 125, or 135 at the time of the practical test and have satisfactorily accomplished that operator's approved:

a. pilot in command aircraft qualification training program that is appropriate to the certificate and rating sought; and

b. qualification training requirements appropriate to the certificate and ratings sought; or

2. are employed as a flight crewmember in scheduled U.S. military air transport operations at the time of the practical test, and have accomplished the pilot in command aircraft qualification training program that is appropriate to the certificate and rating sought.

RETESTING PROCEDURES

If you receive a grade lower than 70 percent and wish to retest, you must present the following to testing center personnel.

- failed Airman Test Report; and
- a written endorsement from an authorized instructor certifying that additional instruction has been given, and the instructor finds you competent to pass the test. If you decide to retake the test in anticipation of a better score, you may retake the test after 30 days from the date your last test was taken. The FAA will not allow you to retake a passed test before the 30-day period has lapsed. Prior to retesting, you must give your current Airman Test Report to the test proctor. The last test taken will reflect the official score

SAMPLE TEST QUESTIONS AND ANSWERS

AIRLINE TRANSPORT PILOT—AIRPLANE (14 CFR part 121/ATP)

1. If a turbine-engine-powered, pressurized airplane is not equipped with quick-donning oxygen masks, what is the maximum flight altitude authorized without one pilot wearing and using an oxygen mask?

- A—FL 300.
- B—FL 250.
- C—FL 200.

*Answer B—Subject Matter Knowledge Code: D11.
14 CFR part 121, section 121.333(c)(2) states:*

“Sec. 121.333 Supplemental oxygen for emergency descent and for first aid; turbine....

(2) When operating at flight altitudes above flight level 250, one pilot at the controls of the airplane shall at all times wear and use an oxygen mask secured, sealed, and supplying oxygen, in accordance with the following:

(i) The one pilot need not wear and use an oxygen mask at or below the following flight levels if each flight crewmember on flight deck duty has a quick-donning type of oxygen mask that the certificate holder has shown can be placed on the face from its ready position, properly secured, sealed, and supplying oxygen upon demand, with one hand and within five seconds....”

2. The “age 60 rule” of 14 CFR part 121 applies to

- A—any required pilot crewmember.
- B—any pilot or flight engineer.
- C—the pilot in command only.

*Answer A—Subject Matter Knowledge Code: D13.
14 CFR part 121, section 121.383(c) states:*

“Sec. 121.383 Airman: Limitations on use of services....

(c) No certificate holder may use the services of any person as a pilot on an airplane engaged in operations under this part if that person has reached his 60th birthday. No person may serve as a pilot on an airplane engaged in operations under this part if that person has reached his 60th birthday....”

SAMPLE TEST QUESTIONS AND ANSWERS

AIRLINE TRANSPORT PILOT—AIRPLANE (14 CFR part 135/ATA) AND AIRLINE TRANSPORT PILOT ADDED RATING—AIRPLANE (14 CFR part 135/ARA)

1. At altitudes above 10,000 feet through 12,000 feet MSL, each pilot of an unpressurized airplane must use supplemental oxygen for that part of the flight that is of a duration of more than

- A—20 minutes.
- B—45 minutes.
- C—30 minutes.

*Answer C—Subject Matter Knowledge Code: E02.
14 CFR part 135, section 135.89(a)(1) states:*

“Sec. 135.89 Pilot requirements: Use of oxygen....

(1) At altitudes above 10,000 feet through 12,000 feet MSL for that part of the flight at those altitudes that is of more than 30 minutes duration....”

2. Which is an operational requirement concerning ice, snow, or frost on structural surfaces?

- A—A takeoff may not be made if ice or snow is adhering to the wings, stabilizing or control surfaces.
- B—A takeoff may be made with ice, snow, or frost adhering to the wings, stabilizing or control surfaces if wing anti-icing and icing equipment is operating.
- C—If snow, ice, or frost is adhering to the airplane’s lift or control surfaces, but polished smooth, a takeoff may be made.

*Answer A—Subject Matter Knowledge Code: E04.
14 CFR part 135, section 135.227(a)(1)(2) states:*

“Sec. 135.227 Icing conditions: Operating limitations.

(a) No pilot may take off an aircraft that has frost, ice, or snow adhering to any rotor blade, propeller, windshield, wing, stabilizing or control surface, to a powerplant installation, or to an airspeed, altimeter, rate of climb, or flight attitude instrument system, except under the following conditions:

(1) Takeoffs may be made with frost adhering to the wings, or stabilizing or control surfaces, if the frost has been polished to make it smooth.

(2) Takeoffs may be made with frost under the wing in the area of the fuel tanks if authorized by the Administrator....”

SAMPLE TEST QUESTIONS AND ANSWERS

AIRLINE TRANSPORT PILOT—HELICOPTER (14 CFR part 135/ATH) AND AIRLINE TRANSPORT PILOT ADDED RATING—HELICOPTER (14 CFR part 135/ARH)

1. What is the result of loading a helicopter so that the CG is aft of the rearward limit?

- A—Insufficient aft cyclic control to decelerate properly during an approach.
- B—Inability of the pilot to recognize this dangerous condition when hovering in a strong headwind.
- C—Insufficient forward cyclic control to fly in the upper allowable airspeed range.

Answer C—Subject Matter Knowledge Code: H76. AC 61-13, Basic Helicopter Handbook page 44.

The pilot may find it impossible to fly in the upper allowable airspeed range due to insufficient forward cyclic displacement to maintain a nose-low attitude.

2. What is the minimum rest period that must be provided for a pilot assigned to Helicopter Hospital Emergency Medical Evacuation Service (HEMES) who has been on duty for a 50-hour period?

- A—16 consecutive hours.
- B—12 consecutive hours.
- C—10 consecutive hours.

Answer A—Subject Matter Knowledge Code: E06. 14 CFR part 135, section 135.271(h)(2) states:

“Sec. 135.271 Helicopter hospital emergency medical evacuation service (HEMES)....

(2) At least 16 consecutive hours for an assignment of more than 48 hours....”

SAMPLE TEST QUESTIONS AND ANSWERS

AIRLINE TRANSPORT PILOT—POWERED-LIFT (14 CFR part 135/ATL)

1. Which person, other than the second in command, may the pilot in command permit to manipulate the flight controls?

A—A member of the National Transportation Safety Board who holds a pilot certificate appropriate for the aircraft.

B—An authorized FAA safety representative who is qualified in the aircraft, and is checking flight operations.

C—A pilot employed by an engineering firm who is authorized by the certificate holder to conduct flight tests.

Answer B—Subject Matter Knowledge Code: E02. 14 CFR part 135, section 135.115(b) states:

“Sec. 135.115 Manipulation of controls....

(b) An authorized safety representative of the Administrator who has the permission of the pilot in command, is qualified in the aircraft, and is checking flight operations.”

2. The lift differential that exists between the advancing main rotor blade and the retreating main rotor blade is known as

A—Coriolis effect.

B—dissymmetry of lift.

C—translating tendency.

Answer B—Subject Matter Knowledge Code: H78. AC 61-13 Basic Helicopter Handbook page 12.

Dissymmetry of lift is created by horizontal flight or by wind during hovering flight, and is the difference in lift that exists between the advancing blade half of the disc area and the retreating blade half.

SAMPLE TEST QUESTIONS AND ANSWERS

AIRCRAFT DISPATCHER (14 CFR part 65/ADX)

1. To remain current as an aircraft dispatcher, a dispatcher must, in addition to other requirements,

A—make a trip over one of the air carrier’s routes within the preceding 6 calendar months.

B—spend 5 hours observing flight deck operations within the preceding 12 calendar months.

C—make a trip in one of the types of airplanes to be dispatched, every 3 months.

Answer B—Subject Matter Knowledge Code: D16. 14 CFR part 121, section 121.463(c) states:

“Sec. 121.463 Aircraft dispatcher qualifications....

(c) No certificate holder conducting domestic or flag operations may use any person, nor may any person serve, as an aircraft dispatcher unless within the preceding 12 calendar months the aircraft dispatcher has satisfactorily completed operating familiarization consisting of at least 5 hours observing operations under this part, in one of the types of airplanes in each group to be dispatched. This observation shall be made from the flight deck or, for airplanes without an observer seat on the flight deck, from a forward passenger seat with headset or speaker....”

2. When an aircraft dispatcher declares an emergency for a flight and a deviation results, a written report shall be sent to the

A—ATC facility chief within 48 hours.

B—nearest FAA district office within 48 hours.

C—FAA Administrator within 10 days.

Answer C—Subject Matter Knowledge Code: D20. 14 CFR part 121, section 121.557(c) states:

“Sec. 121.557 Emergencies: Domestic and flag operations....

(c) Whenever a pilot in command or dispatcher exercises emergency authority, he shall keep the appropriate ATC facility and dispatcher centers fully informed of the progress of the flight. The person declaring the emergency shall send a written report of any deviation through the certificate holder’s operations manager, to the Administrator. A dispatcher shall send his report within 10 days after the date of the emergency, and a pilot in command shall send his report within 10 days after returning to his home base.”

SAMPLE TEST QUESTIONS AND ANSWERS

FLIGHT NAVIGATOR (14 CFR part 63/FNX)

1. What document(s) must be in a person's possession for that person to act as a flight navigator?

- A—Current flight navigator certificate and a current second-class (or higher) medical certificate.
- B—Current flight navigator certificate and a valid passport.
- C—Third-class medical certificate and current flight navigator certificate.

Answer A—Subject matter Knowledge Code: A30. 14 CFR part 63, section 63.3(b) states:

“Sec. 63.3 Certificates and ratings required....

(b) No person may act as a flight navigator of a civil aircraft of U.S. registry unless he has in his personal possession a current flight navigator certificate issued to him under this part and a second-class (or higher) medical certificate issued to him under part 67 of this chapter within the preceding 12 months....”

2. Assuring that appropriate aeronautical charts are aboard an aircraft is the responsibility of the

- A—Aircraft dispatcher.
- B—Flight navigator.
- C—Pilot in command.

Answer C—Subject Matter Knowledge Code: D20. 14 CFR part 121, section 121.549(a) states:

“Sec. 121.549 Flying equipment.

(a) The pilot in command shall ensure that appropriate aeronautical charts containing adequate information concerning navigation aids and instrument approach procedures are aboard the aircraft for each flight....”

APPENDIX 1

LIST OF REFERENCE MATERIALS AND SUBJECT MATTER KNOWLEDGE CODES

The subject matter knowledge codes refer to the specific reference for the knowledge standard. These codes and references were used in the current bank of test questions. There may be additions to the bank of test questions as new reference material becomes available, which reflect on safety of flight, as did AC 135-17, Pilot Guide—Small Aircraft Ground Deicing.

Title 14 of the Code of Federal Regulations (14 CFR) part 1—Definitions and Abbreviations

- A01 General Definitions
- A02 Abbreviations and Symbols

14 CFR part 61—Certification: Pilots, Flight Instructors, and Ground Instructors

- A20 General
- A21 Aircraft Ratings and Pilot Authorizations
- A25 Airline Transport Pilots

14 CFR part 63—Certification: Flight Crewmembers Other Than Pilots

- A32 Flight Navigators

14 CFR part 65—Certification: Airmen Other Than Flight Crewmembers

- A41 Aircraft Dispatchers

14 CFR part 91—General Operating and Flight Rules

- B07 General
- B08 Flight Rules—General
- B09 Visual Flight Rules
- B10 Instrument Flight Rules
- B11 Equipment, Instrument, and Certificate Requirements
- B14 Large and Turbine-powered Multiengine Airplanes
- B15 Additional Equipment and Operating Requirements for Large and Transport Category Aircraft
- B17 Foreign Aircraft Operations and Operations of U.S.-Registered Civil Aircraft Outside of the U.S.

14 CFR part 108—Airplane Operator Security

- C10 General

14 CFR part 119—Certification: Air Carriers and Commercial Operators

- C22 Certification, Operations Specifications, and Certain Other Requirements for Operations Conducted Under Parts 121 or 135

14 CFR part 121—Certification and Operations: Domestic, Flag, and Supplemental Air Carriers and Commercial Operators of Large Aircraft

- D05 Approval of Routes: Domestic and Flag Air Carriers
- D09 Airplane Performance Operating Limitations
- D10 Special Airworthiness Requirements
- D11 Instrument and Equipment Requirements
- D13 Airman and Crewmember Requirements
- D14 Training Program
- D15 Crewmember Qualifications
- D16 Aircraft Dispatcher Qualifications and Duty Time Limitations: Domestic and Flag Air Carriers
- D17 Flight Time Limitations and Rest Requirements: Domestic Air Carriers
- D18 Flight Time Limitations: Flag Air Carriers
- D19 Flight Time Limitations: Supplemental Air Carriers and Commercial Operators
- D20 Flight Operations
- D21 Dispatching and Flight Release Rules
- D22 Records and Reports

14 CFR part 135—Air Taxi Operators and Commercial Operators

- E01 General

Appendix 1

E02	Flight Operations
E03	Aircraft and Equipment
E04	VFR/IFR Operating Limitations and Weather Requirements
E05	Flight Crewmember Requirements
E06	Flight Crewmember Flight Time Limitations and Rest Requirements
E07	Crewmember Testing Requirements
E09	Airplane Performance Operating Limitations
E10	Maintenance, Preventive Maintenance, and Alterations
E11	Appendix A: Additional Airworthiness Standards for 10 or More Passenger Airplanes

US HMR172—Hazardous Materials Table

F02	General
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US HMR 175—Materials Transportation Bureau Hazardous Materials Regulations (HMR)

G01	General Information and Regulations
G02	Loading, Unloading, and Handling
G03	Specific Regulation Applicable According to Classification of Material

NTSB 830—Rules Pertaining to the Notification and Reporting of Aircraft Accidents or Incidents and Overdue Aircraft, and Preservation of Aircraft Wreckage, Mail, Cargo, and Records

G10	General
G11	Initial Notification of Aircraft Accidents, Incidents, and Overdue Aircraft
G13	Reporting of Aircraft Accidents, Incidents, and Overdue Aircraft

AC 61-23—Pilot’s Handbook of Aeronautical Knowledge

H300	Forces Acting on the Airplane in Flight
H303	Loads and Load Factors
H314	Magnetic Compass
H317	Airplane Performance
H339	Aeronautical Charts
H345	Flight Planning

AC 91-23—Pilot’s Weight and Balance Handbook

H13	Index and Graphic Limits
H14	Change of Weight
H15	Control of Loading—General Aviation
H16	Control of Loading—Large Aircraft

AC 61-21—Flight Training Handbook

H55	Basic Flight Maneuvers
H60	Proficiency Flight Maneuvers
H65	Transition to Other Airplanes
H66	Principles of Flight and Performance Characteristics

AC 61-13—Basic Helicopter Handbook

H71	Aerodynamics of Flight
H72	Loads and Load Factors
H73	Function of the Controls
H74	Other Helicopter Components and Their Functions
H76	Weight and Balance
H77	Helicopter Performance
H78	Some Hazards of Helicopter Flight
H80	Helicopter Flight Maneuvers
H81	Confined Area, Pinnacle, and Ridgeline Operations

AC 61-27—Instrument Flying Handbook

I04	Basic Flight Instruments
I07	Electronic Aids to Instrument Flying
I08	Using the Navigation Instruments
I13	Flight Planning
I14	Appendix: Instrument Instructor Lesson Guide—Airplanes

AC 00-6—Aviation Weather

I20	The Earth’s Atmosphere
I21	Temperature
I22	Atmospheric Pressure and Altimetry
I23	Wind
I24	Moisture, Cloud Formation, and Precipitation
I25	Stable and Unstable Air

I26 Clouds
 I27 Air Masses and Fronts
 I28 Turbulence
 I29 Icing
 I30 Thunderstorms
 I31 Common IFR Producers
 I32 High Altitude Weather
 I33 Arctic Weather
 I34 Tropical Weather

AC 00-45—Aviation Weather Services

I41 Surface Aviation Weather Reports
 I42 Pilot and Radar Reports and Satellite Pictures
 I43 Aviation Weather Forecasts
 I44 Surface Analysis Chart
 I45 Weather Depiction Chart
 I46 Radar Summary Chart
 I47 Significant Weather Prognostics
 I48 Winds and Temperatures Aloft
 I50 Severe Weather Outlook Chart
 I51 Constant Pressure Charts

AIM—Aeronautical Information Manual

J01 Air Navigation Radio Aids
 J03 Airport Lighting Aids
 J05 Airport Marking Aids and Signs
 J06 Airspace—General
 J08 Controlled Airspace
 J09 Special Use Airspace
 J10 Other Airspace Areas
 J11 Service Available to Pilots
 J12 Radio Communications Phraseology and Techniques
 J13 Airport Operations
 J14 ATC Clearance/Separations
 J15 Preflight
 J16 Departure Procedures
 J17 En Route Procedures
 J18 Arrival Procedures
 J19 Pilot/Controller Roles and Responsibilities
 J20 National Security and Interception Procedures
 J21 Emergency Procedures—General
 J25 Meteorology

J26 Altimeter Setting Procedures
 J27 Wake Turbulence
 J30 Safety, Accident, and Hazard Reports
 J31 Fitness for Flight
 J33 Pilot Controller Glossary

Other Documents

J34 Airport/Facility Directory
 J35 En Route Low Altitude Chart
 J36 En Route High Altitude Chart
 J40 Standard Instrument Departure (SID) Chart
 J41 Standard Terminal Arrival (STAR) Chart
 J42 Instrument Approach Procedures

AC 67-2—Medical Handbook for Pilots

J52 Hypoxia
 J53 Hyperventilation
 J56 Alcohol
 J58 Carbon Monoxide
 J62 Disorientation (Vertigo)

Additional Advisory Circulars

K01 AC 00-24, Thunderstorms
 K02 AC 00-30, Rules of Thumb for Avoiding or Minimizing Encounters with Clear Air Turbulence
 K04 AC 00-54, Pilot Wind Shear Guide
 K40 AC 25-4, Inertial Navigation System (INS)
 L50 AC 91-6, Water, Slush, and Snow on the Runway
 L57 AC 91-43, Unreliable Airspeed Indications
 L80 AC 103-4, Hazard Associated with Sublimation of Solid Carbon Dioxide (Dry Ice) Aboard Aircraft
 M08 AC 120-58, Pilot Guide—Large Aircraft Ground Deicing
 M35 AC 135-17, Pilot Guide—Small Aircraft Ground Deicing
 M51 AC 20-117, Hazards Following Ground Deicing and Ground Operations in Conditions Conducive to Aircraft Icing

The Aircraft Gas Turbine Engine and Its Operation—United Technologies Corporation, Pratt Whitney, 1988

- T01 Gas Turbine Engine Fundamentals
- T03 Gas Turbine Engine Components
- T05 Operational Characteristics of Jet Engines

Aircraft Powerplants—Glencoe/McGraw-Hill, Seventh Edition

- T07 Aircraft Powerplant Classification and Progress
- T11 Induction Systems, Superchargers, Turbochargers, and Cooling and Exhaust Systems
- T24 Gas-Turbine Operation, Inspection, Troubleshooting, Maintenance, and Overhaul

Aircraft Basic Science—Glencoe/McGraw-Hill, Seventh Edition

- T34 Airfoils and Their Applications

Aircraft Maintenance and Repair—Glencoe/McGraw-Hill, Sixth Edition

- T45 Aircraft Structures

TCAS—Transport Category Aircraft Systems—Jeppesen Sanderson, Inc.

- T55 Anti-Icing Systems and Rain Protection
- T58 Fuel Systems

FAA Accident Prevention Program Bulletins

- V12 FAA-P-8740-48, On Landings, Part I
- V14 FAA-P-8740-50, On Landings, Part III

FTP—Flight Theory for Pilots—Jeppesen Sanderson, Inc.

- W03 Aerodynamic Forces on Airfoils
- W04 Lift and Stall
- W05 Drag
- W06 Jet Aircraft Basic Performance
- W07 Jet Aircraft Applied Performance
- W12 Takeoff Performance
- W13 Landing Performance
- W14 Maneuvering Performance
- W16 Directional and Lateral Stability and Control
- W17 High Speed Flight

Fly the Wing—Iowa State University Press/Ames, Second Edition

- X07 Takeoffs
- X09 Climb, Cruise, and Descent
- X15 Landings: Approach Technique and Performance

NOTE: AC 00-2, Advisory Circular Checklist, transmits the status of all FAA advisory circulars (AC's), as well as FAA internal publications and miscellaneous flight information, such as Aeronautical Information Manual, Airport/Facility Directory, knowledge test guides, practical test standards, and other material directly related to a certificate or rating. AC 00-2 is accessible through the Internet at <http://www.faa.gov/abc/ac-chklst/actoc.htm>, or you may obtain a free copy from:

U.S. Department of Transportation
Subsequent Distribution Office, SVC-121.23
Ardmore East Business Center
3341 Q 75 Ave.
Landover, MD 20785

SUPPLEMENTAL STUDY REFERENCE MATERIALS

- Aircraft Basic Science—McGraw-Hill
- Aircraft Powerplants—McGraw-Hill
- Aerodynamics For Naval Aviators, NAVWEPS 00-80T-80
- 14 CFR part 125, Certification and Operations: Airplanes Having a Seating Capacity of 20 or More Passengers or a Maximum Payload Capacity of 6,000 Pounds or More
- AC 00-30, Rules of Thumb for Avoiding or Minimizing Encounters with Clear Air Turbulence
- AC 00-46, Aviation Safety Reporting Program
- AC 60-22, Aeronautical Decision Making
- AC 61-107, Operations of Aircraft at Altitudes Above 25,000 Feet MSL and/or Mach Numbers (Mmo) Greater Than .75
- AC 90-23, Aircraft Wake Turbulence
- AC 90-48, Pilots' Role in Collision Avoidance
- AC 90-87, Helicopter Dynamic Rollover
- AC 91-13, Cold Weather Operation of Aircraft
- AC 91-32, Safety In and Around Helicopters
- AC 91-50, Importance of Transponder Operation and Altitude Reporting
- AC 120-27, Aircraft Weight and Balance Control
- AC 120-38, Transport Category Airplanes Cabin Ozone Concentrations
- AC 120-43, The Influence of Beards on Oxygen Mask Efficiency
- AC 120-48, Communication and Coordination Between Flight Crewmembers and Flight Attendants
- AC 121.195, Operational Landing Distances for Wet Runways; Transport Category Airplanes
- AC 150/5340-1, Standards for Airport Markings

COMPUTER TESTING DESIGNEES

The following is a list of the computer testing designees authorized to give FAA airman knowledge tests. This list should be helpful in case you choose to register for a test or simply want more information.

Computer Assisted Testing Service (CATS)

1849 Old Bayshore Highway
Burlingame, CA 94010

Applicant inquiry and test registration: 1-800-947-4228
From outside the U.S. (650) 259-8550

Sylvan Prometric

1000 Lancaster Street
Baltimore, MD 21202

Applicant inquiry and test registration: 1-800-274-1900, 1-800-967-1100, or 1-800-359-3278
From outside the U.S. registrants should contact the appropriate Regional Service Center (RSC):

London, England RSC	44-181-607-9090
Paris, France RSC	33-1-4289-3122
Dusseldorf, Germany RSC	49-2159-9233-50
Tokyo, Japan RSC	813-3269-9620
Latin America RSC	(612) 820-5200

LaserGrade Computer Testing

16209 S.E. McGillivray, Suite L
Vancouver, WA 98683

Applicant inquiry and test registration: 1-800-211-2753 or 1-800-211-2754
From outside the U.S. (360) 896-9111