



494.7

WASHINGTON, D.C.

Volume 38 ■ Number 116

PART H



# DEPARTMENT OF **TRANSPORTATION**

Federal Aviation Administration

**ADVISORY CIRCULAR** CHECKLIST AND STATUS OF REGULATIONS

Federal Aviation Administration [AC 00-2X-Effective April 15, 1973]

#### ADVISORY CIRCULAR CHECKLIST AND STATUS OF FEDERAL AVIATION REGU-LATIONS

1. Purpose. This notice contains the revised checklist of current FAA advisory circulars and the status of Federal Aviation Regulations as of April 15, 1973.

2. Explanation. The FAA issues advisory circulars to inform the aviation public in a systematic way of nonregulatory material of interest. Unless incorporated into a regulation by reference, the contents of an advisory circular are not binding on the public. Advisory circulars are issued in a numbered-subject system corresponding to the subject areas in the recodified Federal Aviation Regulations (14 CFR Ch. I). This checklist is issued triannually listing all current circulars and now includes information concerning the status of the Federal Aviation Regulations.

#### 3. The Circular Numbering System.

a. General. The advisory circular numbers relate to the subchapter titles and correspond to the Parts, and when appropriate, the specific sections of the Federal Aviation Regulations. Circulars of a general nature bear a number corresponding to the number of the general subject (subchapter) in the FAR's.

b. Subject numbers. The general subject matter areas and related numbers

are as follows:

Subject Number and Subject Matter

- General. nn
- Procedural. 10 20 Aircraft.
- 60 Airmen.
- 70 Airspace.
- Traffic Control and General Oper-Air ations.
- 120 Air Carrier and Commercial Operators and Helicopters.
- Schools and Other Certified Agencies. 140
- Airports. 160
- Air Navigational Facilities. 170
- Administrative. 180
- Flight Information.

c. Breakdown of subject numbers. When the volume of circulars in a general series warrants a subsubject breakdown, the general number is followed by a slash and a subsubject number. Material in the 150, Airports, series is issued under the following subsubjects:

#### Number and Subject

160/1900	Defense Readiness Program.
150/4000	Resource Management.
16076000	Airport Planning

150/5100 Federal-aid Airport Program.

Surplus Airport Property Convey-150/5150 ance Programs.

150/5190 Airport Compliance Program.

150/6200 Airport Safety—General.

150/5210 Airport Safety Operations (Recommended Training, Standards, Manning).

150/5220 Airport Safety Equipment and Facilities.

150/5230 Airport Ground Safety System. 150/5240 Civil Airports Emergency Preparedness.

DEPARTMENT OF TRANSPORTATION 150/5300 Design, Construction, and Maintenance

150/5320 Airport Design. 160/5325 Influence of Aircraft Performance

on Aircraft Design. Runway, Taxiway, and Apron Characteristics. Airport Visual Aids. 150/6335

150/5340

150/5345 Airport Lighting Equipment.

Airport Buildings. 180/8380 150/5370 Airport Construction.

150/5380 Airport Maintenance.

150 5390 Heliports.

150/5900 Planning Grant for Airports.

d. Individual circular identification numbers. Each circular has a subject number followed by a dash and a sequential number identifying the individual circular. This sequential number is not used again in the same subject series. Revised circulars have a letter A. B, C, etc., after the sequential number to show complete revisions. Changes to circulars have CH 1, CH 2, CH 3, etc., after the identification number on pages that have been changed. The date on a revised page is changed to the effective date of the change.

#### 4. The Advisory Circular Checklist.

a. General. Each circular issued is listed numerically within its subject-number breakdown. The identification number (AC 120-1), the change number of the latest change, if any, to the right of the identification number, the title, and the effective date for each circular are shown. A brief explanation of the contents is given for each listing.

b. Omitted numbers. In some series sequential numbers omitted are missing numbers, e.g., 00-8 through 00-11 have not been used although 00-7 and 00-12 have been used. These numbers are assigned to advisory circulars still in preparation which will be issued later or were assigned to advisory circulars that have been canceled.

c. Free and sales circulars. This checklist contains advisory circulars that are for sale as well as those distributed free of charge by the Federal Aviation Administration. Please use care when ordering circulars to ensure that they are ordered from the proper source.

d. Internal directives for sale. A list of certain internal directives sold by the Superintendent of Documents is shown at the end of the checklist. These documents are not identified by advisory circular numbers, but have their own directive numbers.

#### How to get circulars.

a. When a price is listed after the description of a circular, it means that this circular is for sale by the Superintendent of Documents, When (Sub.) is included with the price, the advisory circular is available on a subscription basis only. After your subscription has been entered by the Superintendent of Documents, supplements or changes to the basic document will be provided automatically at no additional charge until the subscription expires. When no price is given, the circular is distributed free of charge by FAA.

b. Request free advisory circulars shown without an indicated price from:

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

Note: Persons who want to be placed on FAA's mailing list for future circulars should write to the above address. Be sure to identify the subject matter desired by the subject numbers and titles shown in paragraph 3b because separate mailing lists are maintained for each advisory circular subject series. Checklists and circulars issued in the general series will be distributed to every addressee on each of the subject series lists. Persons requesting more than one subject classification may receive more than one copy of related circulars and this checklist because they will be included on more than one mailing list. Persons already on the distribution list for AC's and changes to PAR's will automatically receive related circulars.

c. Order advisory circulars and internal directives with purchase price given from:

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

or from any of the following bookstores located throughout the United States:

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

GPO Bookstore, Everett McKinley Dirksen Building, Room 1463, 14th Floor, 219 South Dearborn Street, Chicago, IL 60804.

GPO Bookstore, Federal Building, Room 1015, 300 North Los Angeles Street, Los Angeles, CA 90012.

GPO Bookstore, Federal Building, Room 144, 601 East 12th Street, Kansas City, MO 64108.

GPO Bookstore, Room G25, John F. Kennedy Federal Building, Sudbury Street, Boston, MA 02203.

GPO Bookstore, Room 110, 26 Federal Plaza, New York, NY 10007.

GPO Bookstore, Federal Building, U.S. Courthouse, Room 1421, 1961 Stout Street, Denver, CO 80202.

GPO Bookstore, Room 1046, Federal Building, U.S. Courthouse, 1100 Commerce Street, Dallas, TX 75202.

GPO Bookstore, Room 100, Federal Building, 275 Peachtree Street NE., Atlanta, GA 30303.

GPO Bookstore, Room 102A, 2121 Building, 2121 Eighth Avenue North, Birmingham, AL 35203.

GPO Bookstore, Federal Office Building, 201 Cleveland Avenue SW., Canton, OH 44702. GPO Bookstore, Federal Office Building, Room 171, 1240 East Ninth Street, Cleveland, OH 44114.

GPO Bookstore, Main Lobby, U.S. Post Office and Courthouse, Ninth and Chestnut Streets, Philadelphia, PA 19107.

GPO Bookstore, 710 North Capitol Street NW., Washington, D.C. 20402.

GPO Bookstore (Department of Commerce).

14th and Constitution Avenue NW., Washington, D.C. 20230.

GPO Bookstore (USIA), 1776 Pennsylvania Avenue NW., Washington, D.C. 20547.

GPO Bookstore (Department of State), 21st and C Streets NW., Washington, D.C. 20520.

GPO Bookstore (Pentagon), Main Concourse, south end, Washington, D.C. 20310.

GPO Bookstore, James Forrestal Building, Room 1-J-001, 1000 Independence Avenue SW., Washington, D.C. 20407.

Send check or money order with your order to the Superintendent of Documents. Make the check or money order payable to the Superintendent of Documents in the amounts indicated in the list. Order for mailing to foreign countries should include an additional amount of 25 percent of the total price to cover postage. No c.o.d. orders are accepted.

6. Reproduction of Advisory Circulars. AC Advisory circulars may be reproduced in their entirety or in part without permission from the Federal Aviation. Administration.

7. Cancellations. The following advisory circulars are canceled:

AC 00-2W Advisory Otrcular Checklist, 12-15-72. Canceled by AC 00-2X, Advisory Circular Checklist, 4-15-73. AC 00-27 U.S. National Standard for the

IFF Mark X (SIF) Air Traffic Control Radar Beacon System Characteristics (ATCRBS), 1-24-69. Canceled.

AO 11-1 Airspace Rule-Making Proposals and Changes to Air Traffic Control Pro-cedures, 10-28-54. Canceled by AC 11-1A, Airspace Rule-Making Proposals and Changes to Air Traffic Control Procedures, 12-21-72.

AO 20-32 Carbon Monoxide (CO) Contami-

nation in Aircraft—Detection and Pre-vention, 8-13-68. Canceled by AC 20-82A, Carbon Monoxide (CO) Contamination in Aircraft—Detection and Prevention, 11-24-72.

AO 21-5B Summary of Supplemental Type Certificates (Announcement of Availa-bility), 2-10-71. Canceled by AC 21-5C, Summary of Supplemental Type Certificates (Announcement of Availability), 1-19-73.

AO 43.13-1 Acceptable Methods, Techniques and Practices—Aircraft Inspection and Repair, 5-16-66. Canceled by AC 49.18-1A, Acceptable Methods, Techniques and Practices Aircraft Inspection and Repair, 4-17-72.

AO 61-9 Pilot Transition Courses for Com-plex Single-Engine and Light Twin-Engine Airplanes, 6-16-64. Canceled by AC 61-9A, Pilot Transition Courses for Complex Single-Engine and Light Twin-Engine Airplanes, 11-7-72.

AC 61-10 Private and Commercial Pilots
Refresher Courses, 9-1-64. Canceled by
AC 61-10A, Private and Commercial
Pilots Refresher Courses, 9-27-72.

48 61-39 Flight Test Guide, Private and Commercial Pilot-Glider, 8-28-67. Canceled by AC 61-89A, Flight Test Guide, Private and Commercial Pilot-Glider, 10-19-72.

10-19-72.

AC 61-42 Airline Transport Pilot (Helicopter) Written Test Guide, 11-7-67.

Canceled by AC 61-42A, Airline Transport Pilot (Helicopter) Written Test

Canceled by AC 61-42A, Airline Transport Pilot (Helicopter) Written Test Guide, 1-20-72.
65-28 Airframe and Powerplant Mechanics Certification Guide, 11-4-71.
Canceled by AC 65-2C, Airframe and Powerplant Mechanics Certification Guide, 2.15.79 Guide, 3-15-73.

AO 65-4A Atteraft Dispatcher Written Test Guide, 8-16-68. Canceled by AC 65-4B, Alreraft Dispatcher Written Test Guide, 7-26-72.

90-12 Severe Weather Avoidance, 4-15-64. Canceled by AC 90-12A, Severe Weather Avoidance, 2-21-78.

AO 90-230 Wake Turbulence, 5-16-72, Canceled by AC 90-23D, Wake Turbulence, 12–15–72.

40 90-36 The Use of Chaff as an In-Flight

Emergency Signal, 5-22-68. Canceled. AO 143-1B Ground Instructor Examination Guide-Basic-Advanced, 4-18-67. Canceled by AC 143-1C, Ground Instructor Test Guide—Basic—Advanced, 10-10-72.

AC 150/5090-1 Regional Air Carrier Airport Planning, 2-2-67. Canceled.

AC 150/5100-6 Labor Requirements in Federal-aid Airport Program Contracts, 6-6-69. Canceled by AC 150/5100-6A, Labor Requirements for Airport Development Aid Program (ADAP) Contracts. 1-31-73.

150/5220-8 Guide Specification 2,000-Gallon Tank Truck, 6-13-69. Canceled

150/5310-3 FAA Order 5310.2, Relocating Thresholds Due to Obstructions at Existing Runways, 5-27-68. Canceled.

AC 150/5340-10 Marking of Paved Areas on Airports, 11-3-70. Canceled by AC 180/ 5340-1D, Marking of Paved Areas on Airports, 1-19-73.

V AC 171-1 Estimating Packing and Shipping Costs for Export Shipments for ATC and Navaid Equipments, 2-18-66. Canceled.

8. Additions. The following advisory circulars are added to the list:

AC 00-2X Advisory Circular Checklist (4-15-73).

AC 11-1A Airspace Rule-Making Proposals and Changes to Air Traffic Control Procedures (12-21-72).

20-7J Supplement 6, General Aviation Inspection Aids (January 1973).

AC 20-7J Supplement 6, General Aviation

Inspection Aids (February 1973).

AC 20-7.1 Supplement 7, General Aviation Inspection Aids (March 1978).

AC 20-7J Supplement 8, General Aviation Inspection Aids (April 1973). AC 20-32B Carbon Monoxide (CO) Con-

tamination in Aircraft-Detection and Prevention (11-24-72).

AC 20-81 Accidental or Unauthorized Activation of Emergency Locator Transmitters (ELT) (10-10-72).

AC 20-82 Maintenance Inspection Notes for Fairchild Hiller F-27/FH-227 Series Aircraft (12-5-72).

AC 20-83 Maintenance Inspection Notes for Boeing B-787 Series Aircraft (1-17-73). AC 21-5C Summary of Supplemental Type Certificates (Announcement of Availability) (1-19-73).

AC 21-12 Application for U.S. Airworthiness Certificate, FAA Form 8180-6 (OMB

04-R0058) (1-17-78). 48.18-1A Acceptable Methods, Techniques and Practices--Aircraft Inspec-

tion and Repair (4-17-72).
43.18-2 Ch-13 Acceptable Methods. Techniques, and P. Alterations (10-17-72). Practices-Aircraft

AC 60-8 Aids Authorized for use by Airman Written Test Applicants (12-29-72).

AC 60-9 Induction Icing-Pilot Precautions and Procedures (2-28-73).

AC 61-9A Pilot Transition Courses for Complex Single-Engine and Light Twin-Engine Airplanes (11-7-72). AC 61-10A Private and Commercial Pilots

Refresher Courses (9-27-72).
AC 61-39A Flight Test Guide, Private and Commercial Pilot-Glider (10-19-72).

AC 61-42A Airline Transport Pilot (Helicopter) Written Test Guide (1-20-72).

AC 65-2C Airframe and Powerplant Mechanics Certification Guide (3-15-73).

AC 65-4B Aircraft Dispatcher Written Test Guide (7-25-72).

65-17 Annual Renewal Meeting of Holders of the Inspection Authorization (1-15-73).

90-12A Severe Weather Avoidance (2-21-78).

AC 90-28D Wake Turbulence (12-15-72). AC 91-37 Truth in Leasing (11-9-72).

AC 91-38 Large and Turbine-Powered Multiengine Airplanes, Part 91, Subpart D (12-18-72).

121-1 Ch-27 Standard Maintenance Specifications Handbook (12-5-72).

AC 143-1C Ground Instructor Written Test Guide-Basic-Advanced (10-10-72).

150/5000-3A Oh-1 Address list for Regional Airports Divisions and Airport District Offices (12-16-72).

150/5100-6A Labor Requirements for Airport Development Aid Program

(ADAP) Contracts (1-81-73).

AC 150/5340-1D Marking of Paved Areas on Airports (1-19-73).

## ADVISORY CIRCULAR CHECKLIST

Superintendent of Documents catalogue numbers have been included to aid Superintendent of Documents personnel in processing orders. Please use them when ordering-along with the title and FAA number. To avoid unnecessary delays, do not order single-sales material and subscription-sales material on the same order form, as orders are separated for processing by different departments when they arrive at Superintendent of Documents.

#### General

SUBJECT No. 00

00-1 The Advisory Circular System (12-4-62).

Describes the FAA Advisory Circular System.

00-2X Advisory (4-15-73) Circular Checklist

Transmits the revised checklist of current FAA advisory circulars and the status of the Federal Aviation Regulations as of 4-15-73.

#### 00-6 Aviation Weather (5-20-65).

Provides an up-to-date and expanded text for pilots and other flight operations personnel whose interest in meteorology is primarily in its application to flying. Reprinted 1969. (\$4 GPO.) FAA 5.8/2:

State and Regional Defense Airlift Planning (4-30-64).

Provides guidance for the development of plans by the FAA and other Federal and State agencies for the use of nonair-carrier aircraft during an emergency.

00-7 CH 1 State and Regional Defense Airlift Planning (1-5-65).

Provides an example of a State Plan for the Emergency Management of Resources in Appendix 4, and adds new Appendix 9. CH.3

00-7 CH 2 State and Regional Defense Airlift Planning (2-20-67).

Revises Appendix 6, SCATANA.

Flights by U.S. Pilots Into and Within Canada (4-16-65).

information concerning flights into and within Canada.

00-15 Potential Hazard Associated With Passengers Carrying "Anti-Mugger" Spray Devices (8-20-65).

Advises aircraft operators, crewmembers, and others who are responsible for flight safety, of a possible hazard to flight should a passenger inadvertently or otherwise discharge a device commonly known as an "anti-mugger" spray device in the cabin of an aircraft.

65).

Provides information on atmospheric turbulence and wind shear, emphasizing important points pertaining to the common causes of turbulence, the hazards associated with it, and the conditions under which it is most likely to be encountered.

00-21 Shoulder Harness (10-5-66).

Provides information concerning the installation and use of shoulder harnesses by pilots in general aviation air-

00-23C Near Midair Collision Reporting (1-20-72).

Advises that the FAA policy on the reporting of near midair collisions, made effective in 1968 (32 F.R. 16539) and continued in effect since that time, will terminate on December 31, 1971, and advises how the reports will be handled after December 31, 1971.

00-24 Thunderstorms (6-12-68).

concerning Contains information flights in or near thunderstorms.

00-25 Forming and Operating a Flying Club (3-24-69).

Provides preliminary information that will assist anyone or any group of people interested in forming and operating a flying club (\$0.35 GPO.) TD 4.8:F 67.

00-26 Definitions of "U.S. National Aviation Standards" (1-22-69).

Informs the aviation community of the approval by the FAA Administrator of a definition of U.S. National Aviation Standards, the need for such standards, and their relationship to the Federal Aviation Regulations.

Interference 00...28 Communications Caused by Sticking Microphone Buttons (8-6-69).

Alerts the industry of communications interference from undesired radiofrequency transmissions.

00-29 Airborne Automatic Altitude Reporting Systems (12-9-69).

Provides information regarding the nature and extent of erroneous altitude reporting systems.

00-30 Rules of Thumb for Avoiding or Minimizing Encounters with Clear Air Turbulence (3-5-70).

Brings to the attention of pilots and other interested personnel, the "Rule of Thumb" for avoiding or minimizing encounters with clear air turbulence (CAT).

00-31 U.S. National Aviation Standard for the VORTAC System (6-10-70).

Informs the aviation community of the establishment and content of the U.S. National Aviation Standard for the VORTAC (VOR-TACAN-DME) System.

00-32 Civil Air Patrol and State and Regional Defense Airlift Relationships (7-2-70).

Advises interested persons of the Memorandum of Understanding between CAP

00-17 Turbulence in Clear Air (12-16- and FAA, and provides additional guidance to further improve the use of nonair carrier aircraft in time of national emergency.

> 00-33 A Nickel-Cadmium Battery Operational, Maintenance, and Overhaul Practices (8-26-71).

Provides guidelines for more reliable nickel-cadmium battery operation through sound operational and maintenance practices.

00-34 Aircraft Ground Handling and Servicing (4-12-72).

Contains information and guidance for the servicing and ground handling of aircraft.

00-35 Emergency Locator Transmitters-Operational and Maintenance Practices (10-27-72).

Provides guidelines relative to the licensing, installation, maintenance, and testing of emergency locator transmitters (ELT).

#### **Procedural**

SUBJECT No. 10

Airspace Rule-Making Proposals 11-1A and Changes to Air Traffic Control Procedures (12-21-72).

Emphasizes the need for the early submission of proposals involving airspace rule-making activity or changes to existing procedures for the control of air traffic.

#### Aircraft

SUBJECT No. 20

20-3B Status and Availability of Military Handbooks and ANC Bulletins for Aircraft (5-12-69).

Announces the status and availability of Military Handbooks and ANC Bulletins prepared jointly with FAA.

20-5B Plane Sense (1970)

Provides general aviation information for the private aircraft owner.

20-65 U.S. Civil Aircraft Register (7-1472).

Lists all active U.S. civil aircraft by registration number. (\$10 GPO.) TD 4.18/2:970.

20-7 K General Aviation Inspection Aids, Summary (August 1972).

Provides the aviation community with a uniform means for interchanging service experience that may improve the durability and safety of aeronautical products. Of value to mechanics, operators of repair stations, and others engaged in the inspection, maintenance, and operation of aircraft in general. (\$5, \$6.25 foreign—Sub, GPO.) 4.409:9720.

Supplement 1 (September 1972).
Supplement 2 (October 1972).
Supplement 3 (November 1972).
Supplement 4 (December 1972).
Supplement 5 (January 1973).
Supplement 6 (February 1973).
Supplement 7 (March 1973).
Supplement 9 (April 1973). 20-7J 20-7J 20-7J 20-7J 20-7J

20-7J 20-7J

20 - 7J20-75 Supplement 8 (April 1973).

00-36 iÐ FEDERAL REGISTER, VOL. 38, NO. 116-MONDAY, JUNE 18, 1973

20-9 Personal Aircraft Inspection Handbook (12-2-64).

Provides a general guide, in simple, nontechnical language, for the inspection of aircraft, Reprinted 1972, (\$1.50 GPO.) FAA 5.8/2:Al 7/2.

Approved Airplane Flight Manuals for Transport Category Air-planes (7-30-63).

Calls attention to the regulatory requirements relating to FAA Approved Airplane Flight Manuals.

20-13A Surface-Effect Vehicles (8-28-64).

States FAA policy on surface-effect vehicles (vehicles supported by a cushion of compressed air).

20-17B Surplus Aircraft of the Armed Forces (10-11-72).

Sets forth the method of obtaining copies of Federal Aviation Regulations which might be required for certification of surplus military aircraft.

20-18A Qualification Testing of Turbo-jet Engine Thrust Reversers (3-16-66).

Discusses the requirements for the qualification of thrust reversers and sets forth an acceptable means of compliance with the tests prescribed in Federal Aviation Regulations, Part 33, when run under nonstandard ambient air conditions.

20–20A Flammability of Jet Fuels (4-9-65).

Gives information on the possibility of combustion of fuel in aircraft fuel tanks.

20-23D Interchange of Service Experience—Mechanical (2-12-71). Difficulties

Provides information on the voluntary exchange service experience data used in improving durability and safety of aeronautical products.

20-24A Qualification of Fuels, Lubricants, and Additives (4-1-67).

Establishes procedures for the approval of the use of subject materials in certificated aircraft.

20-27B Certification and Operation of Amateur-Built Aircraft (4-20-72).

Provides information and guidance concerning certification and operation of amateur-built aircraft, including gliders, free balloons, helicopters, and gyroplanes, and sets forth an acceptable means, not the sole means, of compliance with FAR Part 21 and FAR Part 91.

20-28A Nationally Advertised A Construction Kits (8-7-64).

Explains that using certain kits could render the aircraft ineligible for the issuance of an experimental certificate as an amateur-built aircraft.

20-29B Use of Aircraft Fuel Anti-icing additives (1-18-72).

Provides information on the use of anti-icing additives PFA-55MB and Mil-I-27686 as an acceptable means of compliance with the FARs that require assurance of continuous fuel flow under conditions where ice may occur in turbine aircraft fuel systems.

20-30A Airplane Position Lights and Supplementary Lights (4-18-68).

Provides an acceptable means for complying with the position light requirements for airplane airworthiness and acceptable criteria for the installation of supplementary lights on airplanes.

20-32B Carbon Monoxide (CO) Contamination in Aircraft—Detection and Prevention (11-24-72). -Detection

Provides information on the potential dangers of carbon monoxide contamination from faulty engine exhaust systems or cabin heaters of the exhaust gas heat exchanger type.

20-33 Technical Information Regarding Civil Aeronautics Manuals 1, 3, 4a, 4b, 5, 6, 7, 8, 9, 10, 13, and 14 (2-8-65).

Advises the public that policy information contained in the subject Civil Aeronautics Manuals may be used in conjunction with specific sections of the Federal Aviation Regulations.

20-34A Prevention of Retractable Landing Gear Failures (4-21-69).

Provides information and suggested procedures to minimize landing accidents involving aircraft having retractable landing gear.

20-35B Tie-Down Sense (4-19-71).

Provides information of general use on aircraft tie-down techniques and procedures.

20-36B Index of Materials, Parts, and Appliances Certified Under the Technical Standard Order System-July 1, 1972 (10-24-72).

Lists the materials, parts, and appliances for which the Administrator has received statements of conformance under the Technical Standard Order system as of July 1, 1972. Such products are deemed to have met the requirements for FAA approval as provided in Part 37 of the Federal Aviation Regulations.

20-37A Aircraft Metal Propeller Blade Failure (4-4-69).

Provides information and suggested procedures to increase service life and to minimize blade failures of metal propellers.

20-38A Measurement of Cabin Interior Emergency Illumination in Transport Airplanes (2-8-66).

Outlines acceptable methods, but not the only methods, for measuring the cabin interior emergency illumination on transport airplanes, and provides information as to suitable measuring instruments.

Presents an acceptable method (but not the only method) by which com-pliance may be shown with Federal Aviation Regulations 23.1431, FAR

ternators Installed in Light Aircraft (8-11-65).

Sets forth an acceptable means of complying with placarding rules in Federal Aviation Regulations 23 and 27 with respect to battery-excited alternator installations.

20-41 Replacement TSO Radio Equipment in Transport Aircraft (8-30-65).

Sets forth an acceptable means for complying with rules governing transport category aircraft installations in cases involving the substitution of technical standard order radio equipment for functionally similar radio equipment.

20-42 Hand Fire Extinguishers in Transport Category Airplanes and Rotoreraft (9-1-65).

Sets forth acceptable means (but not the sole means) of compliance with certain hand fire extinguisher regulations in FAR 25 and FAR 29, and provides related general information.

20-43B Aircraft Fuel Control (6-8-71).

Alerts the aviation community to the potential hazards of inadvertent mixing or contamination of turbine and piston fuels, and provides recommended fuel control and servicing procedures.

20-44 Glass Fiber Fabric for Aircraft Covering (9-3-65).

Provides a means, but not the sole means, for acceptance of glass fiber fabric for external covering of aircraft structure.

20-45 Safetying of Turnbuckles on Civil Aircraft (9-17-65).

Provides information on turnbuckle safetying methods that have been found acceptable by the FAA during past aircraft type certification programs.

20-46 Suggested Equipment for Gliders Operating Under IFR (9-23-65).

Provides guidance to glider operators on how to equip their gliders for operation under instrument flight rules (IFR), including flight through clouds.

20-47 Exterior Colored Band Around Exits on Transport Airplanes (2-8-66).

Sets forth an acceptable means, but not the only means, of complying with the requirement for a 2-inch colored band outlining exits required to be openable from the outside on transport airplanes.

20-48 Practice Guide for Decontaminating Aircraft (5-5-66).

The title is self-explanatory.

20-39 Installation Approval of Enter-20-49 Analysis of Bird Strike Reports tainment Type Television Equipment on Transport Category Airplanes in Aircraft (7-15-65). (7-27-66). CANCOLLED DO 27

Provides the results of a statistical study on the frequency of collisions of birds with transport aircraft and the resulting damages.

25.1309(b), FAR 27.1309(b), or FAR 29.1309(b), as applicable.

20-40 Placards for Battery-Excited Al
20-40 Placards for Battery-Excited Al
20-51 Procedures for Obtaining FAA Approval of Major Alterations to Type Certificated Products (4-12-67).

Provides assistance to persons who desire to obtain FAA approval of major alterations to type certificated products.

20-52 Maintenance Inspection Notes for Douglas DC-6/7 Series Aircraft (8-24-67).

Describes maintenance inspection notes which can be used for the maintenance support of certain structural parts of DC-6/7 series aircraft.

20-53 Protection of Aircraft Fuel System Against Lightning (10-6-67).

Sets forth acceptable means, not the sole means, by which compliance may be shown with fuel system lightning protection airworthiness regulations.

20-54 Hazards of Radium-Activated Luminous Compounds Used on Aircraft Instruments (10-24-67).

Provides information concerning health hazards associated with the repair and maintenance of instruments containing luminous markings activated with radium-226 or radium-228 (mesothorium).

20-55 Turbine Engine Overhaul Standard Practices Manual-Maintenance of Fluorescent Penetrant Inspection Equipment (1-22-68),

Advises operators of the necessity for periodic checking of black light lamps and filters used during fluorescent penetrant inspection of engine parts.

20-56 Marking of TSO-C72a Individual Flotation Devices (1-19-68).

Outlines acceptable methods for marking individual flotation devices which also serve as seat cushions.

20-57A Automatic Landing Systems (ALS) (1-12-71).

Sets forth an acceptable means of compliance, but not the only means, for the installation approval of automatic landing systems in transport category aircraft which may be used initially in Category II operations. Approval of these aircraft for use under such conditions will permit the accumulation of data for systems which may be approved for Category IIIa in the future.

20-58A Acceptable Means of Testing Automatic Altitude Reporting Equipment for Compliance With FAR 91.36(b) (4-28-69).

Title is self-explanatory.

20-59 Maintenance Inspection Notes for Convair 240, 340/440, 240T, and 340T Series Aircraft (2-19-68).

Describes maintenance inspection notes which can be used for the maintenance support of certain structural parts of Convair 240, 340/440, 240T, and 340T series aircraft.

20-59 CH-1 (8-24-72).

Provides additional material for Convair Models 240 and 600/240D; Models 340/440 and 640/340D/440D series aircraft Maintenance inspection programs.

20-60 Accessibility to Excess Emergency Exits (7-18-68).

Sets forth acceptable means of compliance with the "readily accessible" provisions in the Federal Aviation Regulations dealing with excess emergency exits.

20-61 Nondestructive Testing for Aircraft (May 1969).

Reviews the basic principles underlying nondestructive testing. (\$0.45 GPO.) TD 4.8:T28

20-62A Eligibility, Quality, and Identification of Approved Aeronautical Replacement Parts (6-16-70).

Provides information relative to the determination of the eligibility of aeronautical parts and materials for installation on certificated aircraft.

20-63 Airborne Automatic Direction Finder Installations (Low and Medium Frequency) (7-7-69).

Sets forth one means, but not the only means, of demonstrating compliance with the airworthiness rules governing the functioning of airborne automatic direction finders. It does not pertain to installations previously approved.

20-64 Maintenance Inspection Notes for Lockheed L-188 Series Aircraft (8-1-69).

Describes maintenance inspection notes which can be used for the maintenance support of certain structural parts of Lockheed L-188 series aircraft.

20-65 U.S. Airworthiness Certificates and Authorizations for Operation of Domestic and Foreign Aircraft (8-11-69).

Provides general information and guidance concerning issuance of airworthiness certificates for U.S. registered aircraft, and issuance of special flight authorizations for operation in the United States of foreign aircraft not having standard airworthiness certificates issued by the country of registry.

20-66 Vibration Evaluation of Aircraft Propellers (1-29-70).

Outlines acceptable means, but not the sole means, for showing compliance with the requirements of the FARs concerning propeller vibration.

20-67A Airborne VHF Communication System Installations (10-17-72).

Sets forth one means, but not the only means of demonstrating compliance with the airworthiness rules governing the functioning of airborne VHF communication systems.

20-68 Recommended Radiation Safety Precautions for Airborne Weather Radar (3-11-70).

Sets forth recommended radiation safety precautions for ground operation of airborne weather radar.

20-69 Conspicuity of Aircraft Instrument Malfunction Indicators (5-14-70).

Provides design guidance information on methods of improving conspicuity of malfunction indication devices.

20-71 Dual Locking Devices on Fasteners (12-8-70).

Provides guidance and acceptable means, not the sole means, by which compliance may be shown with the requirements for dual locking devices on removable fasteners installed in rotocraft and transport category airplanes.

20-72 Restricted Category Helicopter Maximum Weight Increases (3-11-71).

Provides assistance to persons who desire to obtain FAA approval of over-maximum certificated takeoff weight condition for restricted category helicopter operations.

20-73 Aircraft Ice Protection (4-21-71).

Provides information relating to the substantiation of ice protection systems on aircraft.

20-74 · Aircraft Position and Anticollision Light Measurements (7-29-71).

Contains useful information concerning measurements for intensity, covering and color of aircraft position and anticollision lights.

20-76 Maintenance Inspection Notes for Boeing B-707/720 Series Aircarft (10-21-71).

Provides maintenance inspection notes which can be used for the maintenance support program for certain structural parts of the B-707/720 series aircraft.

20-77 Use of Manufacturers' Maintenance Manuals (3-22-72).

Informs owners and operators about the usefulness of manufacturers' maintenance manuals for servicing, repairing, and maintaining aircraft, engines, and propellers.

20-78 Maintenance Inspection Notes for McDonnell Douglas DC-8 Series Aircraft (7-11-72).

Provides maintenance inspection notes which can be used for the maintenance support program for certain structural parts of the DC-8 series aircraft.

20-81 Accidental or Unauthorized Activation of Emergency Locator Transmitters (ELT) (10-10-72).

Alerts the general aviation community to the harmful effects of accidental or unauthorized activation of emergency locator transmitters.

20-82 Maintenance Inspection Notes for Fairchild Hiller F-27/FH-227 Series Aircraft (12-5-72).

Provides maintenance inspection notes which can be used for the maintenance support program for certain structural parts of Fairchild Hiller F-27/FH-227 series aircraft.

20-75

20-83 Maintenance Inspection-Notes for Boeing B-737 Series Aircraft (1-17-73).

Provides maintenance inspection notes which can be used for the maintenance support program for certain structural parts of the B-737 series aircraft.

21-1A Production Certificates (7-9-71).

Provides information concerning Subpart G of Federal Aviation Regulations (FAR) Part 21, and sets forth acceptable means of compliance with its requirements.

21-2B Export Airworthiness Approval Procedures (10-2-69).

Announces the adoption of new regulations and provides guidance to the public regarding the issuance of export airworthiness approvals for aeronautical products to be exported from the United States.

21-2B CH 1 (11-13-70).

21-2B CH 2 (2-8-71).

21-3 Basic Glider Criteria Handbook (1962).

Provides individual glider designers, the glider industry, and glider operating organizations with guidance material that augments the glider airworthiness certification requirements of the Federal Aviation Regulations, Reprinted 1969. (\$1 GPO.) FAA 5.8/2:G49/962.

21-4B Special Flight Permits for Operation of Overweight Aircraft (7-30-69).

Furnishes guidance concerning special flight permits necessary to operate an aircraft in excess of its usual maximum certificated takeoff weight.

21-5C Summary of Supplemental Type Certificates (Announcement of Availability) (1-19-73).

Announces the availability to the public of the new price of the Summary of Supplemental Type Certificates (SSTC), dated January 1971.

21-6 Production Under Type Certificate Only (5-26-67).

Provides information concerning Subpart P of PAR Part 21, and sets forth examples, when necessary, of acceptable means of compliance with its requirements.

21-7A Certification and Approval of Import Products (11-24-69).

Provides guidance and information relative to U.S. certification and approval of import aircraft, aircraft engines and propellers that are manufactured in a foreign country with which the United States has an agreement for the acceptance of those products for export and import.

21-8 Aircraft Airworthiness; Restricted Category: Certification of Aircraft With Uncertificated or Altered Engines or Propellers (5-21-69).

Sets forth acceptable means of substantiating that uncertificated or altered

20-84

FEDERAL REGISTER, VOL. 38, NO. 116-MONDAY, JUNE 18, 1973 20 - 25

engines and propellers have no unsafe features for type certification of aircraft in the restricted category.

21-9 Manufacturers Reporting Failures, malfunctions, or Defects (12-30-70).

Provides information to assist manufactures of aeronautical products (aircraft, aircraft engines, propellers, appliances, and parts) in notifying the Federal Aviation Administration of certain failures, malfunctions, or defects, resulting from design or quality control problems, in the products which they manufacture.

21-10 Flight Recorder Underwater Locating Device (5-20-71).

Provides one acceptable means (not the only means) of showing compliance with the underwater locating device requirements of FAR 25.1459 and FAR 121.343.

21-11 Quality Assurance Systems Analysis Review (QASAR) Program Manufacturers/Suppliers (5-26-72).

Explains the objectives and concept of the FAA's subject program.

21-12 Application for U.S. Airworthiness Certificate, FAA Form 8130-6 (OMB 04-R0058) (1-17-73).

Provides instructions on the preparation and submittal of subject form.

21.25-1 Use of Restricted Category Airplanes for Glider Towing (4-20-65).

Announces that glider towing is now considered to be a special purpose for type and airworthiness certification in the restricted category.

21.303-1A Cartification Procedures for Products and Parts (8-10-72).

Provides information concerning section 21,303 of Federal Aviation Regulations, Part 21, and to set forth examples, as necessary, of acceptable means of compliance with its requirements.

23.1329-1 Automatic Pilot Systems Approval (Non-Transport) (12-23-65).

Sets forth an acceptable means by which compliance with the automatic pilot installation requirements of FAR 23.1329 may be shown.

25-2 Extrapolation of Takeoff and Landing Distance Data Over a Range of Altitude for Turbine-Powered Transport Aircraft (7-9-64).

Sets forth acceptable means by which compliance may be shown with the requirements in CAR 4b and SR-422B.

25-4 Inertial Navigation Systems (INS) (2-18-66).

Sets forth an acceptable means for complying with rules governing the installation of inertial navigation systems in transport category aircraft.

25-5 Installation Approval on Transport Category Airplanes of Cargo Unit Load Devices Approved as Meeting the Criteria in NAS 3610 (6-3-70).

Sets forth an acceptable means, but not the sole means, of complying with the requirements of the Federal Aviation Regulations (FAR's) applicable to the installation on transport category airplanes of cargo unit load devices approved as meeting the criteria in NAS 3610.

25.253-1 High-Speed Characteristics (11-24-65).

Sets forth an acceptable means by which compliance may be shown with FAR 25.253 during certification flight tests.

25.253-1 CH 1 (1-10-66).

Provides amended information for the basic advisory circular.

25.981-1A Guidelines for Substantiating Compliance With the Fuel Tank Temperature Requirements (1-20-71).

Sets forth some general guidelines for substantiating compliance with fuel tank temperature airworthiness standards, section 25.981.

25.1329-1A Automatic Pilot System Approval (7-8-68).

Sets forth an acceptable means by which compliance with the automatic pilot installation requirements of FAR 25.1329 may be shown.

25.1457-1A Cockpit Voice Recorder Installations (11-3-69).

Sets forth one acceptable means of compliance with provisions of FAR 25.1457 (b), (e), and (f) pertaining to area microphones, cockpit voice recorder location, and erasure features.

29-1 Approval Basis for Automatic Stabilization Equipment (ASE) Installations in Rotoreraft (12-26-63).

Gives means for compliance with flight requirements in various CAR's.

29-1 CH 1 (3-26-64),

Transmits revised information about the time delay of automatic stabilization equipment.

29.773-1 Pilot Compartment View (1-19-66).

Sets forth acceptable means, not the sole means, by which compliance with FAR 29.773(a) (1), may be shown.

33-1B Turbine-Engine Foreign Object Ingestion and Rotor Blade Containment Type Certification Procedures (4-22-70).

Provides guidance and acceptable means, not the sole means, by which compliance may be shown with the design and construction requirements of Part 33 of the Federal Aviation Regulations.

33-2A Aircraft Engine Type Certification Handbook (6-5-72).

Contains guidance relating to type certification of aircraft engines which will constitute acceptable means, although not the sole means, of compliance with the Federal Aviation Regulations.

33-3 Turbine and Compressor Rotors Type Certification Substantiation Procedures (9-9-68).

Sets forth guidance and acceptable means, not the sole means, by which compliance may be shown with the turbine and compressor rotor substantiation requirements in FAR Part 33.

37-2 Test Procedures for Maximum Allowable Airspeed Indicators (12-9-68).

Provides guidance concerning test procedures which may be used in showing compliance with the standards in FAR 37.145 (TSO-C46a).

37-3 Radio Technical Commission for Aeronautics Document DO-138 (1-10-69).

This circular announces RTCA Document DO-138 and discusses how it may be used in connection with technical standard order authorizations.

39-1A Jig Fixtures; Replacement of Wing Attach Angles and Doublers on Douglas Model DC-3 Series Aircraft Airworthiness Directive 66-18-2 (3-5-70).

Describes methods of determining that jig fixtures used in the replacement of the subject attached angles and doublers meet the requirements of Airworthiness Directive 66–18–2.

39-6C. Summary of Airworthiness Directives (8-29-72).

Announces the availability of a new Summary of Airworthiness Directives dated January 1, 1972.

43-1 Matching VHF Navigation Receiver Outputs With Display Indicators (8-2-65).

Alerts industry to the possibility of mismatching outputs, both guidance and flag alarm, of certain VHF navigation receivers when used with some types of display indicators causing the receiver to fail without providing a flag alarm.

43-2 Minimum Barometry for Calibration and Test of Atmospheric Pressure Instruments (9-10-65).

Sets forth guidance material which may be used to determine the adequacy of barometers used in the calibration of aircraft static instruments and presents information concerning the general operation, calibration, and maintenance of such barometers.

43.9-1B Instruction for Completion of FAA Form 337 (6-27-66).

Provides instructions for completing revised FAA Form 337, Major Repair and Alteration (Airframe, Powerplant, Propeller or Appliance).

43.13-1A Acceptable Methods, Techniques and Practices—Aircraft Inspection and Repair (4-17-72).

Contains methods, techniques, and practices acceptable to the Administrator for inspection and repair to civil aircraft. Published in 1973. (\$3.76—GPO.) TD 4.28/2:972.

43.13-2 Acceptable Methods, Techniques, and Practices—Aircraft Alterations (4-19-66).

Contains methods, techniques, and practices acceptable to the Administrator in altering civil aircraft. Published in 1965. (\$3.50—Sub. GPO.) FAA 5.16:965.

21-13

FEDERAL REGISTER, VOL. 38, NO. 116-MONDAY, JUNE 18, 1973

36.1 43.4 thru 10 Reprinted in 1971. Ch. 11 (8-11-

71); Ch. 12 (7-26-72); Ch. 13 (10-17-72). 43-202 Maintenance of Weather Radar Radomes (6-11-65).

Provides guidance material useful to repair facilities in the maintenance of weather radar radomes.

43-203A Altimeter and Static System Tests and Inspections (6-6-67).

Specifies acceptable methods for testing altimeter and static system. Also, provides general information on test equipment used and precautions to be taken.

**7**45-2 Identification and Registration Marking (7-7-72).

Provides guidance and information concerning the identification and marking requirements of Federal Aviation Regulations (FAR) Parts 21 and 45, and, where considered helpful, to provide an acceptable means, but not the sole means, of compliance with the regulations.

47-1 Aircraft Registration Eligibility, Identification and Activity Report (2-25-70).

Advises owners and operators of U.S. civil aircraft of recent regulatory changes that require the annual submission of current information related to aircraft registration eligibility, and requests similar submission of information related to identification and activity of aircraft; and to call attention to the availability of the reporting form to be used in complying with this regulatory change.

#### Airmen

#### SUBJECT NO. 60

#### 60-1 Know Your Aircraft (6-12-63).

Describes potential hazards associated with operation of unfamiliar aircraft and recommends good operating practices.

Annual Aviation Mechanic Safety 60-21 Awards Program (3-20-72).

Provides the details of the annual Aviation Mechanic Safety Awards Program.

60-4 Pilot's Spatial Disorientation (2-9-65).

Acquaints pilots flying under visual flight rules with the hazards of disorientation caused by the loss of reference with the natural horizon.

FAA Approved Airplane Flight Monuals, Placards, Listings, Instru-ment Markings—S m a 11 Airplanes 60-6 (12-13-68).

Alerts pilots to the regulatory requirements relating to the subject and provides information to aid pilots to comply with the provisions of FAR section 91.31.

Statement of Additional Instruc-tion for Retest (1-27-72).

Announces a new procedure for the use of a computer printed "Statement of Additional Instruction" on each Airman Written Test Report that has an unsat-

Subscription now includes: Changes 1 isfactory grade for any section. It explains the statement and strongly recommends its use.

> Aids Authorized for use by Airman Written Test Applicants (12–29–72).

Describes the aids that applicants may use when taking airman written tests.

60-9 Induction Icing—Pilot Precautions and Procedures (2-28-73).

Provides the pilot with information on the causes and results of induction icing in reciprocating aircraft engines, and the precautions he should take to reduce the likelihood of icing, and the means available to him in controlling icing when it is encountered.

61-1D Aircraft Type Ratings (5-15-72).

Provides designators adopted by the Federal Aviation Administration for aircraft type ratings issued with pilot certificates.

61-2A Private Pilot (Airplane) Flight Training Guide (9-1-64).

Contains a complete private pilot flight training syllabus which consists of 30 lessons. Reprinted in 1972. (\$1.50 GPO.) FAA 5.8/2:P 64/4/964.

61-3B Flight Test Guide—Private Pi-lot—Airplane—Single Engine (4-2-68).

Assists the private pilot applicant in preparing for his certification flight test. Reprinted in 1969. (\$0.25 GPO.) TD 4.408:P 64/2.

61-4C Multiengine Airplane Class or Type Rating—Flight Test Guide (2-1-71).

Assists the private pilot applicant in preparing for certification or rating flight tests. Reprinted in 1972. (\$0.40 GPO.) TD 4.408:M 91.

61-5A Helicopter Pilot Written Test Guide—Private—Commercial . (8-14-67).

Gives guidance to applicants preparing for the aeronautical knowledge requirements for a private or commercial pilot certificate with a helicopter rating.

C Instrument Rating (Airplane) Written Test Guide (5-31-72).

Reflects the current operating procedures and techniques in a background setting appropriate for applicants preparing for the subject test. (\$1.25 GPO.) TD 4.8:In 7/4.

61-9A Pilot Transition Courses for Complex Single-Engine and Light Twin-Engine Airplanes (11-7-72).

Provides training syllabuses and checkout standards for pilots who seek to qualify on additional types of airplanes. (\$0.30 GPO.) FAA 5.8/2:P 64/7.

61-10A Private and Commercial Pilots Refresher Courses (9-27-72).

Provides a syllabus of study requirements and describes the areas of training that should be emphasized. (\$0.40 GPO.) FAA 5.8/2:P 64/9.

61-11 Airplane Flight Instructor Written Test Guide (9-5-67).

Provides information to prospective airplane flight instructors about certification requirements, application procedures, and reference study materials; a sample examination is presented with explanations of the correct answers. Reprinted in 1969. (\$0.79 GPO.) TD 4.408:In 7.

61-12E Student Pilot Guide (3-10-72).

Provides guidance for prospective student pilots and for those already engaged in their primary flight training, general procedures for obtaining student and private pilot certificates. (\$0.20 GPO.) TD 4.8:P 64/3/970.

61-13 Basic Helicopter Handbook (1-20-66).

Provides detailed information to applicants preparing for private, commercial, and flight instructor pilot certificates with a helicopter rating about helicopter aerodynamics, performance, and flight maneuvers. It will also be useful to certificated helicopter flight instructors as an aid in training students. Reprinted in 1972. (\$1 GPO.) FAA 5.8/ 2:H 36.

61-14A Flight Instructor Practical Test Guide (10-23-69).

Provides assistance to the certificated pilot in preparing for the practical demonstration required for the issuance of the flight instructor certificate, Reprinted in 1972. (\$0.25 GPO.) TD 4.408: In 7/4.

61-16A Flight Instructor's Handbook (10-14-69).

Gives guidance and information to pilots preparing to apply for flight in-structor certificates, and for use as a reference by flight instructors, (\$2 GPO.) Reprinted in 1972. TD 4.408:In 7/3.

61-17B Flight Test Guide-Instrument Pilot Airplane (1-12-72).

Provides assistance for the instrument pilot applicant in preparing for his instrument rating flight test. (\$0.25 GPO.) TD 4.408:In 7/2.

61-18C Airline Transport Pilot (Airplane) Written Test Guide (4-19-

Reflects current operating procedures and techniques in a background setting appropriate for applicants preparing for the Airline Transport Pilot (Airplane) Written Test. (\$0.75 GPO.) Reprinted in 1972. TD 4.408: P64/3.

61-19 Safety Hazard Associated With Simulated Instrument Flights (12-4-64).

Emphasizes the need for care in the use of any device restricting visibility while conducting simulated instrument flights that may also restrict the view of the safety pilot.

61-21 Flight Training Handbook (1-11-66).

Provides information and direction in the introduction and performance of

43.204

training maneuvers for student pilots, pilots requalifying or preparing for additional ratings, and flight instructors. Reprinted in 1969. (\$1.25 GPO.) FAA 1.8:F 64/4.

61-23A Pilot's Handbook of Aeronautical Knowledge (7-10-70).

Contains essential, authoritative information used in training and guiding applicants for private pilot certification, flight instructors, and flying school staffs. (\$4 GPO.) TD 4.408:P 64/5.

61-25 Flight Test Guide—Helicopter, Private and Commercial Pilot (12-7-65).

Assists the helicopter pilot applicant in preparing for the certification flight tests; provides information concerning applicable procedures and standards. Published in 1965. (\$0.10 GPO.) FAA 1.8:H 36/2.

61-27B Instrument Flying Handbook (9-22-70).

Provides the pilot with basic information needed to acquire an FAA instrument rating. It is designed for the reader who holds at least a private pilot certificate and is knowledgeable in all areas covered in the "Pilot's Handbook of Aeronautical Knowledge." (\$3.35 GPO.) TD 4.2/8: In 7/972.

61-28A Commercial Pilot Written Test Guide (4-28-70).

Reflects current operating procedures and techniques for the use of applicants in preparing for the Commercial Pilot-Airplane Written Test. (\$1.50 GPO.) TD 4.408:P 64/4.

61-29A Instrument Flight Instructor Written Test Guide (10-16-70).

Reflects current operating procedures, regulations, and techniques for the use of applicants in preparing for the Flight Instructor Instrument Written Test (\$0.50 GPO.) TD 4.8:In 7/6.

61-30A Flight Test Guide—Gyroplane, Private and Commercial (3-23-72).

Assist the commercial and private pilot applicant in preparing for his gyroplane test (\$0.30 GPO.) TD 4.408;G99.

61-31A Gyroplane Pilot Written Test Guide, Private and Commercial (6-9-72).

Provides guidance and assistance to applicants who are preparing for the Private or Commercial Pilot Gyroplane Written Test. Covers the basic aeronautical knowledge that the prospective gyroplane pilot must know.

61-32A Private Pilot Written Test Guide (12-1-71).

Provides information, guidelines, and sample test items to assist applicants for the Private Pilot Certificate in attaining necessary aeronautical knowledge. (\$1.75 GPO.) TD 4.408:P 64.

61-33 Cyroplane Flight Instructor Examination Guide (3-25-66).

Assists applicants who are preparing for the Flight Instructor Rotorcraft

Gyroplane Written Examination. Revised in 1966.

61-34A Federal Aviation Regulations Written Test Guide for Private, Commercial and Military Pilots (6-18-70).

Outlines the scope of the basic knowledge required of civilian or military pilots who are studying FARs as they pertain to the Regulations 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. For use as a guide in preparing for the FAR Written Test. (\$0.40 GPO.) TD 4.8:P 64.

61-38 Rotorcraft Helicopter Written Test Guide (8-16-67).

Gives guidance to applicants preparing for the aeronautical knowledge requirement for a flight instructor certificate with a helicopter rating.

61-39A Flight Test Guide, Private and Commercial Pilot-Glider (10-19-72).

Assists applicants for private and commercial pilot flight tests in gliders.

61-41A Glider Flight Instructor Written Test Guide (1-12-72).

Provides information, guidelines, and sample test items, to assist applicants for the Gilder Flight Instructor rating in attaining necessary aeronautical knowledge.

61-42A Airline Transport Pilot (Helicopter) Written Test Guide (1-20-72).

Describes the type and scope of required aeronautical knowledge covered in the written tests, lists reference materials available from GPO bookstores, and presents sample test items with answers and explanations. (\$0.40 GPO.) TD 4.408:H 36.

61-43A Glider Pilot Written Test Guide-Private and Commercial (1-12-72).

Provides information, guidelines, and sample test items, to assist applicants for the Glider Pilot Certificate in attaining necessary aeronautical knowledge.

61-45 Instrument Rating (Helicopter) Written Test Guide (1-24-68).

Assists applicants who are preparing for the helicopter instrument rating. Presents a study outline, study materials and a sample test with answers.

61-46 Flight Instructor Procedures (6-4-69).

Informs flight instructors of the procedures involved in the renewal or reinstatement of Flight Instructor Certificates, qualification for "Gold Seal" certificates, and endorsing student pilot logbooks for various operations.

61-47 Use of Approach Slope Indicators for Pilot Training (9-16-70).

Informs pilot schools, flight instructors and student pilots of the recommendation of the Federal Aviation Administration on the use of approach alope indicator systems for pilot training.

61-49 Airline Transport Pilot-Airplane Practical Test Guide (8-9-71).

Describes the practical test requirements for Airline Transport Pilot Certificates (Airplane) and associated class and type ratings. (\$0.25 GPO.) TD 4.408: Ai 7/4.

61-50 Aerial Applicator Aerodynamics Review of "Region of Reversed Command" (2-7-72).

Provided for the purpose of increasing pilot awareness of the aerodynamic limitations pertinent to aerial applicator operations,

61-51 Reporting Flight Time on Pilot Applications, FAA Form 8420-3 (6-26-72).

Advises applicants of the importance of entering their pilot flight time on subject form. (OBM No. 04-R0064.)

61-52 Å 1972 Flight Instructor of the Year Award Program (8-24-72).

Provides the details of the 1972 Flight Instructor of the Year Award Program.

61-53 Crediting of Second in Command Pilot Time Toward the Flight Experience Requirements for Airline Transport Pilot Certificate (8-29-72).

Clarifies the rules governing the crediting of second in command pilot time toward the flight experience required for the issuance of an Airline Transport Pilot Certificate.

61-117-1D Flight Test Guide—Commercial Pilot, Airplane (2-14-72).

Assists the commercial applicant in preparing for his certification flight test. (\$0.20 GPO.) TD 4.8:P 64/2/969.

63-1B Flight Engineer Written Test Guide (10-22-70).

Provides information to prospective flight engineers and others interested in this certification area. Contains information about certification requirements and describes the type and scope of the written test. Lists appropriate study and reference material and presents sample questions similar to those found in the official written tests. (\$0.50 GPO.) TD 4.8:En 3/971.

63-2A Flight Navigator Written Test Guide (4-4-69).

Defines the scope and narrows the field of study to the basic knowledge required for the Flight Navigator Certificate. Published in 1969. (\$0.40 GPO.) TD 4.8:F 64/2.

65-2C Airframe and Powerplant Mechanics Certification Guide (3-15-73).

Provides information to prospective airframe and powerplant mechanics and other persons interested in FAA certification of aviation mechanics. (\$0.65 GPO.) TD 4.8:A1 7/6/971.

65-4B Aircraft Dispatcher Written Test Guide (7-25-72).

Describes the type and scope of aeronautical knowledge covered by the aircraft dispatcher written examination, lists reference materials, and presents sample questions. (\$0.50 GPO.) TD 4.8:Al 7/12.

65-5 Parachute Rigger Certification Guide (6-19-67).

Provides information on how to apply for a parachute rigger certificate or rating and assists the applicant in preparing for the written, oral, and practical tests. Reprint in 1970. (\$0.25 GPO.) TD 4.8:P 21.

65-9 Airframe and Powerplant Mechanics—General Handbook (8-26-70).

Designed as a study manual for persons preparing for a mechanic certificate with airframe or powerplant ratings. Emphasis in this volume is on theory and methods of application, and is intended to provide basic information on principles, fundamentals, and airframe and powerplant ratings. Reprinted in 1972. (\$6 GPO.) TD 4.408:Al 7/2.

65-11A Airframe and Powerplant Mechanics Certification Information (4-21-71).

Provides answers to questions most frequently asked about Federal Aviation Administration certification of aviation mechanics. (\$0.20 GPO.) TD 4.8:Ai:7/219-71.

65-12 Airframe and Powerplant Mechanics Powerplant Handbook (9-25-70).

Designed to familiarize student mechanics with the construction, theory of operation, and maintenance of aircraft powerplants. Reprinted in 1973. (\$3.75 GPO.) TD 4.408:AI 7/3.

65-13 FAA Inspection Authorization Directory (12-14-70).

Provides a new directory of all FAA certificated mechanics who hold an inspection authorization as of the effective date shown above.

65-15 Airframe and Powerplant Mechanics Airframe Handbook (9-18-72).

Designed to familiarize student mechanics with airframe construction, repair, and the operating theory of airframe systems. Reprinted in 1973. (\$5.05 GPO.) TD 4.408;A1 7/5.

65-17 Annual Renewal Meeting of Holders of the Inspection Authorization (1-15-73).

Initiates an annual renewal meeting for the holders of the inspection authorization.

65.95-2B Handbook and Study Guide for Aviation Mechanics Inspection Authorization (10-9-70).

This handbook gives guidance to persons conducting annual and progressive inspections and approving major repairs or alterations of aircraft. While the handbook is primarily intended for me-

chanics holding or preparing for an Inspection Authorization, it may be useful to aircraft manufacturers and certificated repair stations who have these privileges.

#### Airspace

SUBJECT No. 70

70/7460-1B Obstruction Marking and Lighting (10-1-72).

Describes FAA standards on obstruction marking and lighting and establishes the methods, procedures, and equipment types for both aviation red and high intensity white obstruction lights.

70/7460-2 Proposed Construction or Alteration of Objects that may Affect the Navigable Airspace (9-16-71).

Advises those persons proposing to erect or alter an object that may affect the navigable airspace of the requirement to submit a notice to the Administrator of the Federal Aviation Administration (FAA).

70/7460-3 Petitioning the Administrator for Discretionary Review; Section 77.37, FAR (8-8-68).

Revises and updates information concerning the submission of petitions to the Administrator for review, extension, or revision of determinations issued by regional directors or their designees.

73-1 Establishment of Alert Areas (8-11-68).

Announces the establishment of alert areas and sets forth the procedures which FAA will follow in establishing such areas.

#### Air Traffic Control and General Operations

SUBJECT No. 90

90-1A Civil Use of U.S. Government Produced Instrument Approach Charts (4-10-68).

Clarifies landing minimums requirements and revises instrument approach charts.

90-5 Coordination of Air Traffic Control Procedures and Criteria (6-13-63).

States Air Traffic Service policy respecting coordination of air traffic procedures and criteria with outside agencies and/or organizations.

90-12A Severe Weather Avoidance (2-21-73).

Warns all pilots concerning flight in the vicinity of known or forecasted severe weather, severe turbulence and hail and advises them that air traffic control facilities, even though equipped with radar, might not always have the capability nor be in a position to provide assistance for circumnavigation of areas of severe weather.

90-14A Altitude—Temperature Effect on Aircraft Performance (1-26-68).

Introduces the Denalt Performance Computer and reemphasizes the hazardous effects density altitude can have on aircraft.

90-19 Use of Radar for the Provision of Air Traffic Control Services (10-29-64).

Advises the aviation community of FAA practice in the use of radar information to provide air traffic control services.

90-20 Weather Radar Radomes (11-12-64).

Highlights some important points to consider in the selection and maintenance of weather radar radomes.

90-22C Automatic Terminal Information Service (ATIS) (2-2-71).

Provides updated information concerning the operation of Automatic Terminal Information Service.

90-23D Wake Turbulence (12-15-72).

Alerts pilots to the hazards of aircraft trailing vortex wake turbulence and recommends related operational procedures.

90-31 Retention of Flight Service Station (FSS) Civil Flight Plans and Related Records (7-1-67).

Establishes new retention periods for flight plans, preflight briefings logs, visual flight rule flight progress strips, and related records with FSS's.

90-32 Radar Capabilities and Limitations (8-15-67).

Advises the aviation community of the inherent capabilities and limitations of radar systems and the effect of these factors on the service provided by air traffic control (ATC) facilities.

90-34 Accidents Resulting from Wheelbarrowing in Tricycle Gear Equipped Aircraft (2-27-68).

Explains "wheelbarrowing", the circumstances under which it is likely to occur, and recommended corrective action.

90-38A Use of Preferred IFR Routes (12-29-69).

Outlines the background, intent, and requested actions pertaining to the use of preferred IFR routes.

90-41C Revised Standard Instrument Departure/Arrival Procedures (4-13-72).

Describes the revised Standard Instrument Departure (SID) and Standard Terminal Arrival Route (STAR) program which basically eliminates the ability to file STAR's in a flight plan and informs pilots that altitudes and airspeeds will no longer be embedded within the body of a STAR.

90-42A Traffic Advisory Practices at Nontower Airports (8-16-72).

Establishes, as good operating practices, procedures for pilots to be apprised of or exchange traffic information, when approaching or departing uncontrolled airports,

70-2

90-43C Operations Reservations for High-Density Traffic Airports (11-14-71).

Advises the aviation community of the means for all aircraft operators, except helicopters, scheduled and supplemental air carriers and scheduled air taxis, to obtain a reservation to operate to and/or from designated high-density traffic airports.

90-45 Approval of Area Navigation Systems for Use in the U.S. National Airspace System (8-18-69).

Provides guidelines for implementation of area navigation (RNAV) within the National Airspace System (NAS).

90-45 CH-I (10-20-70).

Deletes certain items found to be in excess of minimum requirements and clarifies certain other items.

90-47 Abbreviated Instrument Flight Rules Departure Clearance (3-18-70).

Provides guidance to pilots and operators for participation in the Abbreviated IFR Departure Clearance Program.

90-48 Pilots' Role in Collision Avoidance (3-20-70).

Alerts all pilots to the midair collision and near midair collision hazard and to emphasize those basic problem areas of concern, as related to the human causal factors, where improvements in pilot education, operating practices, procedures, and techniques are needed to reduce midair conflicts.

90-50 Air Traffic Control Radio Frequency Assignment Plan for VFR and IFR Communications (9-29-70).

Describes the civil air traffic control assignment of frequencies in the very high frequency (118-136 MHz) band.

90-51 FAA Motion Picture—"Caution— Wake Turbulence" (11-17-70),

Announces the availability of a new wake turbulence film and encourages its viewing.

90-54 Cruise Clearances (5-25-71).

Provides the aviation community guidance when operating under a "cruise" clearance.

90-55. Identification of Air Taxi Operations for Air Traffic Counting (8-31-71) Quantal 00 - 2y

Informs air taxl and commercial operators (ATCO), certificated under the provisions of Federal Aviation Regulations, Part 135, that they now fall under a separate category for air traffic counting purposes and outlines air traffic identification procedures to be used.

90-58 VOR Course Errors Resulting from 50KHz Channel Selection (2-16-72).

Provides information concerning a potentially hazardous situation when a VOR receiver is tuned 50KHz from the ground station frequency.

90-59 Arrival and Departure Handling of High-Performance Aircraft (2-28-72).

Describes ATC handling of high performance aircraft in terminal areas.

90-60 Weather Observation Reporting Obscured or Partially Obscured Sky Condition (3-31-72).

Provides pilots with information concerning weather conditions reported by weather observers as obscuration or partial obscuration.

90-61 Practice Instrument Approaches (6-12-72).

Advises the aviation community of measures to achieve more organized and controlled operations where practice instrument approaches are conducted.

91-3 Acrobatic Flight (9-30-63).

Sets safe operating practices for the conduct of acrobatic flight operations.

91-5B Waivers of Subpart B, Part 91 of the Federal Aviation Regulations (FARs) (1-28-72).

Provides information concerning the submission of applications for and the issuance of waivers of Subpart B, FAR Part 91.

91-6 Water, Slush, and Snow on the Runway (1-21-65).

Provides background and guidelines concerning the operation of turbojet aircraft with water, slush, and/or snow on the runway.

91-7 Hazards Associated With In-Flight Use of "Visible-Fluid" Type Cigarette Lighters (3-16-65).

Discusses the potential hazards associated with in-flight use of "visible-fluid" type cigarette lighters.

91-8A Use of Oxygen by General Aviation Pilots/Passenger (8-11-70).

Provides general aviation personnel with information concerning the use of oxygen.

91-9 Potential Hazards Associated With Turbojet Ground Operations (6-19-65).

Alerts turbojet operators and flight crews to potential hazards involving turbojet operations at airports.

91-10A Suggestions for Use of ILS Minima by General Aviation Operators of Turbojet Airplanes (10-8-65).

Provides general aviation operators of turbojet airplanes with information on practices and procedures to be considered before utilizing the lowest published IFR minima prescribed by FAR Part 97 and provides information on pilot-in-command experience, initial and recurrent pilot proficiency, and airborne airplane equipment.

91-11A Annual Inspection Reminder (12-3-69).

Provides the aviation community with a uniform visual reminder of the date an annual inspection becomes due. (Reference section 91.169(a) (1) of the FAR's.)

91.11-1 Guide to Drug Hazards in Aviation Medicine (7-19-63).

Lists all commonly used drugs by pharmacological effect on airmen with side effects and recommendations. Reprinted 1970. (\$0.50 GPO.) FAA 7.9:D 84.

91-12B Required Inspection for Aircraft Operating Under FAR Parts 121, 123, 127, or 135 and Reverting to General Operation Under FAR Part 91 (12-9-70).

Describes acceptable methods for complying with the required inspections set forth in FAR Part 91.

91-13A Cold Weather Operation of Aircraft (1-2-70).

Provides background and guidelines relating to operation of aircraft in the colder climates where wide temperature changes may occur.

91-14B Altimeter Setting Sources (10-1-71).

Provides the aviation public, industry, and FAA field personnel with guidelines for setting up reliable altimeter setting sources.

91-15 Terrain Flying (2-2-67).

A pocket-size booklet designed as a tool for the average private pilot. Contains a composite picture of the observations, opinions, warnings, and advice from veteran pilots who have flown this vast land of ours that can help to make flying more pleasant and safer. Tips on flying into Mexico, Canada, and Alaska. (\$0.55 GPO.) TD 4.2:T 27.

91-16 Category II Operations—General Aviation Airplanes (8-7-67).

Sets forth acceptable means by which Category II operations may be approved in accordance with FAR Parts 23, 25, 61, 91, 97, and 135.

91-17 The Use of View Limiting Devices on Aircraft (2-20-68).

Alerts pilots to the continuing need to make judicious and cautious use of all view limiting devices on aircraft.

91-21 Inspection Schedule—for Handley-Page Model HP-137 (4-24-69).

Provides information for use by persons planning to develop an inspection schedule for the Handley-Page Model HP-137 aircraft.

91-22A Altitude Alerting Devices/Systems (12-23-71),

Provides guidelines for designing, installing, and evaluating altitude alerting systems.

91-23 Pilot's Weight and Balance Handbook (5-6-69).

Provides an easily understood text on aircraft weight and balance for pilots who need to appreciate the importance of weight and balance control for safety

90-62 90-62 of flight. Progresses from an explanation of basic fundamentals to the complete application of weight and balance principles in large aircraft operations. Reprinted in 1972 (\$1.25 GPO.) TD 4.408: P 64/3.

91-24 Aircraft Hydroplaning or Aquaplaning on Wet Runways (9-4-69).

Provides information to the problem of aircraft tires hydroplaning on wet runways.

91-25A Loss of Visual Cues During Low Visibility Landings (6-22-72).

Provides information concerning the importance of maintaining adequate visual cues during the descent below MDA or DA.

91-26 Maintenance and Handling of Air-Driven Gyroscopic Instruments (10-29-69).

Advises operators of general aviation aircraft of the need for proper maintenance of air-driven gyroscopic instruments and associated air filters.

91-27A Systemsworthiness Analysis Program—General Aviation (12-16-70).

Explains the purpose and applicability of the Systemsworthiness Analysis Program (SWAP) to certificated air taxis, repair stations, pilot and aviation maintenance technician schools that are operated under the privileges of certificates issued by the Federal Aviation Administration.

91-28 Unexpected Opening of Cabin Doors (12-23-69).

Outlines the importance of assuring that cabin doors are properly closed prior to takeoff.

91-29 Radar Transponder Requirements (3-30-70) Carried Co-24

Describes certain aspects of the planned operation of the Air Traffic Control Radar Beacon System (ATCRBS) which will be of interest to aircraft operators who expect to use radar transponders in their aircraft.

91-30 Terminal Control Areas (TCA) (6-11-70).

Explains the TCA concept and answers some of the most frequently asked questions pertaining to TCA.

9-31 FAR Requirement for the Filing of Flight Plans for Flights Between Mexico and the United States (2-1-71).

Informs pilots of the requirements of section 91.12(c) of Part 91 of the Federal Aviation Regulations.

91-32 Safety in and Around Helicopters (5-7-71).

Provides suggestions to improve helicopter safety by means of acquainting nonflight crew personnel and passengers with the precautions and procedures necessary to avoid undue hazards.

91-33 Use of Alternate Grades of Aviation Gasoline for Grade 80/87 (10-6-71).

Provides information relating to the use of alternate grades of aviation gasoline when grade 80/87 is not available, and the resultant effects of the use of the alternate fuels which may have higher TEL (tetraethyl lead) content.

91-34 Model Aircraft Operating Standards (7-1-72).

Outlines safety standards for operators of model aircraft, and encourages voluntary compliance with these standards.

91-35 Noise, Hearing Damage, and Fatigue in General Aviation Pilots (3-28-72).

Acquaints pilots with the hazards of regular exposure to cockpit noise. Especially pertinent are piston-engine, fixedwing, and rotary-wing aircraft.

91-36 · VFR Flight Near Noise-Sensitive Areas (8-7-72).

Encourages pilots making VFR flights near noise-sensitive areas to fly at altitudes higher than the minimum permitted by regulation and on flight paths which will reduce aircraft noise in such areas.

91-37 Truth in Leasing (11-9-72).

Provides information and guidance for lessees and conditional buyers of U.S. registered large civil aircraft.

91-38 Large and Turbine-Powered Multiengine Airplanes, Part 91, Subpart D (12-13-72).

Sets forth guidelines and procedures to assist operators of large and turbinepowered multiengine airplanes in meeting the safety requirements of FAR, Part 91, Subpart D.

91.29-1 Special Structural Inspections (1-8-68).

Discusses occurrences which may cause structural damage affecting the airworthiness of aircraft.

91.83-1 Canceling or Closing Flight Plans (3-12-64).

Outlines the need for canceling or closing flight plans promptly to avoid costly search and rescue operations.

91.83-2 IFR Flight Plan Route Information (2-16-66).

Clarifles the air traffic control needs for the filing of route information in an IFR (Instrument Flight Rules) flight plan.

95-1 Airway and Route Obstruction Clearance (6-17-65).

Advises all interested persons of the airspace areas within which obstruction clearance is considered in the establishment of Minimum En Route Instrument Altitudes (MEA's) for publication in FAR Part 95.

99-1 Security Control of Air Traffic (1-12-72).

Provides civil aviation with recommended practices for operating aircraft within or penetrating an Air Defense Identification Zone (ADIZ).

101-1 Waivers of Part 101, Federal Aviation Regulations (1-13-64).

Provides information on submission of applications and issuances of waivers to PAR Part 101.

103-2 Information Guide for Air Carrier Handling of Radioactive Materials (7-23-70).

Acquaints air carrier industry and in particular, air freight handling personnel, with the essential requirements and practical application of the various regulations pertaining to the handling and transportation of radioactive materials.

105-2 Sport Parachute Jumping (9-6-68).

Provides suggestions to improve sport parachuting safety; information to assist parachutists in complying with FAR Part 105; and a list of aircraft which may be operated with one cabin door removed, including the procedures for obtaining FAA authorization for door removal.

107-1 Aviation Security—Airports (5-19-72).

Furnishes guidance to those individuals and organizations having responsibilities under Part 107 of the Federal Aviation Regulations. It also provides recommendations for establishing and improving security for restricted or critical facilities and areas the security of which is not dealt with in Part 107.

Air Carrier and Commercial Operators and Helicopters

SUBJECT No. 120

120-1A Reporting Requirements of Air Carriers, Commercial Operators, and Travel Clubs (4-24-69).

Advises of the mechanical reliability reporting requirements contained in FAR Parts 121 and 127 and the accident and incident reporting requirements of NTSB Part 430, Rules Pertaining to Aircraft Accidents, Incidents, Overdue Aircraft, and Safety Investigations.

120-2A Precautionary Propeller Feathering To Prevent Runaway Propellers (8-20-63).

Emphasizes the need for prompt feathering when there is an indication of internal engine failure.

120-5 High Altitude Operations in Areas of Turbulence (8-26-63).

Recommends procedures for use by jet pilots when penetrating areas of severe turbulence.

Issued to emphasize to all air carriers and other operators of large aircraft the necessity for establishing minimum altitudes above the terrain or water when conducting certain simulated emergency flight training maneuvers.

120-12 Private Carriage Versus Common Carriage by Commercial Operators Using Large Aircraft (6-24-64).

Provides guidelines for determining whether current or proposed transportation operations by air constitute private or common carriage.

120-13 Jet Transport Aircraft Attitude Instrument Systems (6-26-64).

Provides information about the characteristics of some attitude instrument systems presently installed in some jet transport aircraft.

120-16A Continuous Airworthiness Program (9-11-69).

Provide air carriers and commercial operators with guidance and information pertinent to certain provisions of Federal Aviation Regulations Parts 121 and 127.

120-17 Handbook for Maintenance Control by Reliability Methods (12-31-64).

Provides information and guidance material which may be used to design or develop maintenance reliability programs which include a standard for determining the time limitations.

120-17 CH1 (6-24-66).

120-17 CH2 (5-6-68).

(4)120-18 Preservation of Maintenance Records (5-10-65) Caluled 27

Provides information and guidance -relative to the microfilming of maintenance records

itations (6-24-66).

Provides methods and procedures for the initial establishment and revision of time limitations on inspections, checks,

maintenance or overhaul. 120–24A Establishment and Revision of Aircraft Engine Overhaul and Inspec-tion Periods (2-25-69).

Describes methods and procedures used by the FAA in the establishment and revision of aircraft engine overhaul periods.

120-26C Civil Aircraft Operator Designators (9-28-72).

Revises the criteria and states the procedures for the assignment of a designator and a corresponding air/ground call sign to civil aircraft operators engaged in domestic services on a repetitive basis.

120-27 Aircraft Weight and Balance Control (10-15-68).

Provides a method and procedures for weight and balance control.

120-28A Criteria for Approval of Category IIIa Landing Weather Minima (12-14-71). C. H. /

States an acceptable means, not the only means, for obtaining approval of Category IIIa minima and the installation approval of the associated airborne systems.

120-29 Criteria for Approving Category I and Category II Landing Minima for FAR 121 Operators (9-25-70).

Sets forth criteria used by FAA in approving turbojet landing minima of less than 300-% or RVR 4,000 (Category I) and Category II minima for all aircraft.

120-29 CH 1 (12-15-71).

Revises Appendix 1 and deletes statement in Appendix 2 regarding 19-foot criteria (does not apply when using an approved automatic landing system).

120-29 CH 2 (7-26-72).

Clarifles the airborne system evaluation by stressing the necessity for meeting maintenance program requirements.

121-1/ Standard Maintenance Specifications Handbook (12-15-62).

Consolidated reprint 3-2-72, includes Changes 1 through 26.

Provides procedures acceptable to FAA which may be used by operators when establishing inspection intervals and overhaul times.

121-1 LH 27 (12-5-72).CH-40

Adds the Beenig 177 and the Douglas De a altereft to the subject himsbook

121-3MN Maintenance Review Board Reports (9-29-71).

Revises the list of Maintenance Review Board Reports that are currently in effect (August 1971).

121-6 Portable Battery-Powered Megaphones (1-5-66).

Sets forth an acceptable means for complying with rules (applicable to various persons operating under Part 121 of the Federal Aviation Regulations) that prescribe the installation of approved megaphones.

121-7 Use of Seat Belts by Passengers and Flight Attendants To Prevent Injuries (7-14-66).

Concerned with the prevention of injury due to air turbulence.

121-12 Wet or Slippery Runways (8-17-67).

Provides uniform guidelines in the application of the "wet runway" rule by certificate holders operating under FAR

121-13 Self-Contained Navigation Systems (Long Range) (10-14-69).

States an acceptable means, not the only means, of compliance with the referenced sections of the FAR as they apply to persons operating under Parts 121 or 123 who desire approval of Doppler RADAR navigation systems or Inertial Navigation Systems (INS) for use in their operations.

12I-13 CH 1 (7-31-70).

Assures standardization of the Minimum Equipment List (MEL) with respect to Inertial Navigation Systems (INS) through the appropriate Flight Operations Evaluation Board (FOEB),

15907

121-13 CH 2 (12-21-70).

Permits all flight training for Doppler and INS qualification, to be completed in a simulator or training device approved for conducting the required pilot training and qualifications in the use of these systems.

Aircraft Simulator Evaluation 121-14 and Approval (12-19-69).

Sets forth one means that would be acceptable to the Administrator for approval of aircraft simulators or other training devices requiring approval under section 121.407.

121-16 Maintenance Certification Procedures (11-9-70).

Provides guidance for the preparation of an Operations Specification-Preface Page which will afford nominal and reasonable relief from approved service and overhaul time limits when a part is borrowed from another operator.

121-17 Aviation Security: Certain Air Carriers and Commercial Opera-tors—Security Programs and Other Requirements (3-14-72).

Provides general information regarding the requirements of FAR Amdt, 121-

121.195(d)-l Alternate Operational Landing Distances for Wet Runways; Turbojet Powered Transport Category Airplanes (11-19-65).

Sets forth an acceptable means, but not the only means, by which the alternate provision of section 121.195(d) may be met.

123-1 Air Travel Clubs (10-17-68).

Sets forth guidelines and procedures to assist air travel clubs using large aircraft in meeting safety requirements of FAR Part 123.

135.144-1 Small Propeller-Driven Air Taxi Airplanes That Meet Section 135.144 (4-13-72).

Provides a summary of and information on small propeller-driven air taxi airplanes that comply with section 135.144 and may continue operations under PAR Part 135 after May 31, 1972. with 10 or more passenger scats.

135.155-1 Alternate Static Source for Altimeters and Airspeed and Vertical Speed Indicators (2-16-65).

Sets forth an acceptable means of compliance with provision in FAR Part 135 and Part 23 dealing with alternate static sources.

135-1A Air Taxi Aircraft Weight and Balance Control (9-26-69).

Provides a method and procedures for developing a weight and balance control

system for small aircraft operating in the air taxi fleet under FAR Part 135.

135-2 Air Taxi Operators of Large Aircraft (10-14-69).

Provides guidelines and procedures for use by air taxi operators or applicants for Air Taxi Operator certificates who desire to obtain FAA authorization to operate large aircraft (more than 12,500 pounds maximum certificated takeoff weight) in air taxi operations.

135-3 Air Taxi Operators of Small Aircraft (2-17-70).

Sets forth guidelines and procedures to assist persons in complying with the requirements of Federal Aviation Regulations, Part 135.

135.60-1 Aircraft Inspection Programs (5-1-70).

Provides information for use by air taxi operators and commercial operators of small aircraft developing an aircraft inspection program for FAA approval.

137-1 Agricultural Aircraft Operations (11-29-65).

Explains and clarifies the requirements of FAR Part 137 and provides additional information, not regulators in nature, which will assist interested persons in understanding the operating privileges and limitations of this Part.

Schools and Other Certificated Agencies
SUBJECT NO. 140

140-1F Consolidated Listing of FAA Certificated Repair Stations (10-29-71).

Provides a revised directory of all FAA certificated repair stations as of July 1, 1971.

140-2 List of Certificated Pilot Flight and Ground Schools (9-13-72).

Provides a list of FAA certificated pilot flight and ground schools as of June 30, 1972.

140-3B Approval of Pilot Training Courses Under Subpart D of Part 141 of the FAR (1-8-70).

The title is self-explanatory.

140-4 Use of Audio-Visual Courses in Approved Pilot Ground Schools Certificated Under Part 141 (8-7-68).

Informs operators of certificated pilot schools on the use of audio-visual training aids for instruction in approved ground school courses conducted under the FARs.

140-5 Radio Maintenance Technician School Curriculum (8-11-71).

Provides information on curriculum subjects for persons desiring to establish radio maintenance technician training courses.

143-1C Ground Instructor Written Test Guide—Basic—Advanced (10-10-72).

Assist applicants preparing for the Basic or Advanced Ground Instructor Written Test by outlining the required knowledge and by providing sample questions for practice. (\$1 GPO.) TD 150/5040-2 Announcement of Re-4.408: G 91.

143-2B Ground Instructor—Instrument—Written Test Guide (6-25-70).

Provides information to applicants for the instrument ground instructor rating about the subject areas covered in the examination and illustrated by a study outline, a list of study materials, and a sample examination with answers. (\$0.65 GPO.) TD 4.8: G 91.

145.101-1A Application for Air Agency Certificate—Manufacturer's Maintenance Facility (3-10-69).

Explains how to obtain a repair station certificate.

147-2K Directory of FAA Certificated Aviation Maintenance Technician Schools (10-14-72).

Provides a revised directory of all FAA certificated aviation maintenance technician schools as of July 31, 1972.

147-3 Phase III, A National Study of the Aviation Mechanics Occupation (3-22-71).

Announces the availability for purchase by the public of a reprint of a report of Phase III, A National Study of the Aviation Mechanics Occupation.

149-2F Listing of Federal Aviation Administration Certified Parachute Lofts (10-8-71).

Provides a revised listing of all FAA certificated parachute lofts as of October 1, 1971.

#### Airports

SUBJECT No. 150

AIRPORT PLANNING

150/5000-1 Cancellation of Obsolete Publications Issued by Standards Division, Airports Service (4-17-70).

Cancels outstanding airport engineering data sheets, technical standard orders, airport engineering bulletins, and miscellaneous publications that are no longer current and to direct the reader to a new source of information, where applicable.

150/5000-2 Index of Publications, Airport Service, Standards Division (9-28-70).

Transmits the first Airports Service, Standards Division, index of advisory circulars and related publications.

150/5000-3A Address List for Regional Airports Divisions and Airport District Offices (7-13-72).

Transmits the second address list for all regional Airports Divisions and Airport District Offices.

150/5000-3A CH 1 (12-15-72).

Transmits address corrections to the subject advisory circular.

150/5040-1A Announcement of Report—Aviation Bemand and Airport Facility Requirement Forecasts for Large Air Transportation Hubs Through 1980 (3-27-69).

Announces the availability of the new report and where to obtain it.

150/5040-2 Announcement of Report—Aviation Demand and Airport Facility Requirement Forecasts for Medium Air Transportation Hubs Through 1980 (5-22-69).

Announces the availability of the report to the public, Federal Aviation Administration personnel, airport and local government planning officials, the aviation industry, and the interested public with forecasts of aviation demand and selected airport facility requirements for medium hubs through 1980.

150/5040-3 Announcement of Report—A Suggested Action Program for the Relief of Airfield Congestion at Selected Airports (6-19-69).

Announces the availability of the report to the public which identifies and analyzes the possible improvements leading to reduced aircraft delays at 18 of the Nation's highest density airports.

150/5040-4 Announcement of Supplementary Report—A Suggested Action Program for the Relief of Airfield Congestion at Selected Airports (3-31-70).

Announces the availability of the report to the public which identifies and analyzes possible improvements needed to prevent delays at 10 additional airports where demand compared to capacity indicates serious congestion will become a problem. This report is supplementary to the report announced by AC 150/5040-3.

150/5050-2 Compatible Land Use Planning in the Vicinity of Airports (4-13-67).

Advises Federal Aviation Administration personnel, local government officials and the public of the availability of the following two reports prepared under the auspices of the FAA by the firm of Transportation Consultants, Inc. Compatible Land Use Planning On and Around Airports, and Aids Available for Compatible Land Use Planning Around Airports.

150/5050-3A Planning the State Airport System (June 1972).

Provides general guidance in preparing a State airport system plan. C, FO

150/5060-1A Airport Capacity Criteria Used in Preparing the National Airport Plan (7-8-68).

Presents the method used by the Federal Aviation Administration for determining when additional runways, taxiways, and aprons should be recommended in the National Airport Plan. The material is also useful to sponsors and engineers in developing Airport Layout Plans and for determining when additional airport pavement facilities should be provided to increase aircraft accommodation capacity at airports.

150/5060-3A Airport Capacity Criteria Used in Long-Range Planning (12-24-69).

Describes the method used by the Federal Aviation Administration for determining the approximate practical hourly and practical annual capacities of vari-

ous airport runway configurations and is used in long-range (10 years or more) planning for expansion of existing airports and construction of new airports to accommodate forecast demand.

150/5070-1 Rapid Transit Service for Metropolitan Airports (8-26-65).

Informs airport officials of a Federal assistance program for rapid transit.

150/5070-2 Planning the Metropolitan Airport (9-17-65). (Consolidated reprint 6-30-66 includes change 1.)

Provides guidance and methodology for planning the metropolitan airport system as a part of the comprehensive metropolitan planning program.

150/5070-3 Planning the Airport Industrial Park (9-30-65).

Provides guidance to communities, airport boards, and industrial developers for the planning and development of Airport Industrial Parks.

150/5070-4 Planning for Rapid Urbanization Around Major Metropolitan Airports (3-31-66).

Alerts planning agencies to the need for developing appropriate planning programs to guide rapid urbanization in the vicinity of major metropolitan airports and suggests procedures for such planning programs.

150/5070-5 Planning the Metropolitan Airport System (5-22-70).

Gives guidance in developing airportsystem plans for large metropolitan areas. It may be used by metropolitan planning agencies and their consultants in preparing such system plans and by the FAA in reviewing same. (\$1.25 GPO.) TD 4.108:M56/2.

150/5070-6 Airport Master Plans (2-5-71).

Provides guidance for the preparation of individual airport master plans as provided for under the Airport Airway Development Act of 1970, (\$1.25 GPO.) TD 4.108:P69.

150/5090-2 National Airport Classification System (Airport System Planning) (6-25-71).

. Sets forth the new national airport classification system. The system is designed for use in the identification and classification of airports within the National System of Airports and for use as a planning tool in long-range airport system planning.

FEDERAL-AID AIRPORT PROGRAMS

150/5100-3A Federal-aid Airport Program-Procedures Guide for Sponsors (9-20-68).

Provides guidance to public agencies that sponsor or propose to sponsor projects under the Federal-aid Airport Program (FAAP) authorized by the Federal Airport Act.

150/5100-3ACH1 (11-28-69).

Transmits revised pages to subject advisory circular. 150/5100-5 Land Acquisition in the Federal-sid Airport Program (1-30-69).

Provides general information to sponsors of alroot development projects under the Federal-aid Airport Program on the eligibility of land acquisition and extent of Federal participation in land acquisition costs.

150/5100-6A Labor Requirements for Airport Development Aid Program (ADAP) Contracts (1-31-73).

Covers the basic labor requirements for the Airport Development Aid Program.

150/5100-7A Requirement for Public Hearing in the Airport Development Aid Program (2-25-72).

Provides guidance to sponsors of airport development projects under the Airport Development Aid Program (ADAP) on the necessity for and conduct of public hearings.

150/5100-8 Request for Aid; Displaced Persons; Public Hearings; Environmental Considerations; Opposition to the Project (1-19-71).

Provides general guidance on the information and coordination required in support of a request for aid for an airport development project under the Airport and Airway Development Act of 1970.

150/5100-9 Engineering Services Under the Airport Development Aid Program (ADAP) (7-1-72).

Provides guidance for airport sponsors and Federal Aviation Administration offices in the definition, selection, review, and approval of engineering services used under subject program.

150/5100-10 Accounting Records Guide for Airport Development Aid Program Sponsors (5-15-72).

Assists sponsors of Airport Development Aid Program (ADAP) projects in maintaining accounting records that will satisfy the recordkeeping and auditing requirements which are necessary to support claims for progress and final payments under the Airport and Airway Development Act of 1970 (Public Law 91-258).

SURPLUS AIRPORT PROPERTY CONVEYANCE PROGRAMS

150/5150-2 Federal Surplus Personal Property for Public Airport Purposes (6-27-68).

Outlines policies and procedures for State and local agencies applying for and acquiring surplus Federal personal property for public airport purposes.

150/5150-2 CH 1 (4-22-69).

Revises the flow of copies of the SF 123 to provide for more accurate review of donated property.

AIRPORT COMPLIANCE PROGRAM

150/5190-1 Minimum Standards for Commercial Aeronautical Activities on Public Airports (8-18-66).

Gives to owners of public airports information helpful in the development and application of minimum standards for commercial aeronautical activities.

150/5190-2A Exclusive Rights at Airports (4-4-72).

Makes available to public airport owners, and to other interested persons, basic information and guidance on FAA's policy regarding exclusive rights at public airports on which Federal funds, administered by FAA, have been expended.

150/5190-2A CH 1 (10-2-72).

Deletes the reference to the sale of aeronautical charts by the National Ocean Survey (formerly the U.S. Coast Guard and Geodetic Survey) and to encourage airport owners to obtain UNICOM license in their own names and make these facilities available to all fixed base operators.

150/5190-3A Model Airport Hazard Zoning Ordinance (9-19-72).

Provides a model airport hazard zoning ordinance for airports. The model ordinance is intended merely as a guide to control manmade and natural hazards to aircraft and will require modifications and revisions to meet the varying circumstances and the state and local laws.

AIRPORT SAFETY-GENERAL

150/5200-3A Bird Hazards to Aircraft (3-2-72).

Transmits to the aviation public the latest published information concerning the reduction of bird strike hazards to aircraft in flight and in the vicinity of airports.

150/5200-4 Foaming of Runways (12-21-66).

Discusses runway foaming and suggests procedures for providing this service.

150/5200-5 Considerations for the Improvement of Airport Safety (2-2-67).

Emphasizes that, in the interest of accident/incident prevention, airport management should conduct self-evaluations and operational safety inspections. An exchange of information and suggestions for the improvement of airport safety is also suggested.

150/5200-6A Security of Aircraft at Airports (6-28-68).

Directs attention to the problem of pilferage from aircraft on airports and suggests action to reduce pilferage and the hazards that may result therefrom.

150/5200-7 Safety on Airports During Maintenance of Runway Lighting (1-24-68).

Points the possibility of an accident occurring to airport employees caused by electrocution.

to Repel Flocks of Birds at Airports (5-2-68).

Acquaints airport operators with new recommendations on the use of chemical Announces the availability of subject methods for dispersing flocks of birds.

150/5200-9 Bird Reactions and Scaring Devices (6-26-68).

Transmits a report on bird species and their responses and reactions to scaring

150/5200-11 Airport Terminals and the Physically Handicapped (11-27-68).

Discusses the problems of the physically handicapped air traveler and suggests features that can be incorporated in modification or new construction of airport terminal buildings.

150/5200-12 Fire Department Responsibility in Protecting Evidence at the Scene of an Aircraft Accident (8-7-69),

Furnishes general guidance for employees of airport management and other personnel responsible for firefighting and rescue operations, at the scene of an aircraft accident, on the proper presentation of evidence.

150/5200-13 Removal of Disabled Aireraft (8-27-70).

Discusses the responsibility for disabled aircraft removal and emphasizes the need for prearranged agreements, plans, equipment, and improved coordination for the expeditious removal of disabled aircraft from airport operating areas. It also illustrates some of the various methods used, equipment employed, equipment available, and concepts for aircraft recovery.

150/5200-14 Results of 90-Day Trial Exercise on Fire Department Activity (9-8-70).

Transmits statistical data collected during a 90-day trial exercise conducted to determine the relationship between aircraft fire and rescue service activities and airport aeronautical operations.

150/5200-15 Availability of the Inter-national Fire Service Training Asso-ciation's (IFSTA) Aircraft Fire Protection and Rescue Procedures Manual (9-11-76).

Announces the availability of the subject manual.

150/5200-16 Announcement of Report AS-71-1 "Minimum Needs for Airport Fire Fighting and Rescue Services" Dated January 1971 (4-13-

Announces the availability of the subject report and describes how to get it.

150/5200-17 Emergency Plan (2-5-72).

Contains guidance material for airport managements to use in developing an emergency plan at civil airports.

150/5200-18 Airport Safety Self-Inspection (2-5-72).

Suggests functional responsibility, procedures, a checklist, and schedule for an airport safety self-inspection.

150/5200-8 Use of Chemical Controls 150/5200-19 Availability of Report No. FAA-RD-71-20 "An Analysis of Airport Snow Removal and Ice Control" dated March 1971 (11-23-71).

report.

Airport Emergency Medical Facilities and Services (9-3-64).

Provides information and advice so that airports may take specific voluntary preplanning actions to assure at least minimum first-aid and medical readiness appropriate to the size of the airport in terms of permanent and transient personnel.

150/5210-4 FAA Aircraft Fire and Rescue Training Film, "Blanket for Survival" (10-27-65).

Provides information on the purpose, content, and availability of the subject training film.

150/5210-5 Painting, Marking, and Lighting of Vehicles Used on an Airport (8-31-66).

Makes recommendations concerning safety, efficiency, and uniformity in the interest of vehicles used on the aircraft operational area of an airport.

150/5210-6 Aircraft Fire and Rescue Facilities and Extinguishing Agents (1-14-70).

Furnishes general guidance for estimating the aircraft fire and rescue facilities needed at civil airports. Ch.

150/5210-7A Aircraft Fire and Rescue Communications (3-16-72).

Provides guidance information for use by airport management in establishing communication and alarm facilities by which personnel required to respond to and function at aircraft ground emergencies may be alerted and supplied with necessary information.

150/5210-8 Aircraft Firefighting and Rescue Personnel and Personnel Clothing (1-13-67).

Provides guidance concerning the manning of aircraft fire and rescue trucks, the physical qualifications that personnel assigned to these trucks should meet, and the protective clothing with which they should be equipped.

150/5210-9 Airport Fire Department Operating Procedures During Periods of Low Visibility (10-27-67).

Suggests training criteria which airport management may use in developing minimum response times for aircraft fire and rescue trucks during periods of low visibility.

150/5210-10 Airport Fire and Rescue Equipment Building Guide (12-7-

This title is self-explanatory.

150/5210-11 Response to Aircraft Emergencies (4-15-69).

Informs airport operators and others of an existing need for reducing aircraft firefighting response time, and outlines a uniform response time goal of 2 minutes within aircraft operational areas on airports.

150/5200.21

150/5210-12 Fire and Rescue Service for Certificated Airports (3-2-72).

Furnishes guidance and explains to Federal Aviation Administration (FAA) airport inspectors and airport management the minimum critera to be applied when evaluating the aircraft fire and rescue service required at an airport for its compliance with the requirements of FAR Part 139.

5210-13 Water Rescue Plans, Facilities, and Equipment (5-4-72). 150/5210-13 Water

Suggests planning procedures, facilities, and equipment to effectively perform rescue operations when an aircraft lands in a body of water, swamp, or tidal area where normal aircraft firefighting and rescue service vehicles are unable to reach the accident scene.

150/5220-1 Guide Specification for a Light-Weight Airport Fire and Rescue Truck (7-24-64).

Describes a vehicle with performance capabilities considered as minimum for an acceptable light rescue truck.

150/5220-4 Water Supply Systems for Aircraft Fire and Rescue Protection (12-7-67).

The title is self-explanatory.

150/5220-6 Guide Specification for 1,000-Gallon Tank Truck (4-10-

Assists airport management in the development of local procurement specifications,

150/5220-9 Aircraft Arresting System for Joint Civil/Military (4-6-70).

Updates existing policy and describes and illustrates the various types of military aircraft emergency arresting systems that are now installed at various joint civil/military airports. It also informs users of criteria concerning installations of such systems at joint civil/ military airports.

150/5220-10 Guide Specification for Water/Foam Type Alreraft Fire and Rescue Trucks (5-26-72). CH. 1+2

Assists airport management in the development of local procurement specifications.

150/5230-3 Fire Prevention During Aircraft Fueling Operations (4-8-69).

This advisory circular provides information on fire preventative measures which aircraft servicing personnel should observe during fueling operations.

Airport Operations Manual 150/5280-1 (6-16-72).

Sets forth guidelines to assist airport operators in developing an Airport Operations Manual in compliance with the requirements of FAR Part 139.

DESIGN, CONSTRUCTION, AND MAINTE-MANCE-GENERAL

150/5300-2B Airport Design Standards-Site Requirements for Terminal Navigational Facilities (11-22-71).

Provides information regarding the relative location and siting requirements Deep of Carriery.

For the terminal navigation that may be established.

for the terminal navigation facilities 150/5325-2B that may be established on an airport.

150/5300-3 Adaptation of TSO-N18 Criterion to Clearways and Stopways (10-18-64).

Sets forth standards recommended by the FAA for guidance of the public for the adaptation of TSO-N18 criterion to clearways and stopways.

150/5300-4A Utility Airports—Air Access to National Transportation (5-6-69).

Presents recommendations of the Federal Aviation Administrator for the design of utility airports. These airports are developed for general aviation operations and this guide has been prepared to encourage and guide persons interested in their development. (\$1.75 GPO.) TD 4.8:A17/968.

150/5300-5 Airport Reference Point (9-26-68).

Defines and presents the method for calculating an airport reference point.

150/5300-6 Airport Design Standards, General Aviation Airports, Basic and General Transport (7-14-69).

Provides recommended design criteria for the development of larger than general utility airports.

150/5300-6 CH-1 (4-13-72).

150/5300-7B FAA Policy on Facility Relocations Occasioned by Airport Improvements or Changes (11-8-72).

Reaffirms the aviation community of the FAA policy governing responsibility for funding relocation, replacement and modification to air traffic control and air navigation facilities that are made necessary by improvements or changes to the airport.

150/5300-8 Planning and Design Criteria for Metropolitan STOL Ports (11-5-70).

Provides the criteria recommended for the planning and design of STOL ports in metropolitan areas.

150/5320-5B Airport Drainage (7-1-70).

Provides guidance for engineers, airport managers, and the public in the design and maintenance of airport drainage systems. (\$1 GPO.) TD 4.8: 78/970.

150/5320-6A Airport Paving (5-9-67).

Provides data for the design and construction of pavements at civil airports. 150/5320-6A CH 1 (6-11-68).

Transmits page changes and adds new chapter 6 to basic AC.

150/5320-6A CH 2 (2-2-70).

Transmits new paragraphs 3, 4, and 5, and adds a new Appendix 2.

150/5320-6A CH 3 (4-1-70).

8-Pt. II-

Transmits several page changes and v subgrade compaction criteria.

50/5325-2B Airport Design Standards—Air Carrier Airports—Surface Gradient and Line of Sight (2-18-70).

Establishes design standards for airports served by certificated air carriers to assist engineers in (1) designing the gradients of airport surface areas used to accommodate the landing, takeoff, and other ground movement requirements of airplanes while (2) providing adequate line of sight between airplanes operating on airports.

150/5325-3 Background Information on the Aircraft Performance Curves for Large Airplanes (1-26-65).

Provides airport designers with information on aircraft performance curves for design which will assist them in an objective interpretation of the data used for runway length determination.

150/5325-3 CH 1 (5-12-66).

Transmits a revision to the effective runway gradient standards.

150/5325-4 Runway Length Requirements for Airport Design (4-5-65).

Presents aircraft performance curves and sets forth standards for the determination of runway lengths to be provided at airports. The use of these standards is required for project activity under the Federal-Aid Airport Program when a specific critical aircraft is considered as the basis for the design of a runway.

150/5325-4 CH 1 (8-5-65).

Provides amended information for the basic advisory circular and includes aircraft performance curves for the BAC 1-11.

150/5325-4 CH 2 (9-21-65).

Transmits aircraft performance curves for the Boeing 707-300C and the Fairchild F-27 and F-27B.

150/5325-4 CH 3 (4-25-66),

Transmits aircraft performance curves for the Douglas DC-8-55, DC-8F-55, and DC-9-10 Series, the Fairchild F-27J, and the Nord 262.

150/5325-4 CH 4 (5-12-66).

Transmits a revision to the effective runway gradient standards.

150/5325-4 CH 5 (7-13-66).

Transmits aircraft performance curves for the Douglas DC-9-10 Series equipped with Pratt & Whitney JT8D-1 Engines.

150/5325-4 CH 6 (12-8-66).

It is recommended that turbojet powered aircraft use more runway length when landing under wet or slippery, rather than under dry conditions. This change furnishes a basis for estimating the additional recommended length.

150/5325-4 CH 7 (2-7-67).

Presents design curves for landing and takeoff requirements of airplanes in common use in the civil fleet. Also presented are instructions on the use of these design curves and a discussion of the factors considered in their development.

150/5325-4 CH 8 (11-8-67).

Transmits aircraft performance curves for the Boeing 747, Convair 640 (340D or 440D), and Douglas DC-9-30 Series.

150/5325-5A Aircraft Data (1-12-68).

Presents a listing of principal dimensions of aircraft affecting airport design for guidance in aircraft development.

150/5325-6A Airport Design Standards-Effects and Treatment of Jet Blast (7-13-72).

Presents criteria on the jet engine blast velocities associated with alreraft in common use in air carrier service, the effects of these blast velocities during ground operations, and suggested means to counteract or minimize these effects.

150/5325-8 Compass Calibration Pad (5-8-69).

Provides guidelines for the design, location on the airport, and construction of a compass calibration pad, and basic information concerning its use in determining the deviation error in an aircraft magnetic compass.

150/5330-2A Runway/Taxiway Widths and Clearances for Airline Airports (7-26-68).

Presents the Federal Aviation Administration recommendations for landing strip, runway, and taxiway widths and clearances at airports served by certificated air carriers.

150/5330-3 Wind Effect on Runway Orientation (5-5-66).

Provides guidance for evaluating wind conditions and determining their effect on the orientation of runways.

150/5335-1A Airport Design Standards-Airports Served by Air Carriers-Taxiways (5-15-70).

Provides criteria on taxiway design for airports served by certificated route air carriers with present airplanes and those anticipated in the near future.

150/5335-2 Airport Aprons (1-27-65).

Provides the criteria for airport aprons which are acceptable in accomplishing a project meeting the eligibility requirements of the Federal-aid Airport Program.

150/5335-3 Airport Design Standards—Airports Served by Air Carriers—Bridges and Tunnels on Airports (4-19-71).

Provides general guidance to those contemplating the construction of a bridge-type structure to allow aircraft to cross over an essential surface transportation mode.

150/5340-1D Marking of Paved Areas on Airports (1-19-73).

Describes standards for marking serviceable runways and taxiways as well

720-4 060

FEDERAL REGISTER, VOL. 38, NO. 116-MONDAY, JUNE 18, 1973

as deceptive, closed, and hazardous areas on airports.

150/5340-4B Installation Details for Runway Centerline and Touchdown Zone Lighting Systems (5-6-69).

Describes standards for the design and installation of runway centerline and touchdown zone lighting systems.

150/5340-5A Segmented Circle Airport Marker System (9-10-71).

Sets forth standards for a system of airport marking consisting of certain pilot aids and traffic control devices.

150/5340-8 Airport 51-foot Tubular Beacon Tower (6-11-64).

Provides design and installation details on the subject tower.

150/5340-9 Prefabricated Metal Housing for Electrical Equipment (8-18-

Provides design and installation details on the subject metal housing.

150/5340-13 High Intensity Runway Lighting System (4-14-67).

Provides corrected curves for estimating loads in high intensity series circuits.

150/5340-14B Economy Approach Lighting Aids (6-19-70).

Describes standards for the design selection, siting, and maintenance of economy approach lighting aids. (# /

150/5340-15B Taxiway Edge Lighting System (4-4-72).

Describes the recommended standards for the design, installation, and maintenance of a taxiway edge lighting system.

150/5340-16B Medium Intensity Runway Lighting System and Visual Approach Slope Indicators for Utility Airports (10–26–70).

Describes standards for the design, installation, and maintenance of medium intensity runway lighting system (MIRL), and visual approach slope indicators for utility airports.

150/5340-17A Standby Power for Non-FAA Airport Lighting Systems (3-19-71).

Describes standards for the design, installation, and maintenance of standby power for nonagency owned airport visual aids associated with the National Airspace System (NAS).

150/5340-18 Taxiway Guidance System (9-27-68).

Describes the recommended standards for design, installation, and maintenance of a taxiway guidance sign system.

150/5340-19 Taxiway Centerline Lighting System (11-14-68).

Describes the recommended standards for design, installation, and maintenance of a taxiway centerline lighting system.

150/5340-20 Installation Details and Maintenance Standards for Reflec-tive Markers for Airport Runway and Taxiway Conterlines (2-17-69).

Describes standards for the installation and maintenance of reflective mark-

ers for airport runway and taxiway for airport lighting circuits. Published centerlines.

150/5340**-2**1 Miscellaneous Airport Lighting Visual Aids (3-25-71).

Describes standards for the system design, installation, inspection, testing, and maintenance of airport miscellaneous visual aids; i.e., airport beacons, beacon towers, wind cones, wind tees, and obstruction lights.

150/5340-22 Maintenance Guide for Determining Degradation and Cleaning of Centerline and Touchdown Zone Lights (4-20-71).

Contains maintenance recommendations for determining degradation and cleaning of centerline and touchdown zone lights installed in airport pavement.

150/5340-22 CH 1 (6-23-71).

Transmits a page change to subject advisory circular.

150/5340-23 Guide for Location of Supplemental Wind Cones (8-24-71).

Describes standards for the performance and location of supplemental wind cones.

150/5345-1 Approved Airport Lighting Equipment (10-26-71).

Contains lists of approved airport lighting equipment and manufacturers qualified to supply their product in accordance with the indicated specification requirements.

150/5345-2 Specification for L-810 Obstruction Light (11-4-63).

Required for FAAP project activity.

150/5345-2 CH 1 (10-28-66).

Transmits page changes to the subject advisory circular. This change provides for a new Alloy 360 in the die casting DIOCESS.

150/5345-3B Specification for L-821 Airport Lighting Panel for Remote Control of Airport Lighting (4-21-72).

Describes the specification requirements for an airport lighting control panel for the remote control of airport lighting circuits and is published by the Federal Aviation Administration for the guidance of the public.

150/5345-4 Specification for L-289 Internally Lighted Airport Taxi Guidance Sign (10-15-63).

Required for FAAP project activity.

150/5345-4 CH 1 (10-28-66).

Transmits page changes to the subject advisory circular. This change provides for a new Alloy 360 in the die casting process.

150/5345-5 Specification for L-847 Circuit Selector Switch, 5,000 Volt 20 Ampere (9-3-63).

Required for FAAP project activity.

150/5345-7B Specification for L-824 Underground Electrical Cables for Airport Lighting Circuits (3-18-71).

Describes the specification requirements for underground electrical cables

by the FAA for the guidance of the public.

150/5345-9C Specification for L-819 Fixed Focus Bidirectional High Intensity Runway Lights (12-23-69).

Describes the subject specifications requirements and is published by the Federal Aviation Administration for the guidance of the public.

150/5345-10C Specification for L-828 Constant Current Regulators (10-22-71).

Describes the subject specification requirements and is published by the Federal Aviation Administration for the guidance of the public.

150/5345-11 Specification for L-812 Static Indoor Type Constant Current Regulator Assembly, 4 Kw and 73/2 Kw, With Brightness Control for Remote Operations (3-2-64).

Required for FAAP project activity.

150/5345-12A Specification for L-801 Beacon (5-12-67).

Describes the subject specification requirements.

150/5345-12A CH 1 (3-19-71).

Transmits paragraph changes to the subject advisory circular.

150/5345-13 Specification for L-841 Auxiliary Relay Cabinet Assembly for Pilot Control of Airport Lighting Circuits (1-6-64).

Required for FAAP project activity.

150/5345-15 Specification for L-842 Airport Centerline Light 1-6-64).

Required for FAAP project activity.

150/5345-16 Specification for L-843 Airport In-Runway Touchdown Zone Light (1-20-64).

Required for FAAP project activity.

150/5345-17 Specification for L-845 Semiflush Inset Prismatic Airport Light (3-3-64).

Describes the subject specification requirements.

150/5345-18 Specification for L-811 Static Indoor Type Constant Current Regulator Assembly, 4 Kw; With Brightness Control and Runway Selection for Direct Operation (3-3-64).

Required for FAAP project activity.

150/5345-18 CH 1 (5-28-64).

Advises that a detail requirement is not applicable to the circular.

150/5345-19 Specification for L-838 Semiflush Prismatic Airport Light (5-11-64).

Describes the subject specification requirements.

150/5345-20 Specification for L-1 Runway and Strip Light (6-24-Describes the subject specific

requirements.

150/5345-20 CH 1 (8-31-64).

Provides amended information for the basic advisory circular.

150/5345-20 CH 2 (1-14-66).

Provides new dimensions for the thickness of the metal stake and an organizational change.

150/5345-20 CH 3 (10-28-66).

Transmits page changes to the subject advisory circular. This change provides for a new Alloy 360 in the die casting process.

150/5345-20 CH 4 (8-5-69).

Describes the subject specification requirements for a runway and strip light.

150/5345-21 Specification for L-813 Static Indoor Type Constant Current Regulator Assembly: 4 Kw and 71/2 Kw; for Remote Operation of Taxiway Lights (7-28-64).

Describes the subject specification requirements.

150/5345-22 Specification for L-834 Individual Lamp Series-to-Series Lamp Series-to-Series Type Insulating Transformer for 5,000 Volt Series Circuit (10-8-64).

Describes the subject specification requirements.

150/5345-23 Specification for L-822 Taxiway Edge Light (10-13-64).

Describes the subject specification requirements.

150/5345-23 CH 1 (1-14-66).

Provides new dimensions for the thickness of the metal stake and an organizational change.

150/5345-23 CH 2 (10-28-66).

Transmits page changes to the subject advisory circular. This change provides for a new Alloy 360 in the die casting process.

150/5345-23 CH 3 (8-5-69).

Describes the subject specification requirements for a taxiway edge light.

150/5345-26A Specification for L-823 Plug and Receptacle, Cable Connectors (5-4-71).

Describes the subject specification requirements.

150/5345-27A Specification for L-807 Eight-foot and Twelve-foot Unlighted or Externally Lighted Wind Cone Assemblies (6-16-69).

Describes the subject specification requirements for a hinged steel pole support, an anodized tapered aluminum hinged base pole support, and an "A" frame fixed support with pivoted center pipe support.

150/5345-28B Specification for L-851 Visual Approach Slope Indicators and Accessories (2-16-72).

Describes the specification requiremis for visual approach slope indicator ASI) and simple abbreviated visual pach slope indicator (SAVASI) nent and accessories.

150/5345-29A FAA Specification L- 150/5345-42 FAA Specification L-857, 852. Light Assembly, Airport Taxi- Airport Light Bases, Transformer 852, Light Assembly, Airport Taxiway Centerline (4-28-71).

Describes FAA Specification L-852. Light Assembly, Airport Taxiway Centerline, for the guidance of the public.

150/5345-30A Specification for L-846 Electrical Wire for Lighting Circuits To Be Installed in Airport Payements (2-3-67).

Describes, for the guidance of the public, subject specification requirements for electrical wire.

150/5345-31A Specification for L-833 Individual Lamp Series-to-Series Type Insulating Transformer for 600-Volt or 5,000-Volt Series Circuits (4-24-70).

Describes the subject specification requirements and is published by the FAA for the guidance of the public.

150/5345-33 Specification for L-844 Individual Lamp Series-to-Series Type Insulating Transformer for Type Insulating Transformer for 5,000 Volt Series Circuit 6.6/20 Amperes 200 Watt (1-13-65).

Describes the subject specification requirements.

150/5345-34 Specification for L-839 Individual Type Insulating Transformer for 5,000 Volt Series Circuit 6.6/20 Amperes 300 Watt (1-13-65).

Describes the subject specification requirements.

150/5345-35 Specification for L-816 Circuit Selector Cabinet Assembly for 600 Volt Series Circuits (1-28-65).

Describes the subject specification requirements.

150/5345-36 Specification for L-808 Lighted Wind Tee (2-3-65).

Describes the subject specification requirements.

150/5345-37C FAA Specification L-850, Light Assembly Airport Runway Centerline and Touchdown Zone (6-27-72).

Describes subject light assembly for the guidance of the public.

150/5345-38 Changes to Airport Lighting Equipment (3-23-67).

The title is self-explanatory.

150/5345-39A FAA Specification L-853, Runway and Taxiway Centerline Retroreflective Markers (9-17-71).

Describes specification requirements for L-853 Runway and Taxiway Retroreflective markers, for the guidance of the public.

150/5345-41 Specification for L-855, Individual Lamp, Series-to-Series Lamp, Series-to-Series lating Transformer for Type Insulating Transformer for 5,000-Volt Series Circuit, 6.6/6.6 Amperes, 65 Watts (4-24-70).

Describes the subject specification and is published by the FAA for the guidance of the public.

Housing and Junction Boxes (10-27-70).

Describes specification requirements for airport light bases, transformer housing and junction boxes for the guidance of the public.

150/5345-43A FAA/DOD Specification L-856, High Intensity Obstruction Lighting Systems (11-19-71).

Describes specification requirements for high intensity obstruction lighting

150/5345-44A Specification for L-858 Retroreflective Taxiway Guidance Signs (7-20-71).

Describes the specification for retroreflective taxiway guidance signs.

150/5355-1A International Signs to Facilitate Passengers Using Airports (11-3-71).

Informs airport authorities of the desirability to provide international signs and diagrammatic maps within terminal buildings and of the need for clearly marked road signs for airports,

150/5355-2 Fallout Shelters in Terminal Buildings (4-1-69).

Furnishes guidance for the planning and design of fallout shelters in airport terminal buidlings.

150/5360-1 Airport Service Equipment Buildings (4-6-64).

Provides guidance on design of buildings for housing equipment used in maintaining and repairing operational areas.

150/5360-2 Airport Cargo Facilities (4-6-64).

Provides guidance material on air cargo facilities.

150/5360-3 Federal Inspection Service Facilities at International Airports (4-1-66).

Describes and illustrates recommended facilities for inspection of passengers. baggage, and cargo entering the United States through international airport terminals. The material is for the guidance of architect-engineers and others interested in the planning and design of these airport facilities.

150/5370-1A Standard Specifications for Construction of Airports (5-28-

Contains specification items for construction of airports and other related information. Acceptable for FAAP project activity. Published in 1968. (\$3.50 GPO.) TD 4.24:968

150/5370-2 Safety on Airports During Construction Activity (4-22-64).

Provides guidelines concerning safety at airports during periods of construction

5245-45

150/5370-4 Procedures Guide for Using the Standard Specifications for Construction of Airports (5-29-69).

Provides guidance to the public in the use and application of the Standard Specifications for Construction of Airports.

150/5370-5 Offshore Airports (12-15-69).

Announces to the public the availability of a two-volume report on offshore airport planning and construction methods.

150/5370-6 Construction Progress and Inspection Report—Federal-Aid Airport Program (3-16-70).

Provides for a report on construction progress and inspection of Federal-aid Airport Program (FAAP) projects, suggests a form for the report, and recommends use of the form unless other arrangements exist to obtain the type of information provided by the form.

150/5370-7 Airport Construction Controls To Prevent Air and Water Pollution (4-26-71).

Supplies guidance material on compliance with air and water standards during construction of airports developed under the Airport and Airway Development Act of 1970.

150/5370-8 Grooving of Runway Pavements (3-16-71).

Provides guidance for the design, instaliation, and maintenance of grooves in runway pavements.

150/5380-1 Airport Maintenance (4-14-63).

Provides a basic checklist and suggestions for an effective airport maintenance program.

150/5380-2A Snow Removal Techniques Where In-Pavement Lighting Systems Are Installed (12-24-64).

Provides information on damage to inpavement lighting fixtures by snow removal equipment and recommends procedures to avoid such damage.

150/5380-3A Removal of Contaminants from Pavement Surfaces (10-27-

Provides information to the aviation industry relative to cleaning rubber deposits, oil, grease, and jet aircraft exhaust deposits from runway surfaces.

150/5380-4 Ramp Operations During Periods of Snow and Ice Accumulation (9-11-68).

Directs attention to an increased accident potential when snow or ice accumulates on the surfaces of ramps and aircraft parking and holding areas and suggests some measures to reduce this potential.

150/5380-5 Debris Hazards at Civil Airports (3-8-71).

Discusses problems of debris at airports, gives information on foreign objects, and tells how to eliminate such objects from operational areas.

ニア・フラーア

150/5390-1A Heliport Design Guide 170-12 Implementation of 50 KHz/Y (11-5-69).

Contains design guidance material for the development of heliports, both surface and elevated, (\$0.75 GPO.) TD 4.108:H36.

#### Air Navigational Facilities

SUBJECT No. 170

170-3B Distance Measuring Equipment (DME) (11-8-65).

Presents information on DME and some of its uses to pilots unfamiliar with this navigational aid.

170-6A Use of Radio Navigation Test Generators (3-30-66).

Gives information received from the Federal Communications Commission as to the frequencies on which the FCC will license test generators (used to radiate a radio navigation signal) within the scope of its regulations and gives additional information to assist the user when checking aircraft navigation receivers.

Aeronautical Beacons and 170/6850-1 True Lights (8-28-68).

Describes FAA standards for the installation and operation of aeronautical beacons serving as true lights.

170-8 Use of Common Frequencies for Instrument Landing Systems Located on Opposite Ends of the Same Runway (11-7-66).

In the future, common frequencies may be assigned to like components of two instrument landing systems serving opposite ends of the same runway. This will include the localizers, glide slopes, and associated outer and middle marker compass locators (LOM and LMM).

Criteria for Acceptance of Ownership and Servicing of Civil Aviation Interest(e) Navigational and Air Truffic Control Systems and Equipment (11-26-68).

Contains a revised FAA policy under which the FAA accepts conditional ownership of equipment and systems from civil aviation interests, without the use of Federal funds, and operates, maintains, and provides the logistic support of such equipment.

170-10 FAA Recommendations to FCC on Licensing of Non-Federal Radio Navigation Aids (10-17-69).

Gives background information and describes the basis for recommendations to be made by the FAA to the Federal Communications Commission (FCC) regarding licensing of radio navigation aids.

170-11 Amendment of Federal Aviation Regulation Part 171 (FAR-171)-Cost of Flight and Ground Inspections (9-17-70).

Alerts the public to the amendment to FAR Part 171 pertaining to the payment of ground and flight inspection charges prior to the issuance of an approved IFR procedure.

Channels for ILS/VOR/DME (10-7-70).

Advises aircraft owners, operators and radio equipment manufacturers of plans for future implementation of split channel assignments in the aeronautical radio navigation bands.

#### **Administrative**

SUBJECT No. 180

183-30 Directory of FAA Designated Mechanic Examiners (12-14-70).

Provides a new directory of all FAA designated mechanic examiners as of the effective date shown above.

183-31A FAA Designated Parachute Rigger Examiner Directory (1-17-72).

Provides a new directory of all FAA designated parachute rigger examiners as of November 30, 1971,

183,29-1E7 Designated Engineering Representatives (1-5-70).

Lists in Appendix 1 the Designated Engineering Representatives who are available for consulting work.

> Flight Information SUBJECT No. 210

210-1 National Notice to Airmen System (2-8-64).

Announces FAA policy for the preparation and issuance of essential flight information to pilots and other aviation interests.

210-2A Established Schedule for Flight Information Effective Dates (9-19-69).

Emphasizes the importance of adherence to the established schedule of effective dates for flight information, and provides a copy of the schedule through June 1971,

210-3 National Notice to Airmen Sys-tem—Elimination of NOTAM Code (5-22-70).

Announces changes in criteria and procedures for the Notice to Airmen System required to accommodate the transmission of all domestic Notice to Airmen data in clear contracted language and eliminate use of the NOTAM code on the domestic service A circuits.

211–2# Recommended Standards for IFR Aeronautical Charts (3-20-67).

Sets forth standards recommended by the Federal Aviation Administration for the guidance of the public in the issuance of IFR aeronautical charts for use in the National Airspace System (NAS).

#### Internal Publications

Contractions Handbook, 7340.1C (2-2-72).

Gives approved word and phrase contractions used by personnel connected with air traffic control, communications weather, charting, and associated seg ices. (\$6.50-\$8.25 foreign Sub.-GH TD 4.308: C76/969.

2700)-1

Location Identifiers, 7350.18.

Incorporates all authorized 3-letter location identifiers for special use in United States, worldwide, and Canadian assignments. Dated 5-15-71. (\$11.00—\$13.75 foreign Sub.—GPO.) TD 4.310:.

En Route Air Traffic Control Handbook, 7110.9C (1-1-73).

Prescribes air traffic control procedures and phraseology for use by personnel providing en route air traffic control service. (\$14 Sub.—GPO.) TD 408; En 1/971.

Terminal Air Traffic Control Handbook, 7110.8C (1-1-73).

Prescribes air traffic control procedures and phraseology for use by personnel providing terminal air traffic control services. (\$24 Sub.—GPO.) TD 4.308: T27/971.

Flight Services, 7110.10B (1-1-73).

This handbook consists of two parts. Part I, the basic, prescribes procedures and phraseology for use by personnel providing flight assistance and communications services. Part II, the teletype-writer portion, includes Services A and B teletype-writer operating procedures, pertinent International Teletype-writer Procedures, and the conterminous U.S. Service A Weather Schedules. (\$24—\$30 foreign Sub.—GPO.) TD 4.308: F 64.

International Flight Information Manual, Vol. 21 (April 1973).

This Manual is primarily designed as a preflight and planning guide for use by U.S. nonscheduled operators, business and private aviators contemplating flights outside of the United States.

The Manual, which is complemented by the International Notams publication, contains foreign entry requirements, a directory of aerodromes of entry including operational data, and pertinent regulations, and restrictions. It also contains passport, visa, and health requirements for each country. Published annually with quarterly amendments. (\$6—\$7.50 foreign—Annual Sub. GPO.) TD 4.309:16.

#### International Notams.

Covers notices on navigational facilities and information on associated aeronautical data generally classified as "Special Notices". Acts as a notice-to-airmen service only. Published weekly. (\$11—\$13.75 foreign—Annual Sub. GPO.) TD 4.11:.

Airman's Information Manual:

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; U.S. Entry and Departure Procedures, including Airports of Entry and Landing Rights Airports; Air Defense Identification Zones (ADIZ);

Designated Mountainous Areas, Scatana, and Emergency Procedures. (Annual Sub. \$7, Foreign mailing—\$1.75 additional, GPO.) TD 4.12;pt. 1/.

#### 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 and Flight Service Stations and National Weather Service Stations and National Weather Service telephone numbers. (Annual Sub. \$7, Foreign mailing—\$1.75 additional. GPO.) TD 4.12:pt. 2/.

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 assigned 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 Part 3 and Part 4. (Annual Sub. \$22, Foreign mailing—\$5.50 additional, GPO.) TD 4.12:pt. 3/.

Part 4—Graphic Notices—Supplemental Data.

Part 4 is issued quarterly and contains abbreviations used in all parts of AIM; Parachute Jump Areas; VOR Receiver Check Points; Special Notice Area Graphics; and Heavy Wagon and

Oil Burner Routes.

Future editions will be expanded to include Special Terminal Area Charts and data not subject to frequent change. (Annual Sub. \$9.50, Foreign mailing—\$2.50 additional. GPO.) TD 4.12;pt. 4/.

Aircraft Type Certificate Data Sheets and Specifications.

Contains all current aircraft specifications and type certificate data sheets issued by the FAA, Monthly supplements provided. (\$72—Sub., Foreign mailing— \$18 additional. GPO.) TD 4.15:967.

Aircraft Engine and Propeller Type Certificate Data Sheets.

Contains all current aircraft engine and propeller type certificate data sheets and specifications issued by FAA. Monthly supplements provided. (\$28.50—Sub., Foreign mailing—\$7.25 additional. GPO.) TD 4.15/2:968.

Summary of Airworthiness Directives for Small Aircraft (1-1-72) Volume I.

Presents, in volume form, all the Airworthiness Directives for small aircraft issued through December 31, 1971. AD's for engines, propeller, and equipment are included in each volume. Each volume is arranged alphabetically by product manufacturer. (\$5.50 Sub.—GPO.) TD 4.10/2:972.

Summary of Airworthiness Directives for Large Aircraft (1-1-72) Volume II.

Presents, in volume form, all the Airworthiness Directives for large aircraft (over 12,500 pounds maximum certificated takeoff weight) issued through December 31, 1971. AD's for engines, propellers, and equipment are included in each volume. (\$6.25 Sub.—GPO.) TD 4.10/3:972.

Summary of Supplemental Type Certificates.

Contains all supplemental type certificates issued by FAA regarding design changes in aircraft, engines, or propellers. List includes description of change, the model and type certificate number, the supplemental type certificate number, and the holder of the change Quarterly supplements provided. (\$41—Sub., Foreign mailing—\$10.25 additional. GPO.) TD 4.36;971.

#### STATUS OF THE FEDERAL AVIATION REGULATIONS

As of April 15, 1973

FEDERAL AVIATION REGULATIONS VOLUMES

Volume No.	Contents	Price	Trans- mittals
olume I Part 1	Definitions and Abbreviations.	\$2.50 plus 75¢ foreign mailing	
olume II Part 11		\$10.50 plus \$2.75 foreign mailing	,26
Part 13 Part 15	Enforcement Procedures.  Nondiscrimination in Federally assisted Programs of the Federal Aviation Administration.	•	
Part 21 Part 87	Certification Procedures for Products and Parts. Technical Standard Order Authorizations.		
Part 39 Part 45	Airworthiness Directives. Identification and Registration Marking.	•	
Part 47 Part 49	Aircraft Registration.  Recording of Aircraft Titles and Security Documents.		
Part 183 Part 185	Representatives of the Administrator: Testimony by Employees and Production of Re- cords in Legal Proceedings and Service of Legal		

Part 187 Fees.
Pert 189 Use of Federal Aviation Administration Communications System:

#### FEDERAL AVIATION REGULATIONS VOLUMES---Continued

Volume No.	Contents	Price	Tran mitta
Volume III		PIS an almost an decider and an	
Part 23	Airworthiness Standards: Normal, Utility, and	\$13.50 plus \$5.50 foreign mailing	;
2 m + 40	Acrobatic Category Airplanes.		
Part 25	Airworthiness Standards: Transport Category Air-		
	planes.		
Part \$6	Noise Standards: Aircraft Type Certification.		
Volume IV		#F no -1 - 44 Am 41	
Post 27	Airworthiness Standards: Normal Category Rotor-	\$5.00 plus \$1.25 foreign mailing	
Lm r x1	craft.		
Dest 90	Airworthiness Standards: Transport Category		
FM 1 49	Rotorcraft,		
Dorf 51	Airworthiness Standards; Manned Free Balloons.		
Port 32	Airworthiness Standards: Aircraft Engines.		
Dort 25	Airworthiness Standards: Propellers.		
	<del>-</del>		
Volume V	***************************************	\$3.50 plus \$1 foreign mailing	1
Part 43	Maintenance, Preventive Maintenance, Rebuilding,		
	and Alteration.		
Part 145	Repair Stations.		
		An	_
Voiding A I	Coneral Organiting and Elista Dates	\$9 plus \$2.25 foreign mailing	2
Lant at	General Operating and Flight Rules, Special Air Traffic Rules and Airport Traffic Pat- terns. Security Control of Air Traffic.		
Tan #3	torns		
Part 00	Security Control of Air Troffic		
Part tot	Security Control of Air Traffic.  Moored Balloons, Kites, Unmanned Rockets, and	•	
I OK > 101	Unmanned Free Balloons.		
Part 103	Transportation of Dangerous Articles and Mag-		
2 400	netized Materials.		
Part 105	Parachute Jumping.		
Part 107	Airport Security.		
Volume VII		\$10 to also \$0 ft feeden mailing -	
Part 191	Certification and Operations: Domestic, Flag, and Supplemental Air Carriers and Commercial Oper- ators of Large Aircraft.	\$10.50 plus \$2.75 foreign mailing	-
T ## 4 401	Supplemental Air Corriers and Commercial Oner.		
	stors of Large Aircraft.		
Part 123	Certification and Operations: Air Travel Clubs		
	Using Large Airplanes.		
Part 127	Certification and Operations of Scheduled Air		
	Certification and Operations of Scheduled Air Carriers with Helicopters.		
Pari (20	Onerations of Foreign Air Carriers		
Volume VIII	*	\$5 plus \$1.25 foreign mailing.	- 1
PRI DE	Molorcraft External Load (Inarations	• • • • • • •	
Part 135	Air Taxi Operators and Commercial Operators of		
	Small Aircraft.		
Part 187	Agricultural Aircraft Operations.	40 . 4	_
Volume IX	Carlifordian, Titlete and Pilabi Instructors	\$6 plus \$1.50 foreign mailing	,
Part 01	Certification: Pilots and Flight Instructors. Certification: Flight Crewmembers Other Than		
Γωι 03	Pilots.		
Dort 85	Certification: Airmen Other Than Flight Crew-	•	
104.00	members.		
Part 67	Medical Standards and Certification.		
Part 141	Plot Schools		
Part 143	Pilot Schools. Ground Instructors.		
Part 147	Aviation Maintenance Technician Schools.		
Volume X	an item to a section of the section	\$7 plus \$1.75 foreign mailing	1
Part 189	Certification and Operations: Land Airports Serving	A. Name Artin strenger summerch-saving	_
* *** * *******	CAB-Certificated Scheduled Air Carriers Operating		
	Large Aircraft (Other than Helicopters).		
Part 151	Federal Aid to Airports.		
Part 152	Airport Aid Program.		
/ Part 153	Airport Aid Program. Acquisition of U.S. Land for Public Airports.		
Part 155	Release of Airport Property from Eurplus Property		
	District Prestrictions.		
Part 159	National Capital Airports. Annette Island, Alaska, Airport.		
Part 167	Annette Island, Alaska, Airport.		
Volume X (		\$5 plus \$1.25 foreign mailing	17
Part 71	Designation of Federal Airways, Area Low Routes		
	Controlled Airspace, and Reporting Points. Special Use Airspace.		
Part 78	Special Use Airspace.		
PRYL 7A	NEISBURDON OF LET HOMES AND LIGHT LENG HOMES		
Part 77	Objects Affecting Navigable Airspace. IFR Altitudes.		
Part 95	IFR Autudes.		
Part 97	Blandard instrument Approach Procedures.		
Part 187	Notice of Construction, Alteration, Activation, and		
Daret son	Deactivation of Airports. Expenditure of Federal Funds for Nonmilitary Air-	•	
Pert 169	Expenditure of Federal Funds for Nonmilitary Air-		
	DOL'S OF ALL NEVIGERIONAL PROBLEMS THEREON.		
	Non-Federal Navigation Facilities.		

Volumes may be purchased from: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Transmittal (amendment) service is automatic with the purchase of a Volume and is also provided by the Superintendent of Documents. Check or money order made payable to the Superintendent of Documents, should be included with each order.

WILLIAM E. MURPHY,
Acting Manager,
Headquarters Operations.

[FR Doc.73-12018 Filed 6-15-73;8:45 am]

### DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION Washington, D.C. 20591

Official Business

PENALTY FOR PRIVATE USE, \$300

POSTAUS AND YESS PAID SECRETAL AVIATION ADMINISTRATION DOT 515

