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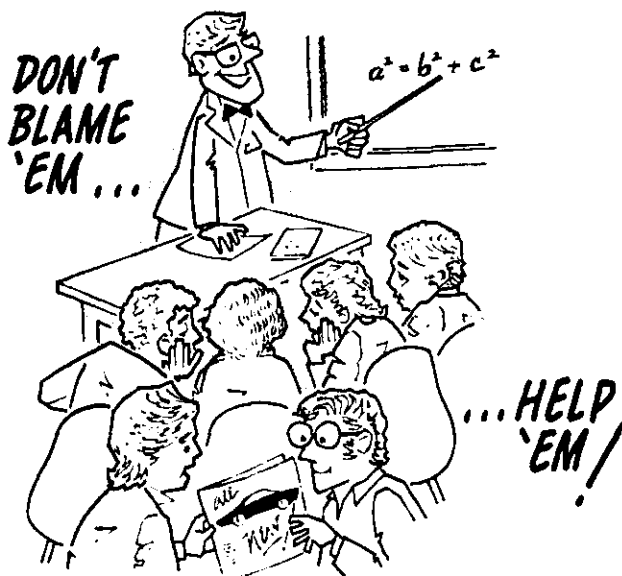
DATE: 5/11/73

# ADVISORY CIRCULAR

## DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

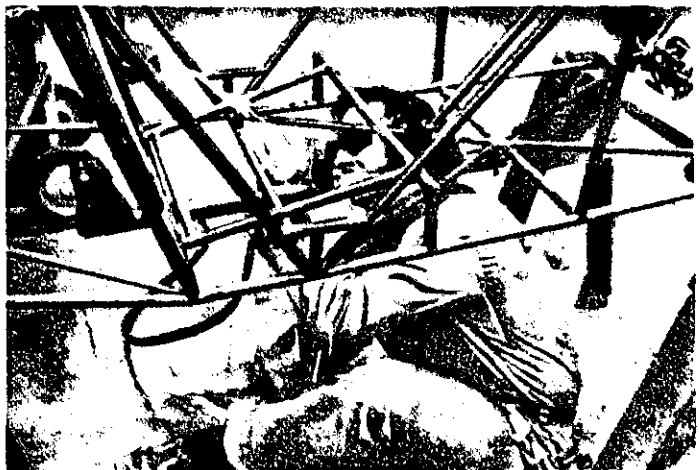
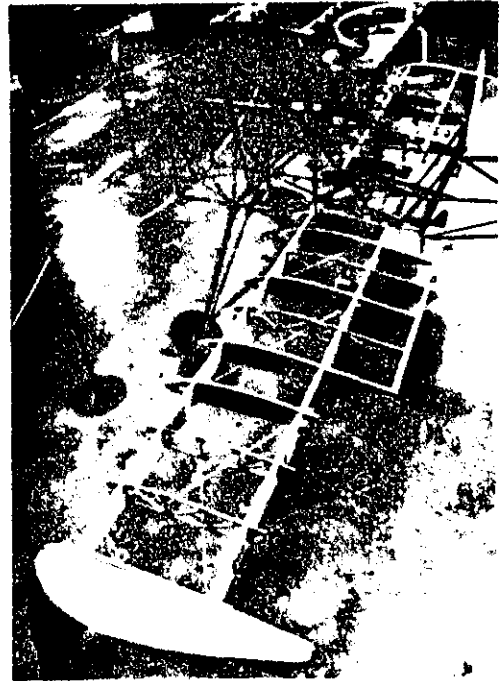
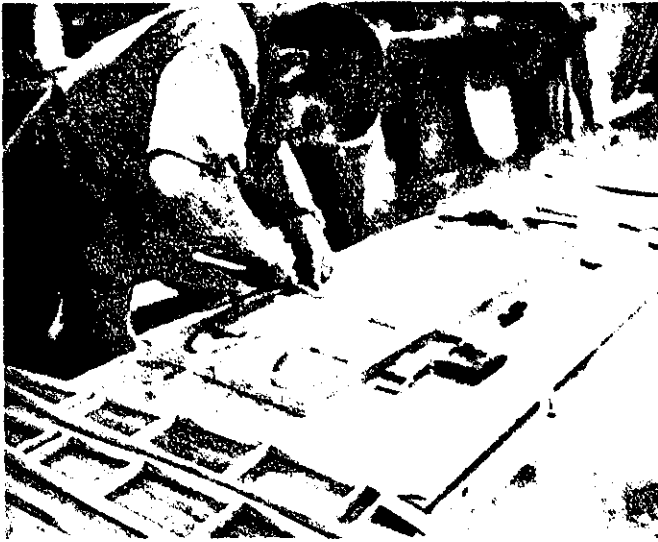
**SUBJECT:** AVIATION EDUCATION THROUGH BUILDING AN AIRPLANE

1. **PURPOSE.** The objective of this advisory circular is to provide information to high schools about the available assistance, resources, methods, and opportunities for attaining basic educational goals by building an airplane.
2. **BACKGROUND.** Many schools throughout the country have already completed their first amateur-built airplane and are now on their second. Student and teacher enthusiasm is running high. Student interest in school work has taken an upward swing, and so have grades, performance, attendance, and general attitude.



HOW COME? The answer is very simple - those schools are substituting aviation-related subject matter for previously unrelated, stodgy, dry classroom situations. Those schools are teaching science concepts connected with the aerodynamics of flight and flight surfaces by means of lectures, demonstrations, blackboard discussions, and shop projects--including the construction of an airplane.

This part of the program is usually conducted by science teachers and industrial arts teachers. Mathematics teachers become involved by introducing shop-related math; the solution of simple problems in determining

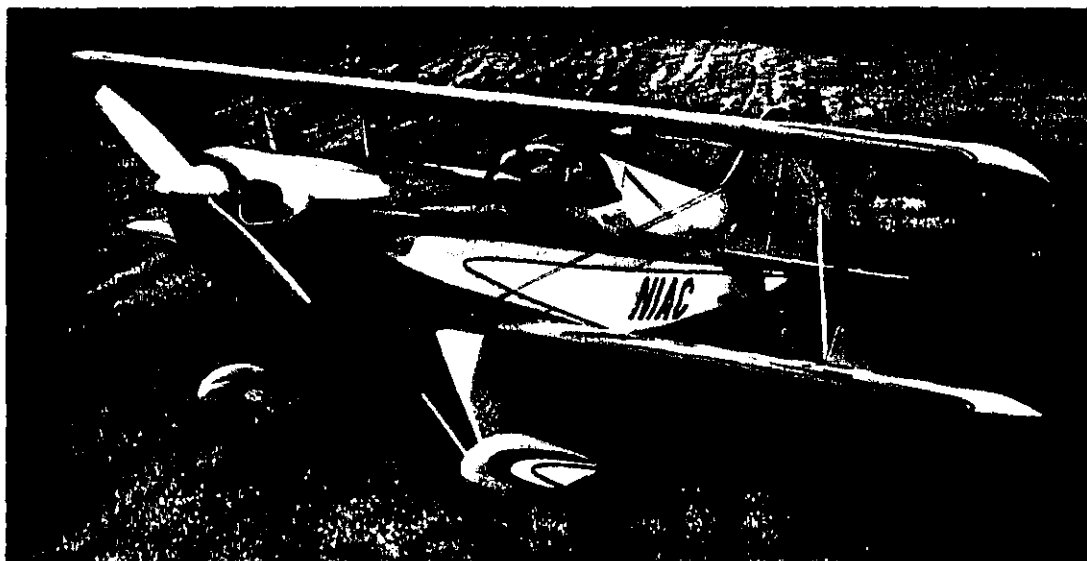


-- Photographs courtesy of Experimental Aircraft Association.

fuel and oil capacity, weight and balance, wing loading, etc. English teachers devote time to increasing the students' vocabulary by using aviation terms in oral communications and in composition assignments.

Aircraft construction projects are within the normal scope of a modern school's curriculum and provide educational program enrichment in many subject areas or disciplines. For example, many teachers use an interdisciplinary instructional approach by emphasizing the social-studies implications of aviation related topics and problems. This type of educational approach often leads logically to discussions and studies of the availability of air and other forms of transportation in proximity to the school. Another important benefit is learning about various careers in aviation and related construction fields.

3. WHAT TO BUILD. Administrators, curriculum planners or writers, teachers, or students, who are considering building an airplane as part of an on-going curriculum, should select a specific model for construction. Instead of a ready made "do-it-yourself" kit, the students should be required to utilize their knowledge of mathematics, science, shop techniques, wood-working, metal, fabrication, etc. Any high school contemplating building an airplane should contact the Experimental Aircraft Association for construction plans.



-- Photograph courtesy of Experimental Aircraft Association.

The accompanying picture illustrates one type of airplane that may be built from EAA plans and blueprints. Sufficient copies of the plans should be purchased so that as many students as possible could have a set of working plans at any time. Funds for purchase of the plans may be available from community or private sources.

4. WHERE TO FIND HELP. Any school administrator or teacher who is planning to initiate an airplane building project in a high school will find that various sources of assistance and information are available.

Assistance in the planning, fabrication, and construction of a flyable airplane is available from the FAA, many of the State aeronautics commissions, private organizations, and any of the high schools that have either started or completed building their first airplane. Additionally, assistance may be obtained from any of the FAA certificated aviation maintenance technician schools (see appendix 1 for names and addresses).

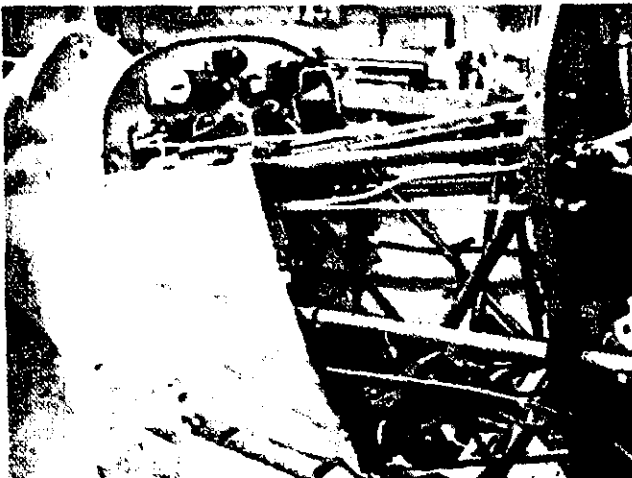
- a. Supervision and inspection of amateur-built aircraft. No person may legally fly an airplane without the prior approval of the FAA Administrator. What this means then is that all pilots and all airplanes, including amateur-built aircraft, must be certificated. Two primary offices within the FAA are delegated the authority to supervise, inspect, and enforce applicable policy and regulations pertaining to amateur aircraft builder activities:

- (1) Engineering and Manufacturing District Offices (EMDOs) - see appendix 2 for locations.
- (2) General Aviation District Offices (GADOs) - see appendix 3 for locations.

FAA inspectors, in coordination with the amateur-builders, should establish a planned program which includes an inspection schedule or other suitable arrangements for inspecting the airplane during the various stages of construction so that critical areas will not be permanently covered or closed before they have been inspected

for workmanship, condition, and safety. Amateur builders should arrange to keep suitable records of inspections, tests, and related findings of any areas or components inspected by the FAA.

Usually an EMDO inspector will approve the amateur-built airplane for its initial test flight and issue the initial airworthiness certificate.



-- Photograph courtesy of Experimental Aircraft Association.

- b. The Experimental Aircraft Association (EAA) is an international non-profit organization of amateur aircraft builders, engineers, and sport plane enthusiasts. With more than 400 chapters in the United States, and representation in more than 50 countries throughout the world, the EAA membership has devoted thousands of hours to guiding and assisting amateur builders. Anyone considering building an airplane should seek the services, guidance, and assistance of any of the EAA chapters. Inquiries may be addressed to the parent organization:

Experimental Aircraft Association  
P.O. Box 229  
Hales Corners, Wisconsin 53130

- c. Many of the States have a State aeronautics commission staffed with experienced technical advisors qualified in various aspects of aviation education including amateur aircraft construction requirements. These aeronautic commissions are usually located at the State Capitol. See appendix 4 for the addresses of the various State aeronautics departments or commissions.
- d. An organization within the educational community that secondary school administrators and teachers may turn to for assistance is the:

American Industrial Arts Association  
1201 16th Street, N.W.  
Washington, D.C. 20036

The Association will provide information on schools with aviation programs and provide advice ranging from curriculum to suggestions for developing community support for an aircraft construction project.

- e. Previous builders of amateur-built aircraft could be contacted for advice; or, perhaps, for copies of plans for aircraft they have built. One such contact is La Mar Steen, 3218 South Cherry Street, Denver, Colorado 80222. Mr. Steen put together plans so that other amateur builders may duplicate the Steen Skybolt.

A number of high schools and vocational schools that have successfully completed aircraft building projects are:

Parkside High School Jackson, Michigan	Bay View High School Milwaukee, Wisconsin	St. Rita's High School Chicago, Illinois
Manual High School Denver, Colorado	Aviation High School Long Island City, N.Y.	Dean Morgan Jr. High Casper, Wyoming

Delano Joint Union  
High School  
Delano, Colorado

Santana High School  
Santee, California

Valley City High School  
Valley City, N. Dakota

Beloit High School  
Beloit, Wisconsin

Norwich Sr. High School  
Norwich, New York

J. Mills School  
Elwood Park, Illinois

5. OTHER AIDS. A unique aviation education film, "The Wind Is Right," centers around the construction of a flyable aircraft by high school industrial arts students. The film was produced by and is available from the Aviation Distributors and Manufacturers Association, 1900 Arch Street, Philadelphia, Pennsylvania 19102.

A single copy of "The Wind Is Right" may be borrowed from the FAA by writing to: U.S. Department of Transportation, Federal Aviation Administration, Film Library, AAC 44.5, P.O. Box 25082, Oklahoma City, Oklahoma 73125.

All loans are made for a minimum period of one week unless permission is otherwise obtained. To expedite requests for the film, provide the following information:

- (1) Film Title: "The Wind Is Right"
- (2) FAA Film No.: FAC-135
- (3) Complete address where film is to be shipped.
- (4) First and alternate choice of show dates.

6. FEDERAL AVIATION REGULATIONS AND REFERENCE MATERIALS. Federal Aviation Regulations are available from:

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

We recommend the following volumes:

Volume I	Part I, Definitions and Abbreviations (\$1.50 for domestic order, \$2.00 for foreign)
Volume II	Part 21, Certification Procedures For Products And Parts; Part 45, Identification And Registration Marking; Part 47, Aircraft Registration (\$8.00 domestic, \$10.00 foreign)
Volume VI	Part 91, General Operating and Flight Rules (\$5.50 domestic, \$6.75 foreign).
Volume IX	Part 61, Certification: Pilots and Flight Instructors; Part 65, Certification: Flight Crew Members Other Than Pilots (\$6.00 domestic, \$7.50 foreign)

Following is a select list of pertinent FAA Advisory Circulars. The FAA issues advisory circulars to inform the aviation public of nonregulatory material of interest. (If a price is listed after the description of the advisory circular, it means the circular is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. If no price is listed, then the circular is distributed free of charge by the Department of Transportation, Distribution Unit, TAD 484.3, Washington, D.C. 20590. Please order advisory circulars accordingly.)

Advisory Circular 20-27B, Certification and Operation of Amateur-Built Aircraft (4-20-72). Provides information and guidance material for amateur aircraft builders.

Advisory Circular 20-28A, Nationally Advertised Aircraft Construction Kits, Amateur-Built Aircraft (12-29-72). Explains that using certain kits could render the aircraft ineligible for the issuance of an experimental certificate as an amateur-built aircraft.

Advisory Circular 43.13-1A, Acceptable Methods, Techniques, and Practices - Aircraft Inspection and Repair (1972). Contains methods, techniques, and practices acceptable to the Administrator for the inspection and repair of civil aircraft. (\$3.70)

Advisory Circular 43.13-2, Acceptable Methods, Techniques, and Practices - Aircraft Alterations (1966). Contains methods, techniques, and practices acceptable to the Administrator in altering civil aircraft. (\$2)

Advisory Circular 65-9, Airframe and Powerplant Mechanic General Handbook (1970). Provides basic information on principles, fundamentals, and technical procedures common to both airframe and powerplant mechanics. (\$6)

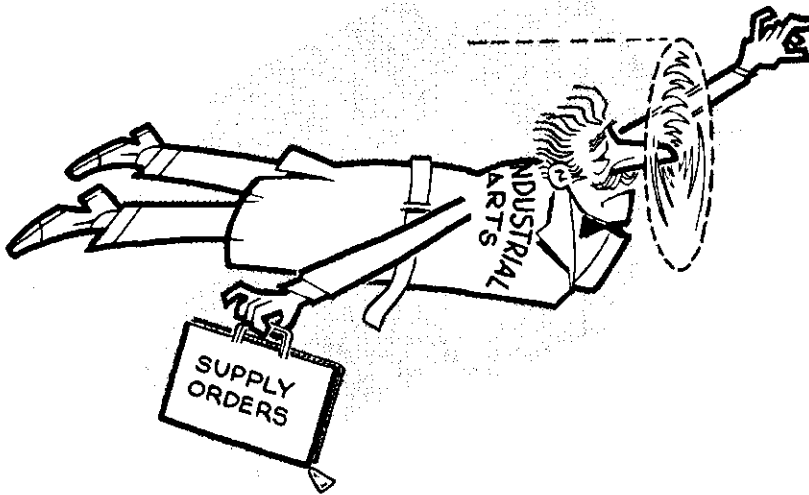
Advisory Circular 65-12, Airframe and Powerplant Mechanic Powerplant Handbook (1970). Provides basic information on the construction, theory of operation, and maintenance of aircraft powerplants. (\$3.75)

Advisory Circular 65-15, Airframe and Powerplant Mechanics Airframe Handbook (1972). Provides basic information on airframe construction features, assembly and rigging, fabric covering, painting and finishing, structural repairs, welding, and airframe systems. (\$4)

In addition to government publications there are many commercial texts available from various publishers that provide useful reference material for the amateur aircraft builders. The EAA has a "How To" series of publications designed as self-education texts for the amateur builder. This series includes such subjects as wood, sheet metal, welding, aircraft building tips, dope and fabric, and hand tools. Write to the EAA and request a complete listing of their "How To" series, including cost.

7. WHERE DO YOU BUY SUPPLIES AND EQUIPMENT? If this is your first attempt at amateur-aircraft building, a good source of information is

the FAA Engineering and Manufacturing District Office or the General Aviation District Office. Another source of information will be found in the advertising in monthly aviation magazines. And, once again, the EAA is another source for lists of supplies and suppliers. Or, any of the high schools that have built an airplane will gladly share the names and addresses of their suppliers.



8. QUESTIONS AND ANSWERS. The most frequently asked questions about amateur-built aircraft are outlined below, and their applicable answers provide some basic information for schools interested in constructing an airplane.

Ques: How long does it take to complete an amateur-built aircraft?

Ans: This varies with the size group; experience indicates that construction will extend beyond one school year.

Ques: Are there any manuals for the amateur aircraft builder that provide step-by-step basic information and guidance?

Ans: Yes. EAA "How To" manuals are one such source of information.

Ques: To be eligible as an amateur-built aircraft, in whose name should the airplane be registered--the student builders? the teacher? the school? or the person who provided the necessary funds?

Ans: The airplane should be registered in the name of the school or the teacher.



Ques: In what category will the aircraft be certificated (licensed)?

Ans: Experimental (home-built).

Ques: What is the significance of the experimental category?

Ans: The experimental category includes the amateur-built or home-built aircraft that are built for educational and recreational purposes.

Ques: When does the amateur-built aircraft have to be inspected?

Ans: The aircraft must be inspected prior to covering and prior to the test flight. However, there are some components that must be inspected before assembly because they become inaccessible when installed in the aircraft.

Ques: If any difficulties or problems arise during the construction, where can we get help?

Ans: Help and assistance is as close as your telephone. Feel free to call the FAA inspector at any time. In addition you can contact the EAA chapter in your area or communicate with EAA headquarters.

Ques: Can we build the entire airplane from a do-it-yourself kit?

Ans: There are many kits of materials that are acceptable to FAA as a basis for assembling and fabricating the major portions of an airplane. However, a kit of prefabricated parts that allows only for the "erector set" type of assembly is not acceptable. FAA Advisory Circular 20-28A speaks to this subject in more detail.

Ques: What special skills are needed to build an airplane?

Ans: Basic manipulative skills with hand tools are all that one needs in the construction of an amateur-built airplane.

Ques: What tools are required?

Ans: A good assortment of basic tools is required; saws, drills, files, mallets, wrenches, electric drill, drill press, bench grinder, band saw, belt and disc sanders, table saw, etc. A welding torch should be available.

Ques: Is a hangar necessary for the construction?

Ans: No. A high school industrial arts shop is sufficient. Final assembly of components could be done out-of-doors.

9. SUMMARY. There is no part of an airplane that cannot be fabricated with the tools normally found in a high school shop, nor a part which requires a function beyond the abilities of most high school students. An airplane building project can become a part of an industrial arts course, or a general science course. What could be more motivating, more relevant, more practical, than teaching aviation education through an application of basic skills and personal experiences?

A handwritten signature in cursive script, reading "C. R. Melugin Jr.".

C. R. MELUGIN, JR.

Acting Director, Flight Standards Service

## APPENDIX 1. AVIATION MAINTENANCE TECHNICIAN SCHOOLS

<b>ALABAMA</b>	Cavilan College 2310 San Felipe Rd. Hollister, Ca. 95023	San Francisco Int'l Arpt. Sch. San Francisco Int'l Airport San Francisco, Ca. 91328
Ala. Inst. of Aviation Tech. 1439 So. Union Ave. Ozark, Al. 36360	Glendale College 1500 No. Verdugo Rd. Glendale, Ca. 91208	College of San Mateo 1700 W. Hillsdale Blvd. San Mateo, Ca. 94402
Sch. of Aviation Technology Marion County Airport Hamilton, Al. 35570	John A. O'Connell Vocational High School and Tech. Inst. 21st & Harrison St. San Francisco, Ca. 94110	Shasta College 1605 N. Old Oregon Trail Redding, Ca. 96001
<b>ALASKA</b>	Long Beach City College Business and Technical Div. 1305 E. Pacific Coast Hwy. Long Beach, Ca. 90806	Skyline College 3300 College Drive San Mateo, Ca. 94066
Anchorage Community College, Division of University of Alaska Aviation Maintenance Technician School 2408 East 5th Avenue Anchorage, Ak. 99502	Los Angeles Trade Tech. Col. 9700 So. Sepulveda Blvd. Los Angeles, Ca. 90045	Victor Valley Community College 18422 Bear Valley Rd. Victorville, Ca. 92392
North Star Borough School of Aviation 1505 Gillam Way Fairbanks, Ak. 99701	<b>COLORADO</b>	
<b>ARIZONA</b>	Mt. San Antonio College 1100 N. Grand Ave. Walnut, Ca. 91789	Colorado Aero Tech., Inc. 10851 W. 120th Avenue Broomfield, Co. 80020
Cochise College Drawer 1 Douglas, Az. 85607	Northrop Institute of Tech. 1155 W. Arbor Vitae St. Inglewood, Ca. 90301	Emily Griffity Opportunity Sch. 8301 Montview Blvd. Denver, Co. 80020
Phoenix Union High School 512 E. Van Buren St. Phoenix, Az. 85004	Orange Coast College 2701 Fairview Rd. Costa Mesa, Ca. 92626	<b>CONNECTICUT</b>
<b>ARKANSAS</b>	Palo Alto Unified School Dist. 50 Embarcadero Rd. Palo Alto, Ca. 94301	Harvard H. Ellis Regional Vocational Tech. School Maple St., P.O. Box 149 Danielson, Ct. 06239
Southwest Tech. Institute Camden, Ar. 71070	<b>DISTRICT OF COLUMBIA</b>	
<b>CALIFORNIA</b>	Reedley College Manning and Reed Avenues P.O. Box 552 Reedley, Ca. 93654	Washington Technical Institute Washington National Airport Hangar 10 Washington, D.C. 20001
College of Alameda P.O. Box 2564, Airport Stn. Oakland, Ca. 94614	Sacramento City College 3835 Freeport Blvd. Sacramento, Ca. 95822	<b>FLORIDA</b>
Chaffey College 5885 Haven Avenue Alta Loma, Ca. 91701	San Bernardino Valley College 701 So. Mt. Vernon Ave. San Bernardino, Ca. 92410	George T. Baker Aviation Sch. 3275 NW 42nd Ave. Miami, Fl. 33142
Deuel Vocational Institute P.O. Box 400 Tracy, Ca. 95376	San Diego City College Miramar Campus 10440 Black Mountain Rd. San Diego, Ca. 92128	Bay Air Tech. School, Inc. Albert Whitted Arpt., Bgr. 1 St. Petersburg, Fl. 33701
Fresno City College 1101 University Avenue Fresno, Ca. 93704	Embry-Riddle Aero University Daytona Beach Municipal Arpt. P.O. Box 2411 Daytona Beach, Fl. 32016	

## Appendix 1

Lake City Community College  
Lake City, Fl. 32055

Lewis M. Lively Area  
Vocational & Tech. School  
500 N. Appleyard Dr.  
Tallahassee, Fl. 32304

Florida Academy of Aero.  
Tech., Inc.  
Airport Br. Post Office  
St. Petersburg, Fl. 33732

## GEORGIA

Atlanta Area Tech. School  
1560 Steward Ave., SW  
Atlanta, Ga. 30310

South Ga. Tech. & Voc. School  
P.O. Box 1088  
Americus, Ga. 31709

## HAWAII

Honolulu Community College  
AVMAT  
402 Aokea Place  
Honolulu, Ha. 96819

## IDAHO

Ricks College  
Rexburg, Id. 83440

School of Trade and Tech. Ed.  
Idaho State University  
Pocatello Municipal Airport  
Pocatello, Id. 83201

## ILLINOIS

Belleville Area College  
Bi-State Parks Airport  
1400 Upper Cahokia Rd.  
Cahokia, Il. 62206

Board of Ed.-City of Chicago  
228 N. LaSalle St.  
Chicago, Il. 60604

Lewis College Aviation  
Maintenance Department  
Route 53  
Lockport, Il. 60441

Parks College of Aero.Tech.  
of St. Louis University  
Parks Airport  
E. St. Louis, Il. 62201

Rock Valley College, Aviation  
Maintenance Technology  
6349 Falcon Rd.  
Rockford, Il. 61109

Southern Ill. Univ. Avn. Tech.  
Southern Illinois Airport  
Carbondale, Il. 62901

University of Illinois  
Institute of Aviation  
Univ. of Ill. Willard Airport  
Savoy, Il. 61874

## INDIANA

Purdue University  
Department of Aviation Tech.  
Lafayette, In. 47907

Vincennes University  
Aviation Maintenance Tech.  
1002 N. First St.  
Vincennes, In. 47591

## IOWA

Des Moines Technical School  
1800 Grand Ave.  
Des Moines, Ia. 50307

Hawkeye Institute of Tech.  
Merged Area (Education) VII  
1501 E. Orange Rd.  
P.O. Box 8015  
Waterloo, Iowa 50704

Indian Hills Community College  
Iowa Tech. Campus  
Ottumwa Industrial Airport  
Ottumwa, Ia. 52501

Iowa Western Community College  
2700 College Road  
Council Bluffs, Ia. 51501

## KANSAS

Kansas Technical Institute  
Dept. of Aeronautical Tech.  
Salina, Ka. 67401

Salina Area Voc. Tech. Sch.  
Building 658  
Salina Arpt. Indust. Center  
Salina, Ka. 67401

Wichita Area Voc. Tech. School  
301 S. Grove  
Wichita, Ka. 67211

Wilson Aero Space Trng. Ctr.  
3150 Fairfax Rd.  
Kansas City, Ks. 66115

## KENTUCKY

Somerset Vocational Annex  
Route 2, Box 521A  
Somerset, Ky. 42501

## LOUISIANA

Isaac Delgado College  
615 City Park Ave.  
New Orleans, La. 70119

Sowela Technical Institute  
501 Broad St.  
Lake Charles, La. 70601

## MAINE

Air-Tech, Incorporated  
16 Central Ave.  
Limerick, Me. 04048

## MASSACHUSETTS

E. Coast Aero-Tech. Sch., Inc.  
P.O. Box 412  
Lexington, Ma. 02173

Wentworth Institute  
550 Huntington Ave.  
Boston, Ma. 02115

## MICHIGAN

Aero Mechanics School  
10200 Erwin  
Detroit, Mi. 48234

Detroit Inst. of Aeronautics  
Willow Run Airport  
Ypsilanti, Mi. 48197

Montcalm Community College  
Sidney, Mi. 48885

Kirtland Community College  
Route 4, Box 59A  
Roscommon, Mi. 48653

Southwestern Michigan College  
Dept. of Applied Sciences  
Cherry Grove Rd.  
Dowagiac, Mi. 49047

Western Michigan University  
Transportation Tech. Dept.  
Kalamazoo, Mi. 49001

MINNESOTA	MONTANA	NORTH CAROLINA
Area Technical-Vocational Sch. Thief River Falls, Mn. 56701	Aero Division, Helena Voc.-Tech. Center 1115 Roberts Helena, Mt. 59601	Piedmont Aerospace Institute Smith Reynolds Airport Winston-Salem, N.C. 27102
Minneapolis Area Voc. Tech. Inst., Aviation Trng. Ctr. 5810 34th Ave. So. Minneapolis, Mn. 55417	NEBRASKA	Wayne Community College P.O. Drawer 1878 Goldsboro, N.C. 27530
Skyline School of Aviation Maintenance, Inc. 5944 28th Ave. So. Minneapolis, Mn. 55417	Western Nebraska Technical College Sidney, Ne. 69162	NORTH DAKOTA
Winona Area Tech. School 1250 Homer Road Winona, Mn. 55942	NEVADA	Kundert Aviation Voc. Sch. Box 5534, S.U. Station Hector Field Fargo, N.D. 58102
MISSISSIPPI	Southern Nevada Vocational Technical Center 2832 E. Flamingo Rd. Las Vegas, Nv. 89109	OHIO
Golden Triangle Voc-Tech. Ctr., Aviation Facility P.O. Box 789 Columbus, Ms. 39701	NEW JERSEY	Cincinnati Technical College 3520 Central Parkway Cincinnati, Oh. 45223
Hinds Junior College John Bell Williams Airport Raymond, Ms. 39154	Teterboro Sch. of Aero., Inc. 80 Moonachie Avenue Teterboro Airport Moonachie, N.J. 07074	Columbus Technical Institute 550 E. Spring St. Columbus, Oh. 43215
MISSOURI	NEW MEXICO	Macomber Voc.Tech. High School 1501 Monroe St. Toledo, Oh. 43624
Atlantic School, Inc. d/b/a * Aero Mechanics School, Inc. 838 Richards Road Municipal Airport Kansas City, Mo. 64116	Eastern New Mexico University P.O. Box 6761 Roswell, N.M. 88202	Montgomery County Joint Vocational School 6800 Hoke Rd. Clayton, Oh. 45315
Fort Osage Area Voc-Tech Sch. Route 2, Box 928 Independence, Mo. 64056	NEW YORK	OKLAHOMA
Hiller Air & Space Acad., Inc. 3051/53/55 SW Blvd. Kansas City, Mo. 64108	Academy of Aeronautics La Guardia Field Flushing, N.Y. 11757	Aeronautical Technology The Technical Institute Oklahoma State University Stillwater, Ok. 74074
Linn Technical College Linn, Mo. 65051	Aviation High School Queens Blvd. & 35th St. Long Island City, N.Y. 11101	O.T. Autry Area Voc.Tech. Ctr. 1201 West Willow St. Enid, Ok. 73701
Maple Woods Community College 2601 NE Barry Road Kansas City No., Mo. 64156	Burgard Vocational High School 400 Kensington Ave. Buffalo, N.Y. 14214	Oklahoma City Voc.Tech. Ctr. 4901 S. Bryant Oklahoma City, Ok. 73121
Midco Aviation School Corp. d/b/a Mid-Continent Aviation School of Aeronautics 1441 Atlantic Ave. Kansas City No., Mo. 64116	East N.Y. Voc & Tech School Fountain Ave. & Wells St. Brooklyn, N.Y. 11208	Spartan School of Aero., Inc. 8820 E. Pine St. P.O. Box 51239 Tulsa, Ok. 74151
	Riverside Sch. of Aeronautics Riverside Airport P.O. Box 444 Utica, N.Y. 13503	
	Lewis A. Wilson Technological Center Grand Boulevard & Lucon Dr. Detr Park, N.Y. 11729	

\* d/b/a = "doing business as"

## Appendix 1

<p><b>OREGON</b></p> <p>Lane Community College 4000 E. 30th Ave. Eugene, Or. 97405</p> <p>Portland Community College 12000 SW 49th Ave. Portland, Or. 97219</p> <p><b>PENNSYLVANIA</b></p> <p>Pittsburgh Institute of Aero Allegheny County Airport P.O. Box 10897 Pittsburgh, Pa. 15236</p> <p>Quaker City School of Aero. 2563-69 Grays Ferry Ave. Philadelphia, Pa. 19146</p> <p>Upper Bucks County Area Vocational Technical School Star Route Perkasie, Pa. 18944</p> <p>Williamsport Area Community College 1005 West Third St. Williamsport, Pa. 17701</p> <p><b>SOUTH CAROLINA</b></p> <p>Florence-Darlington Technical Education Center P.O. Box 384 Florence, S.C. 29501</p> <p><b>SOUTH DAKOTA</b></p> <p>Lake Area Voc. Tech. School Aviation Mechanics Dept. Watertown, S.D. 57201</p> <p><b>TENNESSEE</b></p> <p>Memphis Area Voc Tech. Sch. Aviation Division 2752 Winchester Rd. Memphis, Tn. 38116</p> <p>Moody Aviation, d/b/a Moody Bible Institute of Chicago Box 429 Elizabethton, Tn. 37643</p>	<p><b>TEXAS</b></p> <p>Aero Technical Institute Municipal Airport P.O. Box 1916 Wichita Falls, Tx. 73607</p> <p>Hallmark Aero-Tech. 4234 Roosevelt Ave. San Antonio, Tx. 78214</p> <p>LeTourneau College, Dept. of Aero. Tech. 2300 S. Mobberly Ave. Longview, Tx. 75601</p> <p>Tarrant Co. Jr. College Dist. P.O. Box 4526, Stockyards Stn. Fort Worth, Tx. 76119</p> <p>Texas State Technical Institute Aviation Maintenance Dept. James Connally Campus Waco, Tx. 76705</p> <p>Texas State Technical Institute Mid-Continent Campus P.O. Box 4228 Amarillo, Tx. 79105</p> <p><b>UTAH</b></p> <p>Dixie College St. George, Ut. 84770</p> <p>Utah State University of Agriculture &amp; Applied Sciences College Hill, Aero. Dept. Logan, Ut. 84321</p> <p><b>WASHINGTON</b></p> <p>Big Bend Community College Bldg. 4103, North Campus Grant County Airport Moses Lake, Wa. 98837</p> <p>Clover Park Voc. Tech. School 4500 Steilacoom Blvd., SW Lakewood Center, Wa. 98499</p> <p>Everett Community College Bldg. 512, Paine Field Everett, Wa. 98201</p> <p>Seattle Community College Aircraft Branch 6770 E. Marginal Way So. Seattle, Wa. 98108</p> <p>Spokane Community College E. 3403 Mission Ave. Spokane, Wa. 99202</p>	<p><b>WISCONSIN</b></p> <p>Blackhawk Technical Center 228 Center Avenue Janesville, Wi. 53545</p> <p>Gateway Technical Institute 3520 30th Avenue Kenosha, Wi. 53140</p> <p>Milwaukee Area Tech. College 1015 North Sixth St. Milwaukee, Wi. 53203</p> <p><b>WYOMING</b></p> <p>Cannon Aeronautical School P.O. Box 2553 Cheyenne, Wy. 82001</p>
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APPENDIX 2. ENGINEERING AND MANUFACTURING DISTRICT OFFICESAlabama

P.O. Box 5196  
Fulton Road Station  
Mobile, Alabama 36615

California

5885 West Imperial Hwy.  
P.O. Box 45018  
Los Angeles, California 90045

2815 East Spring Street  
Long Beach, California 90806

7200 N. Vineland Avenue  
Sun Valley, California 91352

Colorado

Park Hill Station  
P.O. Box 7213  
Denver, Colorado 80207

Connecticut

1209 John Finch Blvd., Rte. 5  
South Windsor, Connecticut 06074

Florida

P.O. Box 2014  
Miami, Florida 33159

P.O. Box 578  
Vero Beach, Florida 32960

Georgia

1568 Willingham Drive  
Suite "C", Room 207  
College Park, Georgia 30337

Box 13457  
Oglethorpe Branch  
Savannah, Georgia 31406

Illinois

2300 East Devon Avenue  
Des Plaines, Illinois 60018

Indiana

FAA Building #1  
Municipal Airport  
Indianapolis, Indiana 46241

Kansas

Flight Standards Building  
Municipal Airport  
Wichita, Kansas 67209

Administration Building  
Fairfax Airport  
Kansas City, Kansas 66115

Michigan

Westgate Medical Tower  
750 West Sherman Boulevard  
Muskegon, Michigan 49441

New Jersey

510 Industrial Avenue  
Teterboro, New Jersey 07608

New York

Melville Park Building  
435 Broad Hollow Road  
Melville, New York 11746

Ohio

5241 Wilson Mills Road  
Suite 27  
Richmond Heights, Ohio 44143

Room 214, Terminal Building  
Dayton Municipal Airport  
Valdalia, Ohio 45377

Oklahoma

Room 112, General Aviation Terminal  
Tulsa International Airport  
Tulsa, Oklahoma 74115

Pennsylvania

Federal Building, Box 640  
228 Walnut Street  
Harrisburg, Pennsylvania 17108

Texas

Room 219, Terminal Building  
P.O. Box 2531  
Greater Southwest Airport Station  
Fort Worth, Texas 76125

Room 203, Executive Aircraft Terminal  
1115 Paul Wilkens Road  
International Airport  
San Antonio, Texas 78216

Washington

Room 210 (2nd Floor)  
Terminal Building  
Boeing Field International  
Seattle, Washington 98108

APPENDIX 3. GENERAL AVIATION DISTRICT OFFICES & FLIGHT  
STANDARDS DISTRICT OFFICES

GENERAL AVIATION DISTRICT OFFICES

Alabama

Municipal Airport  
6500 43rd Ave., North  
Birmingham, Al. 35206

Alaska

13th and Orca Sts.,  
Anchorage, Ak. 99501

Arkansas

Terminal Annex Building  
Adams Field  
Little Rock, Ar. 72202

California

FAA Bldg., Suite 1-B  
Fresno Air Terminal  
Fresno, Ca. 93727

Suite 3, Municipal Airport  
3200 Airport Ave.  
Santa Monica, Ca. 90405

Administration Building Annex  
International Airport  
Ontario, Ca. 91761

Sacramento Municipal Airport  
Sacramento, Ca. 95822

1387 Airport Boulevard  
San Jose, Ca. 95110

Colorado

FAA Building  
Jefferson County Airport  
Broomfield, Co. 80020

Florida

P.O. Box 38665  
Jacksonville, Fl. 32202

Building 121, Opa Locka Arpt.  
P.O. Box 365  
Opa Locka, Fl. 33054

St. Petersburg-Clearwater Arpt.  
St. Petersburg, Fl. 33732

Georgia

FAA Bldg., Rm. 200  
Fulton County Airport  
3999 Gordon Rd., SW.  
Atlanta, Ga. 30336

Idaho

3113 Airport Way  
Boise, Id. 83705

Illinois

DuPage County Airport  
P.O. Box H  
West Chicago, Il. 60185

Rm. 201, Facilities Building  
Capital Airport  
Springfield, Il. 67205

Indiana

St. Joseph County Airport  
South Bend, In. 46628

Iowa

Municipal Airport  
204 Administration Bldg.  
Des Moines, Io. 50321

Kansas

2nd Floor, Administration Bldg.  
Fairfax Airport  
Kansas City, Ks. 66115

Flight Standards Building  
Municipal Airport  
Wichita, Ks. 67209

Kentucky

Administration Building  
Bowman Field  
Louisville, Ky. 40205

Louisiana

Rm. 227, Admin Bldg. <sup>1/</sup>  
New Orleans Lakefront Airport  
New Orleans, La. 70126

Rm. 202, Terminal Bldg.  
Downtown Airport  
Shreveport, La. 71107

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<sup>1/</sup>Satellite office: Lafayette Airport, Lafayette, La. 70501



## Appendix 3

General Aviation District Offices (cont'd)Maine

1001 Westbrook St.  
Portland, Me. 14102

Maryland

Friendship International Arpt.  
Baltimore, Md. 21240

Massachusetts

Municipal Airport  
Norwood, Ma. 02062

1st Floor Terminal Building  
Barnes-Westfield Municipal Arpt.  
P.O. Box 544  
Westfield, Ma. 01085

Michigan

Kent County Airport  
5500 44th St., SE  
Grand Rapids, Mi. 49508

Minnesota

Wold-Chamberlain Airport  
6301 34th Ave., So.  
Minneapolis, Mn. 55450

Mississippi

P.O. Box 5855, Pearl Station  
Jackson, Ms. 39208

Montana

Rm. 216, Admin. Bldg.  
Billings-Logan Field  
Billings, Mt. 59101

Rm. 3, FAA Building  
Helena Airport  
P.O. Box 1167  
Helena, Mt. 59601

Nebraska

General Aviation Building  
Lincoln Municipal Airport  
Lincoln, Ne. 68524

Nevada

2601 East Plumb Lane  
Reno, Nv. 89502

5100-C South Haven  
Las Vegas, Nv. 89119

New Jersey

Teterboro Air Terminal  
510 Industrial Avenue  
Teterboro, N.J. 07608

New Mexico

Albuquerque Museum Building  
P.O. Box 9045, Sunport Station  
Albuquerque, N.M. 87119

New York

Albany County Airport  
Albany, N.Y. 12211

Building 53, Republic Airport  
Farmingdale, N.Y. 11735

Hangar 3, Rochester-Monroe Co. Arpt.  
Rochester, N.Y. 14624

North Carolina

FAA Bldg., Municipal Airport  
Charlotte, N.C. 28208

Rm. 204, Admin. Building  
Raleigh-Durham Arpt.  
P.O. Box 1858  
Raleigh, N.C. 27602

North Dakota

Rm. 216, Admin. Building  
Hector Field, P.O. Box 2128  
Fargo, N.D. 58102

Ohio

Hangar 5, Lunken Airport  
Cincinnati, Oh. 45226

Rm. 215, New Terminal Building  
Port Columbus Airport  
4393 E. 17th Ave.  
Columbus, Oh. 43219

Oklahoma

FAA Bldg., Wiley Post Arpt.  
Bethany, Ok. 73008

General Aviation Terminal  
Rm. 110, Tulsa Int'l Airport  
Tulsa, Ok. 74115

General Aviation District Offices (cont'd)Oregon

3410 NE Marine Drive  
Portland, Or. 97218

Route 1, Box 717  
Eugene, Or. 97402

Pennsylvania

Allentown-Bethlehem-Easton Arpt.  
Allentown, Pa. 18103

Rm. 201, Admin. Bldg.  
Capital City Airport  
New Cumberland, Pa. 17070

Allegheny County Airport  
West Mifflin, Pa. 15122

Administration Building  
North Philadelphia Airport  
Philadelphia, Pa. 19114

South Carolina

Metropolitan Airport, Box 200  
West Columbia, S.C. 29169

South Dakota

Municipal Airport, RFD 2, Box 633B  
Rapid City, S.D. 57701

Tennessee

2488 Winchester  
P.O. Box 30050  
Memphis, Tn. 38130

303 Doyle Terminal  
Metropolitan Airport  
Nashville, Tn. 37217

Texas

Redbird Airport  
Dallas, Tx. 75332

Rm. 202, FAA Building  
6795 Convair Rd.  
El Paso, Tx. 79925

Rm. 201, Admin. Bldg.  
Meacham Field  
Fort Worth, Tx. 76106

P.O. Box 1942  
Executive Air Terminal 2/  
Lubbock, Tx. 79417

8345 Telephone Road  
Houston, Tx. 77017

1115 Paul Wilkins Rd., Rm. 201 3/  
San Antonio, Tx. 78216

Utah

116 North 23rd West, Rm. 100  
Salt Lake City, Ut. 84116

Virginia

Byrd Field  
Sandston, Va. 23150

Washington

Rm. 104, FAA Building  
Boeing Field  
Seattle, Wa. 98108

5629 E. Rutter Ave.  
Spokane, Wa. 99206

West Virginia

Kanawha County Airport  
Charleston, W.V. 25311

Wisconsin

General Mitchell Field  
Milwaukee, Wi. 53207

Wyoming

1187 Fuller St., Casper Air Terminal  
Casper, Wy. 82601

2/ Satellite Office: Rm. 213, Term. Bldg., Midland-Odessa Reg. Air Term.,  
Midland, Tx. 79701

3/ Satellite Office: Rte. 2, Box 903, Bledsoe Hangar 3, Corpus Christi, Tx. 78408

## Appendix 3

## FLIGHT STANDARDS DISTRICT OFFICES

Alaska

5640 Airport Way  
Fairbanks, Ak. 99701

R.R. 5, Box 5115  
Juneau, Ak. 99801

Arizona

2800 Sky Harbor Blvd.  
Sky Harbor Airport, Rm. 112  
Phoenix, Az. 85034

California

Municipal Airport  
2815 E. Spring St.  
Long Beach, Ca. 90806

Box 2397, Oakland Int'l Airport  
Oakland, Ca. 94614

3750 John J. Montgomery Dr.  
San Diego, Ca. 93123

7120 Havenhurst Ave.  
Van Nuys, Ca. 91406

District of Columbia

West Building  
Washington National Airport  
Washington, D.C. 20001

Hawaii

Air Service Corp. Building  
218 Lagoon Drive  
Honolulu Int'l Airport  
Honolulu, Ha. 96820

Indiana

FAA Bldg. 1, Mun. Arpt.  
P.O. Box 41525  
Indianapolis, In. 46241

Michigan

Flight Standards Building  
Willow Run Airport  
Ypsilanti, Mi. 48197

Missouri

North Terminal Building  
Municipal Airport  
Kansas City, Mo. 64116

Ohio

Cleveland-Hopkins Int'l Airport  
Cleveland, Oh. 44135

Puerto Rico

RFD 1, Box 29A  
Loiza Station  
San Juan, P.R. 00914

## APPENDIX 4. STATE AERONAUTICS DEPARTMENTS AND COMMISSIONS

Alabama Department of Aeronautics  
State Highway Bldg. - 11 S. Union St.  
Montgomery, Alabama 36104  
Phone: (205) 269-6494

Idaho Department of Aeronautics  
3103 Airport Way  
Boise, Idaho 83705  
Phone: (208) 384-3183

Division of Aviation  
Department of Public Works  
4510 International Airport Rd.  
Anchorage, Alaska 99502  
Phone: (907) 274-1544

Illinois Department of Aeronautics  
Capital Airport - Box 218  
Springfield, Illinois 63705  
Phone: (217) 525-2888

Arizona Department of Aeronautics  
3000 Sky Harbor Boulevard  
Phoenix, Arizona 85034  
Phone: (602) 275-7531

Aeronautics Commission of Indiana  
100 North Senate Avenue  
Indianapolis, Indiana 46204  
Phone: (317) 633-6545

Arkansas Division of Aeronautics  
Suite 514 - 1515 W. 7th St.  
Little Rock, Arkansas 72201  
Phone: (501) 371-1471

Iowa Aeronautics Commission  
State House  
Des Moines, Iowa 50319  
Phone: (515) 285-1551

California Department of Aeronautics  
Sacramento Executive Airport  
Sacramento, California 95822  
Phone: (916) 445-2582

Aviation Division, Dept. of Economic  
Development  
State Office Building  
Topeka, Kansas 66612  
Phone: (913) 296-3481

Deputy Transportation Commissioner  
Bureau of Aeronautics - DOT  
24 Wolcott Hill Rd. - P.O. Drawer A  
Wethersfield, Connecticut 06109  
Phone: (203) 566-4594

Kentucky Department of Aeronautics  
Sixth Floor - Capital Plaza  
Frankfort, Kentucky 40601  
Phone: (502) 564-4480

Division of Transportation  
Dept. of Highways & Transportation  
P.O. Box 778  
Dover, Delaware 19901  
Phone: (302) 678-4307

State Aviation Division  
Department of Public Works  
P.O. Box 44155 - Capitol Station  
Baton Rouge, Louisiana 70804  
Phone: (504) 389-5549

Bureau of Aviation  
Division of Mass Transit Operations  
Department of Transportation  
Tallahassee, Florida 32304  
Phone: (904) 488-3251

Maine Department of Transportation  
State Office Building  
Augusta, Maine 04330  
Phone: (207) 289-3185

Office of Aviation Development  
Georgia Dept. of Transportation  
No. 2 Capitol Square, SW.  
Atlanta, Georgia 30334  
Phone: (404) 656-5712

State Aviation Administration  
Department of Transportation  
P.O. Box 8755  
Friendship Int'l Airport, Maryland 21240  
Phone: (301) 768-9520

Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: (808) 548-3205

Massachusetts Aeronautics Commission  
Boston-Logan Airport  
East Boston, Massachusetts 02128  
Phone: (617) 727-5353

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State Aeronautics Departments and Commissions (cont'd)

Michigan Aeronautics Commission  
Capital City Airport  
Lansing, Michigan 48906  
Phone: (517) 489-2421

Office of Aeronautics  
Department of Transportation  
Raleigh, North Carolina 27602  
Phone: (919) 829-4889

Department of Aeronautics  
Administration Building  
Downtown Airport  
St. Paul, Minnesota 55107  
Phone: (612) 222-4741

North Dakota Aeronautics Commission  
Box U - Bismarck Airport  
Bismarck, North Dakota 58501  
Phone: (701) 224-2748

Mississippi Aeronautics Commission  
P.O. Box 5  
Jackson, Mississippi 39205  
Phone: (601) 354-7494/354-7495

Ohio Division of Aviation  
2829 W. Granville Rd.  
Worthington, Ohio 43085  
Phone: (614) 889-2533

Aviation Section, Division of  
Commerce & Industrial Development  
8th Floor - Jefferson Building  
Jefferson City, Missouri 65101  
Phone: (314) 751-3674

Oklahoma Aeronautics Commission  
424 United Founders Tower Bldg.  
Oklahoma City, Oklahoma 73112  
Phone: (405) 521-2377

Division of Aeronautics  
Dept. of Intergovernmental Relations  
Capitol Post Office  
Helena, Montana 59601  
Phone: (406) 449-2506

Oregon State Board of Aeronautics  
3040 - 25th St., SE.  
Salem, Oregon 97310  
Phone: (503) 378-4880

Nebraska Department of Aeronautics  
P.O. Box 82088  
Lincoln, Nebraska 68501  
Phone: (402) 471-2371

Bureau of Aviation  
Department of Transportation  
Capital City Airport  
New Cumberland, Pennsylvania 17070  
Phone: (717) 787-8754

New Hampshire Aeronautics Commission  
Municipal Airport  
Concord, New Hampshire 03301  
Phone: (603) 271-2551

Puerto Rico Ports Authority  
G.P.O. Box 2829  
San Juan, Puerto Rico 00936  
Phone: (809) 723-2260

Division of Aeronautics  
Department of Transportation  
1035 Parkway Avenue  
Trenton, New Jersey 08625  
Phone: (609) 292-3020

Assistant Director of Transportation  
Division of Airports  
Department of Transportation  
Theodore Francis Green State Airport  
Warwick, Rhode Island 02886  
Phone: (401) 737-5000

New Mexico Aviation Department  
P.O. Box 579  
Santa Fe, New Mexico 87501  
Phone: (505) 827-2861

South Carolina Aeronautics Commission  
Columbia Metropolitan Airport, Box 88  
West Columbia, South Carolina 29169  
Phone: (803) 758-2766

Aviation Section  
Department of Transportation  
1220 Washington Avenue  
Albany, New York 12226  
Phone: (518) 457-2820

South Dakota Aeronautics Commission  
State Office Building #1  
Pierre, South Dakota 57501  
Phone: (605) 224-3575

State Aeronautics Departments and Commissions (cont'd)

Development and Operations  
Bureau of Aeronautics  
Department of Transportation  
P.O. Box 17326, Glenview Station  
Nashville, Tennessee 37217  
Phone: (615) 741-3208

Texas Aeronautics Commission  
111 East 17th Street  
Austin, Texas 78711  
Phone: (512) 475-4768

Utah Division of Aeronautics  
135 North 23rd West  
Salt Lake City, Utah 84116  
Phone: (801) 328-2066

Vermont Board of Aeronautics  
State Administrative Building  
Montpelier, Vermont 05602  
Phone: (802) 828-2442

Division of Aeronautics  
State Corporation Commission  
4508 So. Laburnum Ave., P.O. Box 7716  
Richmond, Virginia 23231  
Phone: (703) 770-3685

Washington State Aeronautics Commission  
8600 Perimeter Road - Boeing Field  
Seattle, Washington 98108  
Phone: (206) 764-4131

West Virginia Aeronautics Commission  
Kanawha Airport  
Charleston, West Virginia 25311  
Phone: (304) 348-2689

Division of Aeronautics  
Department of Transportation  
951 Hill Farms State Office Building  
Madison, Wisconsin 53702  
Phone: (608) 266-3351

Wyoming Aeronautics Commission  
200 East 8th Avenue  
Cheyenne, Wyoming 82001  
Phone: (307) 777-7481

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
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