

Air Traffic Rules



Second Edition

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U. S. DEPARTMENT OF COMMERCE

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CIVIL AERONAUTICS ADMINISTRATION

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Introductory Note

Civil Aeronautics Manual 60 contains the rules, policies, and interpretations issued by the Administrator of Civil Aeronautics in application to the various sections of Civil Air Regulations Part 60, Air Traffic Rules.

CAA *rules* are supplementary regulations issued pursuant to authority expressly conferred on the Administrator in the Civil Air Regulations. Such rules are mandatory and must be complied with.

CAA *policies* provide detailed technical information on recommended methods of complying with the Civil Air Regulations. Such policies are for the guidance of the public and are not mandatory in nature.

CAA *interpretations* define or explain words and phrases of the Civil Air Regulations. Such interpretations are for the guidance of the public and will be followed by the Administration in determining compliance with the regulations.

The table of contents is arranged to show the title and number of each section of the regulations. Any rules, policies, or interpretations follow the pertinent section of the regulations and are identified by consecutive dash numbers appended to the regulation section number. The text contains only the rules, policies, and interpretations which have been issued.

This manual contains all material published as Civil Aeronautics Manual 60 dated April 15, 1956, Supplement 1 to CAM 60 dated September 1, 1955, and Supplement 1 to Volume I dated August 15, 1956. In those cases where this manual material may be contradictory to portions of information contained in other prior publications, the manual shall govern.

This manual shall become effective April 15, 1955, unless otherwise indicated and will be revised from time to time in accordance with the changes in Air Traffic Rules or as the need for additional explanations are brought to the attention of the Administrator.

Civil Aeronautics Manual 60

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Air Traffic Rules

General

60.1-1 *Conditions for issuance of a certificate of waiver (FAA policies which apply to sec. 60.1 (b)).*

(a) *General.* A Certificate of Waiver or Authorization, Form FAA-663, will be issued to authorize noncompliance with any section of this part for a special flight operation when the operation can be conducted under the terms and conditions of a certificate which will provide a reasonable degree of safety to other air traffic and to persons and property on the ground. Deviations from the following sections of this part for special flight operations are considered routine and generally require the approval of only the local Bureau of Flight Standards Inspector:

- (1) Section 60.16 *Acrobatic flight.*
- (2) Section 60.17 *Minimum safe altitudes.*
- (3) Section 60.18 *Operation on and in the vicinity of an airport.*
- (4) Section 60.23 *Aircraft lights.*

Deviations from other sections of this part are normally not considered routine and may require consideration and approval of authority higher than the local Bureau of Flight Standards Inspector. The application for deviations should be submitted sufficiently in advance of the contemplated operation to allow time for the approval procedure to be completed. Normally, 10 days is sufficient advance time to complete the approval procedure for issuance of a certificate of waiver, but requests for deviation from sections not listed above may require a longer period of time.

(b) *Application for waiver.* An applicant for a Certificate of Waiver or Authorization for any special flight operation should comply with the following Procedure:

(1) Obtain three copies of an Application for Certificate of Waiver, Form FAA-400 (see

pages 51 and 52) from the local Bureau of Flight Standards District Office.¹

(2) Fill out copies of the application, as follows:

- (i) Type or print in ink.
- (ii) Give complete information on all applicable items 1 through 13.
- (iii) In item 1, fill in complete name and name of company, if operations has a company name, e. g., John B. Jones d/b/a Jones Dusting Service.
- (iv) List, under item 3, all sections of this Part for which a waiver is requested.
- (v) Sign all copies of the completed application on the reverse side in the space provided for the applicant's signature.

(3) Submit all copies of the application to the local Bureau of Flight Standards Inspector.

(4) Arrange with the local Bureau of Flight Standards Inspector for inspection of aircraft, aircraft records, personnel, etc., as appropriate for the operation involved.

(c) *Authorization.* The certificate will authorize noncompliance with only those sections of the Air Traffic Rules listed on the certificate. It will not relieve the holder from compliance with any State, or local law or ordinance which may apply to the operation, or from obtaining prior permission from owners over whose property the operation may be conducted.

(d) *Duration.* The certificate will contain an expiration date to allow ample time for completion of the operation, not to exceed 1 year. It may be surrendered by the holder or cancelled by the Administrator at any time for noncompliance with provisions of the Certificate of Waiver or Authorization, for operation in a careless or reckless manner, or at any time a need no longer exists for the certificate.

(e) *Special provisions.* The certificate will contain such special provisions or conditions as

¹ See Appendix A.

the approving inspector may deem necessary in the interest of safety or appropriate to good operating practices.

In addition, specific instructions or precautions will be required where they are deemed necessary to insure safety during the use of special equipment, or are necessary for the particular areas or types of operation involved.

(f) *Operation outside the United States.* A Certificate of Waiver or Authorization is valid only within the continental limits of the United States, its Territories and possessions. It is the responsibility of the holder to obtain prior clearance from the foreign country for operation within that country.

(Published in 20 F. R. 2513, Apr. 16, 1955, effective Apr. 15, 1955.)

60.1-2 *Certificate of waiver or authorization for aerial application and industrial operations (FAA policies which apply to sec. 60.1 (b)).* Operators or individuals engaging in agricultural (aerial application operations) or in industrial operations² may obtain a certificate of waiver or authorization, when such operations involve noncompliance with provisions of this part. However, private pilots will be issued such certificate of waiver or authorization only if the operation is to be conducted over his own property, when such property is located in a noncongested area, and subject to the conditions listed in section 60.1-2 (a). Application for a certificate of waiver or authorization should be made in accordance with section 60.1-1 (b).

(a) *Aerial application and industrial operations over other than congested areas.*

(1) *Conditions of waiver.* A certificate of waiver or authorization issued to operators or individuals to permit aerial application and industrial operations in a noncongested area will contain the following conditions:

(i) *Right-of-way rules.* Operations shall be conducted in accordance with the right-of-way rules of Part 60, except that any operation conducted under a waiver authorizing a deviation from the traffic pattern for an airport shall remain clear of, and shall give way to, other aircraft in the pattern.

² When practicable, aircraft should be plainly marked "survey," "patrol," etc., appropriate to the operation conducted. See appendix B for list of various types of operations.

(ii) *Operations on and in the vicinity of an airport.* Notwithstanding the waiver of section 60.18, when operating on or near an airport within a control zone, the operator of the aircraft shall give prior notice of the proposed operations to Air Traffic Control; operations on or near a military airport shall be coordinated with the appropriate military authority; and, when operating on or near other airports, prior written permission shall be obtained from the authorized official of the airport for any deviation from the traffic pattern for the airport.

(iii) *Pilot qualifications.* Each pilot-in-command shall hold at least a commercial pilot certificate with the appropriate category and class rating, except that a private pilot may be issued a waiver if the operation will be conducted over his own property and he meets the flight experience and skill requirements of a commercial pilot.

(iv) *Record of pilots and aircraft used.* The holder of this waiver shall establish and maintain at the home base a current list of pilots and aircraft authorized under the terms of this certificate of waiver.

(2) *Operations before sunrise and after sunset.* When early morning and late evening aerial application operations are to be conducted without navigation lights, the following special provisions will apply:

(i) Prominent unlighted objects must be visible for a distance of 3 miles.

(ii) All flights are to be restricted to local areas where the dusting or spraying is to be performed.

(iii) Landings and takeoffs being made at uncontrolled airports must have the prior consent of the airport manager.

(iv) Takeoffs and landings shall not be conducted when other types of operations which require position lights are in progress.

(v) Clearance from Air Traffic Control must be obtained before taking off and landing at controlled airports.

(vi) No other aerial applicator aircraft is to be operated in the immediate area.

(b) *Aerial application operations over congested areas.* A certificate of waiver or authorization issued to operators to permit aerial application over congested areas will contain the

FEDERAL AVIATION AGENCY APPLICATION FOR CERTIFICATE OF WAIVER		FORM APPROVED BUDGET BUREAU NO. 04-R073 APPLICANTS—DO NOT USE THESE SPACES	
To: FEDERAL AVIATION AGENCY.		REGION NO. _____	DATE _____
INSTRUCTIONS Submit this application in triplicate (3) to your local FAA General Aviation District Office. Applicants requesting a Certificate of Waiver for an air meet will complete all items and certification on this form and will attach a properly marked map or diagram of the operations area. This map or diagram must be to scale, and distances must be shown. It must include race courses, obstructions, grandstands; congested areas, parking areas, dead lines, police stations; ambulance, fire-truck, crash-wagon, and control stations. Applicants requesting a Certificate of Waiver, for activities other than an air meet, will complete items 1 through 7 only and the certification on the reverse.		ACTION <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED (Explain under "Remarks") SIGNATURE OF AUTHORIZED FAA REPRESENTATIVE _____	
1. NAME (FIRST, MIDDLE, AND LAST)			
2. PERMANENT MAILING ADDRESS	HOUSE NUMBER AND STREET, OR ROUTE NUMBER	POST OFFICE	STATE TELEPHONE
3. TO AUTHORIZE NONOBSERVANCE OF CIVIL AIR REGULATIONS, SECTION (INDICATE SECTIONS WHICH PROHIBIT PROPOSED OPERATION)			
4. IN PERFORMANCE OF (DESCRIBE PROPOSED OPERATION AND PURPOSE THEREOF IN DETAIL)			
(IF NECESSARY, ATTACH SUPPLEMENT TO CONTINUE)			
5. AREA OF OPERATION			
6. FOR THE PERIOD OF—		BEGINNING (Date)	ENDING (Date)
HOURS	DAYS	WEEKS	MONTHS
7. AIRCRAFT MAKE AND MODEL		IDENTIFICATION MARK	OWNER
ADDRESS (STREET, CITY, STATE)			
WHILE BEING FLOWN BY THE FOLLOWING PILOTS:			
NAME	ADDRESS (STREET, CITY, STATE)	CERTIFICATE NUMBER AND RATING	

Form FAA-400 (1-48)

Sample Form FAA-400, Application for Certificate of Waiver.

8. THE AIR MEET WILL BE SPONSORED BY—			
9. PERMANENT MAILING ADDRESS	HOUSE NUMBER AND STREET OR ROUTE NUMBER	POST OFFICE	CITY
10. POLICING (WHAT PROVISION WILL BE MADE FOR POLICING THE MEET?)			
11. EMERGENCY FACILITIES			
<input type="checkbox"/> PHYSICIAN <input type="checkbox"/> AMBULANCE <input type="checkbox"/> FIRE TRUCK <input type="checkbox"/> CRASH WAGON <input type="checkbox"/> OTHER (Specify) _____			
12. AIR TRAFFIC CONTROL (DESCRIBE METHOD OF CONTROLLING TRAFFIC, INCLUDING PROVISION FOR ARRIVAL AND DEPARTURE OF SCHEDULED AIRCRAFT)			
13. SCHEDULE OF EVENTS (INCLUDE ARRIVAL AND DEPARTURE OF SCHEDULED AIRCRAFT AND OTHER OPEN PORT PERIODS; UNFORESEEN CHANGES AND REVISIONS TO BE SUBJECT TO APPROVAL OF LOCAL INSPECTOR)			
HOUR	DATE	EVENT	PILOT RATING
<i>(If sufficient space is not available, the entire schedule of events may be submitted on separate sheets, in the order and manner indicated above.)</i>			
The undersigned applicant accepts full responsibility for the strict observance of the terms of the Certificate of Waiver, and understands that the authorization contained in such certificate will be strictly limited to the above-described operations.			
I CERTIFY that the foregoing statements are true.			
_____ (DATE)		_____ (SIGNATURE OF APPLICANT)	
REMARKS:			

Form FAA-400 (1-48)

Sample Form FAA-400, Application for Certificate of Waiver (reverse).

following conditions, appropriate to the particular operations:

(1) *Aircraft airworthiness.* No aircraft shall be operated except in accordance with the operating limitations prescribed for the aircraft. Certificated aircraft whose operating limitations state that the aircraft is not eligible for a waiver under section 8.31 cannot be used.

(2) *Right-of-way rules.* Operations shall be conducted in accordance with the right-of-way rules of Part 60, except that any operation conducted under a waiver authorizing a deviation from the traffic pattern for an airport shall remain clear of, and give way to, other aircraft in the pattern.

(3) *Operations on and in the vicinity of an airport.*

(i) Notwithstanding the waiver of section 60.18 when operating on or near an airport within a control zone, the operator of the aircraft shall give prior notice of the proposed operations to Air Traffic Control; operations on or near a military airport shall be coordinated with the appropriate military authority; and, when operating on or near other airports, prior written permission shall be obtained from the authorized official of the airport for any deviation from the traffic pattern for the airport.

(ii) *Two-way radio.* No swath runs or turnarounds shall be flown within a mile of the boundary of an airport having an operating control tower unless the aircraft is equipped with a functioning two-way radio capable of communicating with the appropriate airport traffic control tower. Prior to entering such an area, the pilot of the aircraft shall notify the control tower of his proposed operation and thereafter he shall maintain a continuous listening watch on the appropriate radio frequency of such tower to receive any pertinent air traffic control information or instructions which may be issued.

(4) *Operations.* Notwithstanding the waiver of the area operating limitations of section 8.31, the operator shall comply with the following operating limitations in addition to those prescribed in special provisions (1) through (3) above:

(i) Prior to commencing any spraying or dusting operation over a congested area the operator shall:

(a) Contact an inspector of the FAA district in the area involved or the Bureau of Flight Standards Inspector responsible for the operation to present this waiver. The inspector will be apprised in detail of the intended operation. Written clearance must be obtained for the proposed operation from an inspector;

(b) Submit a written statement from the appropriate officials of the political subdivision of the area involved that such operation is in the public interest and is authorized by such officials; and

(c) Give public notice of the operation to the persons residing in such area by an appropriate notice in a local daily newspaper; if there is no local newspaper, other equivalent publicity media shall be used.

(ii) *Aircraft.* No aircraft other than those listed in the application for this waiver shall be used.

(iii) *Single-engine aircraft.* Single-engine aircraft shall not take off nor make turnarounds over congested areas. Swath runs may be flown over congested areas if they are traversed in a manner so that at all times the aircraft, in the event of an emergency, can land without jeopardy to persons or property on the ground. However, before the operation can start, the operator must present satisfactory evidence to the inspector that he can comply with the above.

(iv) *Equipment—Emergency load-dumping equipment.* All aircraft shall be equipped with operational nonleaking emergency dump valves having not greater than a 10 to 1 ratio between the total tank capacity in gallons and the cross sectional area of the dump valves in square inches.

Such emergency systems shall have vents that satisfy the formulated dump ratio, and be so installed as to prevent blowback into the fuselage area, or spillage in normal flight conditions.

Vent size in sq. in. =

the dump rate in GPM ÷ 150

(v) *Daily aircraft inspections.*

(a) The pilot-in-command of the aircraft or a certificated A and P mechanic will conduct a thorough visual inspection of the

aircraft and its components for general safe flight operations, its chemical-carrying and dispensing equipment, and make a functional check of all controls, powerplants, propellers, instruments, and emergency-dumping equipment to determine that the aircraft is in condition for safe flight operations prior to commencing each day's operation.

(b) The person making this inspection shall record the results of his inspection in the permanent aircraft records, stating whether or not the aircraft and equipment is in condition for safe flight operations, and sign his name, placing date and certificate number after this entry.

(vi) *Operations procedures.* Prior to commencing any spraying or dusting operation, the operator shall prepare, and secure the issuing inspector's approval of, an overall basic operational procedure for the use and guidance of the flight crews. Such procedure shall include basic emergency situations which may occur during the spraying or dusting operations. The flight crews shall be trained in the use of such procedures and shall utilize them under the appropriate circumstances.

(vii) *Pilot qualifications.*

(a) *Certificate and rating.*

(1) Each pilot-in-command shall hold at least a commercial pilot certificate with the appropriate category and class rating. In the case of aircraft exceeding 12,500 lbs. maximum certificate weight, he shall also hold a type rating for the aircraft.

(2) No pilots will be used except those listed in the application for certificate of waiver.

(b) *Experience.* In addition to the requirements of subparagraph (1) above, each pilot shall meet the following experience requirements:

(1) *Single-engine aircraft.* Each pilot-in-command shall have logged at least 100 hours as pilot-in-command of aircraft engaged in aerial application, and have at least 25 hours as pilot-in-command in the type of aircraft to be used.

(2) *Multiengine aircraft.* Each pilot-in-command shall have logged at least 100 hours of pilot-in-command time in multiengine aircraft which shall include 100 hours

as pilot-in-command in aircraft engaged in aerial application. In lieu of the 100 hours of aerial application experience such pilot may substitute an additional 25 hours of pilot-in-command time on the type of aircraft to be used and at least 5 hours of dual flight instructions as pilot in actual or simulated aerial application in the type of aircraft to be used.

(viii) *Weight and balance data for all multiengine aircraft.*

(a) Current weight and balance data shall be provided for each multiengine aircraft used. Such data shall include:

(1) Basic empty weight of the aircraft, including chemical-dispensing equipment, the residual oil and fuel tanks empty;

(2) Maintenance of a continuous and current record of all changes affecting the basic weight and c. g. of the aircraft; and

(3) A means of determining various operating gross weights and corresponding c. g. ranges of the aircraft for all operating weights authorized.

(ix) *Gross weight limitations over congested areas.*

(a) The gross weight limitations imposed by the FAA on multiengine and large single-engine aircraft for operations over congested areas will not be exceeded.

(b) Only those single-engine aircraft which can operate at a weight which will permit the aircraft to climb at a rate of at least 300 feet per minute under existing conditions will be authorized by the inspector in the area involved to operate over the congested areas.

(c) *Industrial operations³ over congested areas.* A certificate of waiver or authorization issued to operators to permit industrial operations over congested areas will contain the following conditions, appropriate to the particular operation:

(1) *Aircraft airworthiness.* No aircraft shall be operated except in accordance with the operating limitations prescribed for the aircraft. Certificated aircraft whose operating limitations state that the aircraft is not eligible for a waiver under section 8.31 cannot be used.

³ A waiver will not be issued for a photographic operation when it can be satisfactorily accomplished by the use of a telescopic lens at the altitude required by Part 60 or by the use of a telescopic lens while flying over sparsely populated areas.

(2) *Right-of-way rules.* Operations shall be conducted in accordance with the right-of-way rules of Part 60, except that any operation conducted under a waiver authorizing a deviation from the traffic pattern for an airport shall remain clear of, and give way to other aircraft in the pattern.

(3) *Operations on and in the vicinity of an airport.*

(i) Notwithstanding the waiver of section 60.18 when operating on or near an airport within a control zone, the operator of the aircraft shall give prior notice of the proposed operations to Air Traffic Control; operations on or near a military airport shall be coordinated with the appropriate military authority; and, when operating on or near other airports, prior written permission shall be obtained from the authorized official of the airport for any deviation from the traffic pattern for the airport.

(ii) *Two-way radio.* The aircraft will not be operated within a mile of the boundary of an airport having an operating control tower unless the aircraft is equipped with a functioning two-way radio capable of communicating with the appropriate airport traffic control tower. Prior to entering such an area, the pilot of the aircraft shall notify the control tower of his proposed operation and thereafter he shall maintain a continuous listening watch on the appropriate radio frequency of such tower to receive any pertinent air traffic control information or instructions which may be issued.

(4) *Operations.* Notwithstanding the waiver of the area operating limitations of section 8.31, the operator shall comply with the following operating limitations in addition to those prescribed in special provisions (1) through (3) above:

(i) Prior to commencing any industrial operation over a congested area the operator shall:

(a) Contact an inspector of the FAA district in the area involved or the Bureau of Flight Standards Inspector responsible for the operation to present this waiver. The Bureau of Flight Standards Inspector will be apprised in detail of the intended operation. Written clearance must be obtained for the proposed operation from an inspector;

(b) Submit a written statement from the appropriate officials of the political subdivision of the area involved that such operation is in the public interest and is authorized by such officials; and

(c) Give public notice of the operation to the persons residing in such area by an appropriate notice in a local daily newspaper; if there is no local newspaper, other equivalent publicity media shall be used.

(ii) *Aircraft.* No aircraft other than those listed in the application for this waiver shall be used.

(iii) *Single-engine aircraft.* Single-engine aircraft shall not take off over congested areas. They may be flown over congested areas if they are traversed in a manner so that at all times the aircraft, in the event of an emergency, can land without jeopardy to persons or property on the ground. However, before the operation can start, the operator must present satisfactory evidence to the inspector that he can comply with the above.

(iv) *Daily aircraft inspections.*

(a) The pilot-in-command of the aircraft or a certificated A and P mechanic will conduct a thorough visual inspection of the aircraft and its components for general safe flight operations, and make a functional check of controls, powerplants, propellers, and instruments to determine that the aircraft is in condition for safe flight operations prior to commencing each day's operation.

(b) The person making this inspection shall record the results of his inspection in the aircraft's permanent records, stating whether or not the aircraft and equipment is in condition for safe flight operations, and sign his name, placing date and certificate number after this entry.

(v) *Operations procedures.* Prior to commencing any operation, the operator shall prepare, and secure the issuing inspector's approval of, an overall basic operational procedure for the use and guidance of the flight crews. Such procedure shall include basic emergency situations which may occur. The flight crews shall be trained in the use of such procedures and shall utilize them under the appropriate circumstances.

(vi) *Pilot qualifications.*(a) *Certificate and rating.*

(1) Each pilot-in-command shall hold at least a commercial pilot certificate with the appropriate category and class rating. In the case of aircraft exceeding 12,500 lbs. maximum certificate weight, he shall also hold a type rating for the aircraft.

(2) No pilots will be used except those listed in the application for certificate of waiver.

(vii) *Weight and balance data for all multiengine aircraft.*

(a) Current weight and balance data shall be provided for each multiengine aircraft used. Such data shall include:

(1) Basic empty weight of the aircraft, including permanent special equipment, the residual oil and fuel tanks empty.

(2) Maintenance of a continuous and current record of all changes affecting the basic weight and c. g. of the aircraft; and

(3) A means of determining various operating gross weights and corresponding c. g. ranges of the aircraft for all operating weights authorized.

(viii) *Gross weight limitations over congested areas.*

(a) The gross weight limitations imposed by the FAA on multiengine and large single-engine aircraft for operations over congested areas will not be exceeded.

(b) Only those single-engine aircraft which can operate at a weight which will permit the aircraft to climb at a rate of at least 300 feet per minute under existing conditions will be authorized by the inspector in the area involved to operate over congested areas.

(Published in 20 F. R. 2513, Apr. 16, 1955, effective Apr. 15, 1955; amended in 22 F. R. 2312-14, Apr. 6, 1957, effective Apr. 6, 1957.)

60.1-3 *Certificate of waiver for an air show, meet, race, etc. (FAA policies which apply to sec. 60.1 (b)).* A Certificate of Waiver or Authorization is issued only when the air show, meet, race, or other aeronautical demonstration can be conducted in a manner which will not subject spectators and other nonparticipating persons or property in the air or on the ground to aircraft hazards. The certificate is issued to the person or persons directly in charge of

the conduct of the show and who are responsible for compliance with all applicable portions of the waiver.

All acrobatics as well as other potentially hazardous acts are to be conducted at a distance of not less than 500 feet from the grandstand or spectators. Such acts may be required to be performed at greater distances when the experience of the pilot, the terrain, location, or type of act require a greater distance for reasons of safety. Applicants for a specific act may be required to demonstrate the act, or maneuvers, to the satisfaction of the agent issuing the certificate, so that a proper determination of the safe distance from the grandstand or spectators can be made.

Where a demonstration is required, it will conform as closely as possible to the act which will be performed at the air show. Demonstration of normal flying acts which do not constitute a potential hazard are not usually required.

The demonstration of an act may be waived when a performer has been actively engaged in performing at air shows during the previous year and can present evidence of previous authorization. This may be a copy of the most recent certificate of waiver issued by the FAA which indicates the names of the performers and the minimum distances authorized, or it may be a letter from an inspector who authorized the most recent performance of the act.

Acrobatic flights are expected to be under direct control provided by the holder of the certificate of waiver. The method of communication should insure that the pilot can be informed of any hazardous situation which may occur during the flight, or informed that the air show or his act has been stopped.

The Certificate of Waiver or Authorization may contain any or all of the following provisions:

(a) All acts shall be approved in writing by the local inspector before they may be performed.

(b) Participants in a specific act shall, if required by the local inspector, demonstrate competency to perform the act prior to approval.

(c) First-aid and fire-fighting equipment shall be immediately available at the location of the demonstration.

(d) Provisions shall be made for control of spectators.

(e) The applicant shall establish a central operations point from which activities will be directed, and he or his representatives shall be immediately available at this point during activities.

(f) The applicant shall provide means to advise all participants that an activity has been halted.

(g) An activity shall be halted when unauthorized persons enter the operations area, or for any other reason in the interest of safety.

(h) No aircraft will be flown closer than (specified distance) horizontally to spectators.

(i) Acrobatics or inverted flight will not be demonstrated lower than (specified altitude).

(j) No object will be dropped from an aircraft if the object will land within (specified distance) from spectators.

(k) A closed field signal, readily seen from an altitude of 3,000 feet (large white "X"), shall be displayed on the landing area when the activities are in progress.

(l) A physical barrier shall be provided to confine spectators to designated areas.

(m) A deadline readily visible to the participants shall be provided to insure that aircraft will maintain the approved horizontal distance from the spectators.

(n) The holder shall notify the nearest FAA Flight Service Station of the date, time, place, nature, and duration of the operations and request that an appropriate Notice to Airmen be disseminated.

(o) The course and pylons for races shall be located and spaced to provide protection to persons and property on the ground.

(p) The holder shall, prior to beginning activities, submit to the approving agent a written statement, signed by all participants that they have read and understand the conditions of the certificate of waiver.

(q) All participants shall be briefed on special field rules, and the manner and order of events before beginning activities.

(r) Clearance for all participating pilots and aircraft shall be obtained from the approving inspector before beginning activities.

(s) All aircraft and special equipment shall be inspected prior to each day's operation.

(t) Any other special provisions which the approving inspector may deem necessary in the interest of safety.

(Published in 20 F. R. 2513, on Apr. 16, 1955, effective Apr. 15, 1955.)

60.2-1 *Emergency situation, report required within 48 hours (FAA policies which apply to sec. 60.2).* When a pilot has been involved in a situation for which a report must be submitted within 48 hours to the nearest regional office of the Administrator, he should describe the incident in detail and forward the report to the regional office⁴ having jurisdiction over the area in which the incident occurred.

(Published in 20 F. R. 2514, on Apr. 16, 1955, effective Apr. 15, 1955.)

General Flight Rules (GFR)

60.13-1 *Appropriate authority (FAA interpretations which apply to sec. 60.13).*

(a) Appropriate authority to issue permission for aircraft operation within a Prohibited or Restricted Area will mean the "Using Agency" (Controlling Agency) as shown on radio facility charts and sectional and world aeronautical charts published by the U.S. Coast and Geodetic Survey.

(b) Application for permission to operate aircraft within a Prohibited or Restricted Area will be made to the "Using Agency" (Controlling Agency).

(c) Application for permission to operate within the Washington, D. C., prohibited area will be made to the Federal Aviation Agency, Bureau of Flight Standards, Washington 25, D.C.

(Published in 20 F. R. 5676 on Aug. 6, 1955, effective Sept. 1, 1955.)

60.16-1 *Issuance of a waiver or authorization (FAA policies which apply to sec. 60.16).*

(a) No Certificate of Waiver or Authorization will be issued for acrobatic flights over congested areas, cities, towns, settlements, or open air assembly of persons.

(b) A waiver may be issued for acrobatic flight within a civil airway premised on a satisfactory showing by the applicant that the flight or flights will be conducted at such altitudes, locations, and times as not to be a hazard to other traffic using the airway.

A waiver may be issued for acrobatic flight within a control zone only after concurrence of

⁴ See appendix A.

the appropriate traffic control authority, and on a showing by the applicant that the flight or flights will be conducted at such altitudes, locations, and times as not to be a hazard to other known traffic. Any waiver issued for such flight will stipulate ceiling and visibility minimums to insure safety to air traffic.

(c) A Certificate of Waiver or Authorization for acrobatic flight under 1,500 feet altitude will be restricted to air meets, air shows, and related activities.

(d) The policies and procedures of section 60.1-1 apply to an application for a Certificate of Waiver or Authorization.

60.17-1 *Minimum en route instrument altitudes (FAA rules which apply to sec. 60.17 (d)).* Minimum en route instrument altitudes prescribed by the Administrator are published in Part 610 of Regulations of the Administrator.

(Published in 16 F. R. 7351, July 27, 1951, effective upon publication.)

60.18-1 Vacant.

60.18-2 *Right-turn indicators (FAA rules which apply to sec. 60.18 (a)).* (a) Daytime operations. The L-shaped marker described in this paragraph is approved as a standard visual marker which indicates that turns are to be made to the right.⁵ The marker shall be prepared in such size and color, and located in such area, that when displayed between sunrise and sunset it will be readily visible to pilots using the airport. The marker shall be placed in such position that the short member of the L will show the direction of the traffic in the air, the long member of the L will point out the landing strip to be used, and the entire L will indicate the course of the turn to be executed by pilots using the landing strip.

⁵ The L-shaped marker is applied to the Segmented Circle Airport Marker System in Technical Standard Order TSO-N5, available free of charge from Aeronautical Reference Branch, Washington 25, D.C.

(b) *Night-time operation.* A flashing amber light shall mean that a clockwise flow of traffic around the airport is required unless otherwise authorized by the control tower operator.

(Published in 16 F. R. 6829, July 17, 1951, effective 0001 A. S. T. July 14, 1951.)

60.18-3 *Light signals (FAA rules which apply to sec. 60.18 (e)).* Light signals used for the control of air traffic shall be of the color and shall mean the following:

Color and type of signal	On the ground	In flight
Steady green----	Cleared for take-off.	Cleared to land.
Flashing green----	Cleared to taxi--	Return for landing (to be followed by steady green at proper time).
Steady red-----	Stop-----	Give way to other aircraft and continue circling.
Flashing red-----	Taxi clear of landing area (runway) in use.	Airport unsafe—do not land.
Flashing white----	Return to starting point on airport.	
Alternating red and green.	General warning signal—exercise extreme caution.	

(Published in 16 F. R. 6829, July 17, 1951, effective 0001 A. S. T., July 14, 1951.)

60.18-4 [Deleted]

60.18-5 *Traffic patterns for Anchorage Airport and Lake Hood-Lake Spenard Landing Area (FAA rules which apply to sec. 60.18 (d)).* Aircraft taking off from or landing at the Anchorage Airport or the Lake Hood-Lake Spenard Landing Area, shall adhere to the following traffic patterns and the altitudes made a part thereof, unless otherwise author-

ized by Air Traffic Control. The subject traffic patterns shall be contained within the air space described by a 5-mile horizontal radius of the Anchorage Airport and extending vertically to 2,000 feet mean sea level.

(a) *Anchorage Airport.*

(1) *General.*

(i) Traffic patterns at the Anchorage Airport shall be rectangular and, for each runway, the traffic pattern shall lie to the side of the runway opposite Lake Hood and Lake Spenard.

(ii) Light and heavy aircraft shall follow their respective patterns as indicated by the diagrams set forth below. The differentiation between light and heavy aircraft shall be:

(a) *Light aircraft.* Aircraft which normally use a final approach true air speed of 100 m. p. h. or less.

(b) *Heavy aircraft.* Aircraft which normally use a final approach true air speed greater than 100 m. p. h.

(2) *Takeoff.*

(i) *Aircraft remaining in the traffic pattern—(a) Runway 6 and 13.* Aircraft remaining in the traffic pattern shall execute a turn of 90° to the right at or before reaching an altitude of 500 feet mean sea level, and follow the rectangular patterns for runways 6 and 13 respectively.

(b) *Runway 24 and 31.* Aircraft remaining in the traffic pattern shall execute a turn of 90° to the left at or before reaching an altitude of 500 feet mean sea level and follow the rectangular patterns for runways 24 and 31 respectively.

(ii) *Departing aircraft.*

(a) *Runway 6 and 13.*

(1) *Light aircraft.* Execute a turn of 90° to the right at or before reaching 500 feet mean sea level, and at the approximate midpoint of the initial crosswind leg, execute a turn of 45° to the left.

(2) *Heavy aircraft.* Execute a turn of 45° to the right from the takeoff leg at or before reaching an altitude of 500 feet mean sea level.

(b) *Runway 24 and 31.*

(1) *Light aircraft.* Execute a turn of 90° to the left at or before reaching 500 feet mean sea level, and at the approximate mid-

point of the initial crosswind leg, execute a turn of 45° to the right.

(2) *Heavy aircraft.* Execute a turn of 45° to the left from the takeoff leg at or before reaching an altitude of 500 feet mean sea level.

(3) *Traffic pattern entry.*

(i) *Light aircraft.* Enter the traffic pattern at an altitude of 900 feet mean sea level and at an angle of 45° to the approximate midpoint of the downwind leg.

(ii) *Heavy Aircraft.* Enter the traffic pattern at an altitude of 1,400 feet mean sea level and at an angle of 45° to the approximate midpoint of the downwind leg.

(4) *Landing.*

(i) *Light aircraft.* Aircraft shall be operated so as to enter the final approach at a distance of at least 1,000 feet from the approach end of the runway.

(ii) *Heavy aircraft.* Aircraft shall be operated so as to enter the final approach at a distance of at least 1,500 feet from the approach end of the runway.

(b) *Lake Hood-Lake Spenard Landing Area.*

(1) *Landing area.*

(i) *East or west wind.* The landing area shall be defined by the projection of the shore lines of the canal through Lake Spenard and a projection of the south shore line of the canal through Lake Hood and a parallel projection from Sea Airmotive Hangar extending to the west shore line of Lake Hood as shown by the diagrams set forth below.

(ii) *North or south wind.* The landing area shall be defined as the area extending 500 feet west of a line connecting the most northern and most southern points of the Lake Hood shore line as shown by the diagrams set forth below.

(2) *Traffic control.*

(i) Traffic control instructions issued by the Anchorage Tower to aircraft landing at or taking off from the Lake Hood-Lake Spenard Landing Area will be issued only with respect to existing traffic at the Anchorage Airport. Separation of surface traffic, therefore, will be the responsibility of the aircraft operator.

(ii) In the absence of an air traffic control facility at Lake Hood or Lake Spenard, aircraft shall be operated so as to conform to

the taxiing routes as shown by the diagrams set forth below.

(3) *Traffic patterns.*

(i) *East or west takeoff or landing.* The traffic pattern shall lie to the side of the Lake Hood-Lake Spenard canal opposite the Anchorage Airport.

(ii) *North or south takeoff or landing.* The traffic pattern shall lie to the side of the east side of Lake Hood.

(4) *Limitations.*

(i) Only aircraft equipped with fully functioning two-way radio will be authorized to make a south takeoff from Lake Hood or to enter the traffic pattern for a north landing on Lake Hood.

(ii) No aircraft shall make a takeoff to the south from Lake Hood or enter traffic for a landing to the north at Lake Hood without having received a traffic clearance by radio from the Anchorage tower.

(iii) No aircraft shall enter the landing area in use while taxiing "on the step."

(5) *Takeoff.*

(i) A pilot shall not begin a takeoff run until he has determined that the landing area and the final approach are clear of traffic.

(ii) Aircraft remaining in the traffic pattern:

(a) *East or south takeoff.* Execute a turn of 90° to the left at or before reaching an altitude of 500 feet mean sea level, and follow the rectangular pattern for an east or south wind respectively.

(b) *West or north takeoff.* Execute a turn of 90° to the right at or before reaching an altitude of 500 feet mean sea level and follow the rectangular pattern for a west or north wind respectively.

(iii) *Departing aircraft:*

(a) *East takeoff.* Execute a turn of 90° to the left at or before reaching an altitude of 500 feet mean sea level, and at the approximate midpoint of the initial crosswind leg, execute a turn of 45° to the right.

(b) *South takeoff.* Execute a turn of 180° to the left at or before reaching an altitude of 500 feet mean sea level, and at the approximate midpoint of the downwind leg, execute a turn of 45° to the right.

(c) *West or north takeoff.* Execute a

turn of 90° to the right at or before reaching an altitude of 500 feet mean sea level, and at the approximate midpoint of the initial crosswind leg, execute a turn of 45° to the left.

(6) *Landing.*

(i) *Traffic pattern entry.* Enter the traffic pattern at an altitude of 600 feet mean sea level and at an angle of 45° to the approximate midpoint of the downwind leg.

(7) *Taxiing route for takeoff.*

(i) *Taxiing for a west takeoff from Lake Spenard.* All aircraft maneuvering from parking areas in Lake Hood for a west takeoff from Lake Spenard shall follow a counter-clockwise flow of taxiing traffic in Lake Hood until the pilot has determined that the canal, landing approach, and landing area is clear of traffic, then proceed through the canal in an expeditious manner. All taxiing in Lake Spenard shall be confined to the area south of a projection of the north shore line of the canal.

(ii) *Taxiing for an east takeoff from Lake Hood.* Aircraft maneuvering from parking areas for an east takeoff from Lake Hood through the canal, shall follow a counter-clockwise flow of taxiing traffic in Lake Hood until the pilot has determined that the canal is clear of all taxiing traffic.

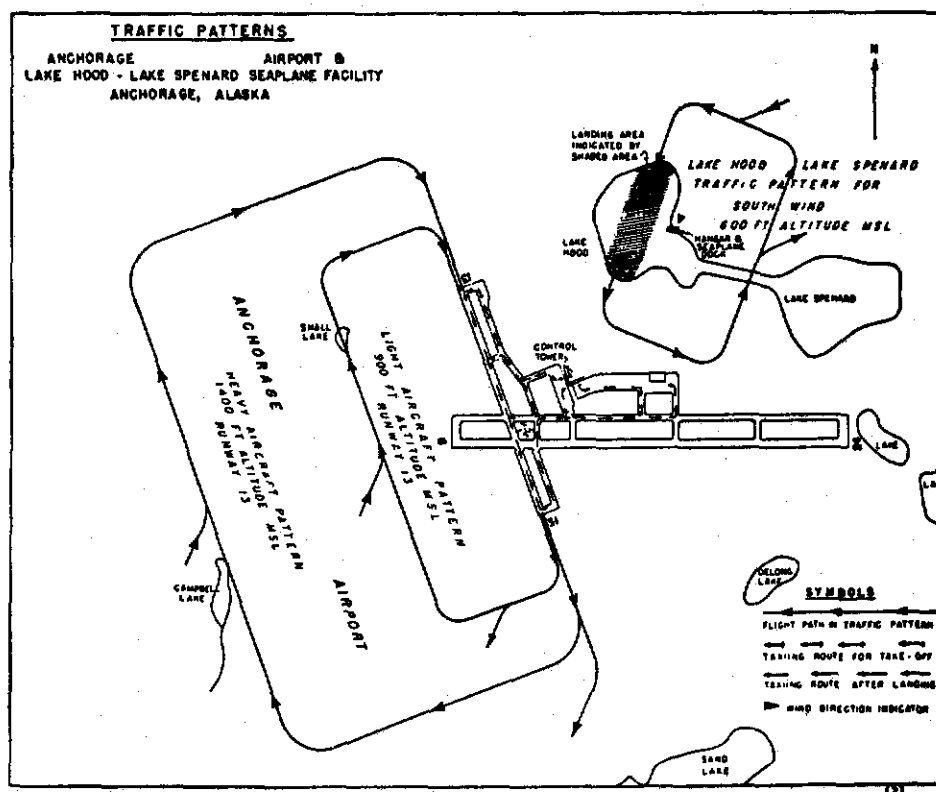
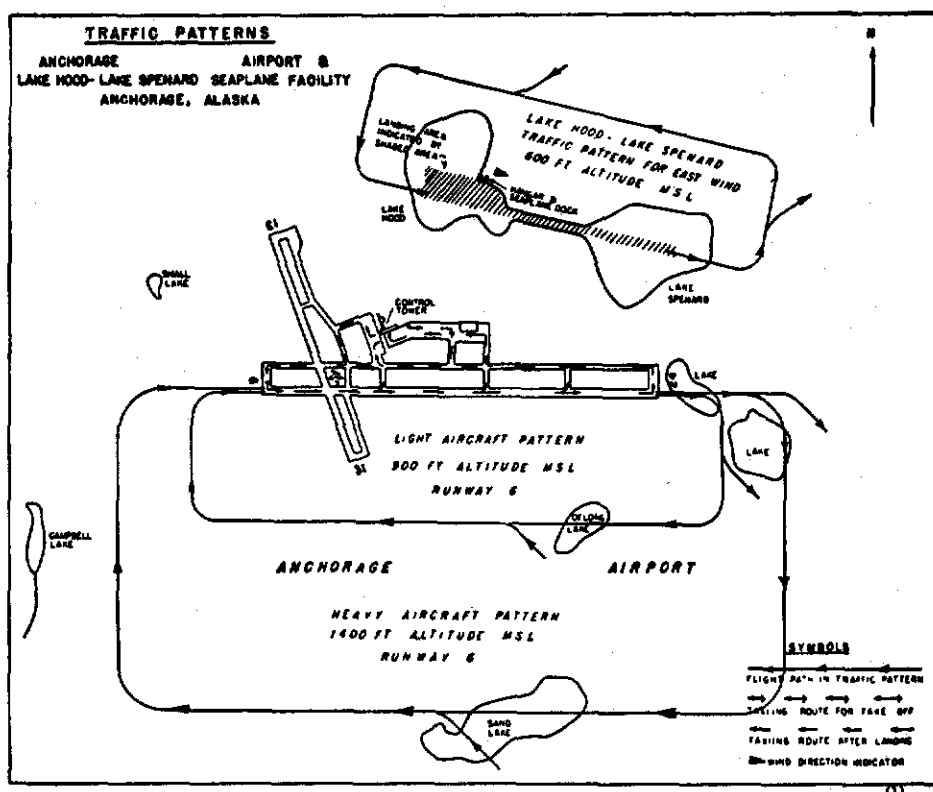
(iii) *Taxiing for a south takeoff from Lake Hood.* Aircraft maneuvering from parking areas for a south takeoff from Lake Hood shall follow a counter-clockwise flow of taxiing traffic in Lake Hood to a takeoff position near the north shore of Lake Hood.

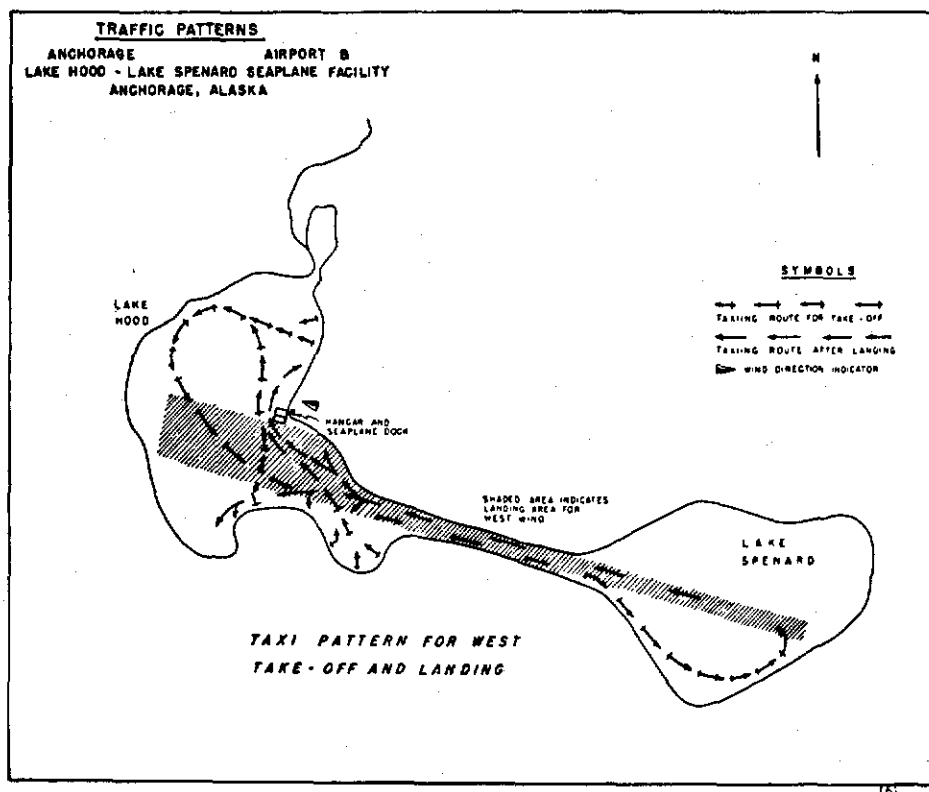
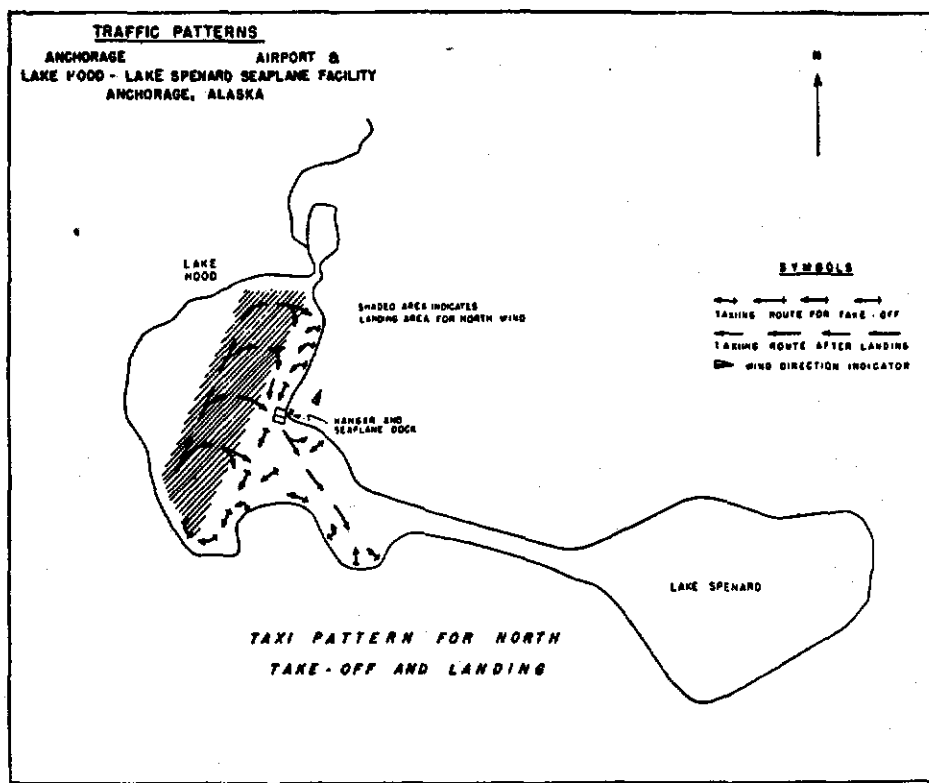
(iv) *Taxiing for a north takeoff from Lake Hood.* Aircraft maneuvering from parking areas for a north takeoff from Lake Hood shall follow a clockwise flow of taxiing traffic in Lake Hood to a takeoff position near the south shore of Lake Hood.

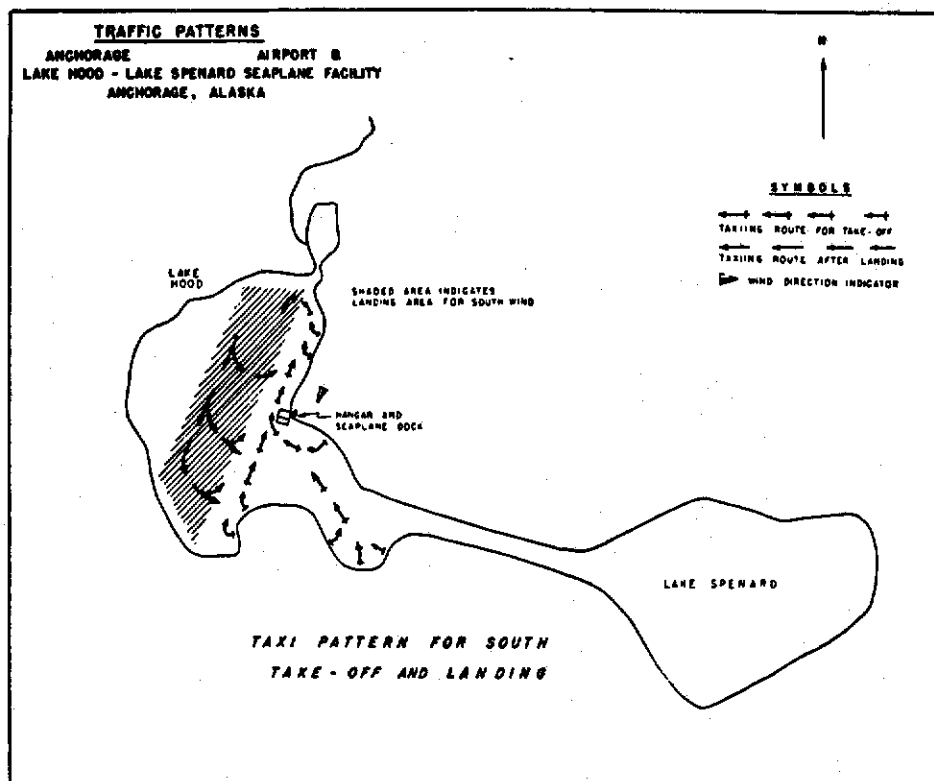
(8) *Taxiing route following landing.*

(i) *Taxiing route after landing to the south on Lake Hood.* At the completion of the landing run, the aircraft shall be operated so as to join a counter-clockwise flow of traffic to the aircraft parking area.

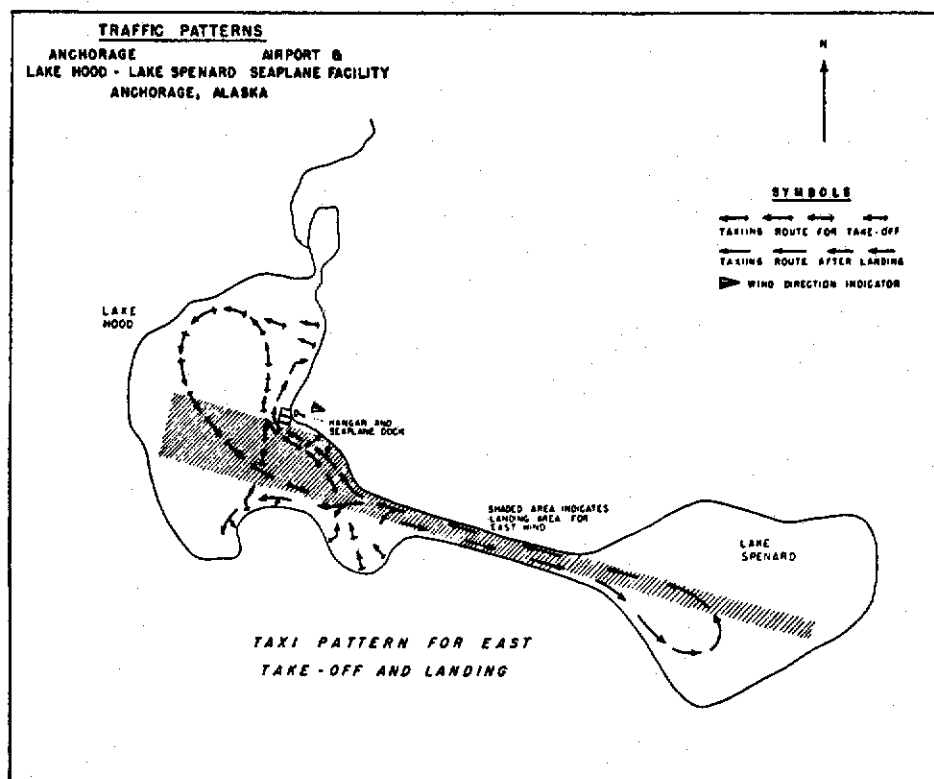
(ii) *Taxiing route after landing to the north on Lake Hood.* At the completion of the landing run, the aircraft shall be operated so as to join a clockwise flow of traffic to the aircraft parking area.







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(iii) *Taxiing after landing to the east on Lake Hood.*

(a) If the landing run is completed prior to entering the canal, the aircraft may be taxied direct to the aircraft parking area.

(b) If the landing run continues into the canal, proceed through the canal in an expeditious manner, following a counter-clockwise flow of traffic in Lake Spenard until it has been determined that the landing approach and the canal are clear of traffic, then proceed expeditiously through the canal to the aircraft parking area.

(iv) *Taxiing after landing to the west on Lake Spenard or Canal.* At the completion of the landing run, proceed expeditiously through the canal and direct to the aircraft parking area.

(Published in 16 F. R. 6829, July 17, 1951, effective 0001 A. S. T., July 14, 1951.)

60.18-6 *Traffic patterns for Fairbanks Airport and Chena River Landing Area (FAA rules which apply to sec. 60.18 (d)).* Aircraft taking off from or landing at the Fairbanks Airport or the Chena River Landing Area shall adhere to the following traffic patterns and altitudes made a part thereof, unless otherwise authorized by Air Traffic Control. The subject traffic patterns shall be contained within the air space described by a 3-mile horizontal radius of the Fairbanks Airport and extending vertically to 2,500 feet mean sea level.

(a) *Fairbanks International Airport.*

(1) *General.*

(i) Traffic patterns at the Fairbanks Airport shall be rectangular, extending east of the FAA road and for each runway the traffic pattern shall be to the east side of the runway.

(ii) Light and heavy aircraft shall follow their respective patterns as indicated by the diagrams set forth below. The differentiation between light and heavy aircraft shall be:

(a) *Light aircraft.* Aircraft which normally use a final approach true air speed of 100 m. p. h. or less.

(b) *Heavy aircraft.* Aircraft which normally use a final approach true air speed greater than 100 m. p. h.

(2) *Takeoff.*

(i) *Aircraft remaining in the traffic pattern.*

(a) *Runway 1.*

(1) *Light aircraft.* Aircraft remaining in the traffic pattern shall execute a 90° turn to the right at an altitude of at least 800 feet mean sea level, climbing to a traffic altitude of 1,100 feet mean sea level following the rectangular pattern for runway 1.

(2) *Heavy aircraft.* Aircraft remaining in the traffic pattern shall execute a 90° turn to the right at an altitude of at least 800 feet mean sea level climbing to a traffic altitude of 1,600 feet mean sea level following the rectangular pattern for runway 1.

(b) *Runway 19.*

(1) *Light aircraft.* Aircraft remaining in the traffic pattern shall execute a 90° turn to the left at an altitude of at least 800 feet mean sea level climbing to a traffic altitude of 1,100 feet mean sea level following the rectangular pattern for runway 19.

(2) *Heavy aircraft.* Aircraft remaining in the traffic pattern shall execute a 90° turn to the left at an altitude of at least 800 feet mean sea level climbing to a traffic altitude of 1,600 feet mean sea level following the rectangular pattern for runway 19.

(ii) *Departing aircraft.*

(a) *Runway 1.*

(1) *Light aircraft.* Aircraft shall execute a 90° turn to the right at an altitude of at least 800 feet mean sea level, and at the approximate midpoint of the initial crosswind leg execute a turn of 45° to the left.

(2) *Heavy aircraft.* Aircraft shall execute a 45° turn to the right from the takeoff leg at an altitude of at least 800 feet mean sea level.

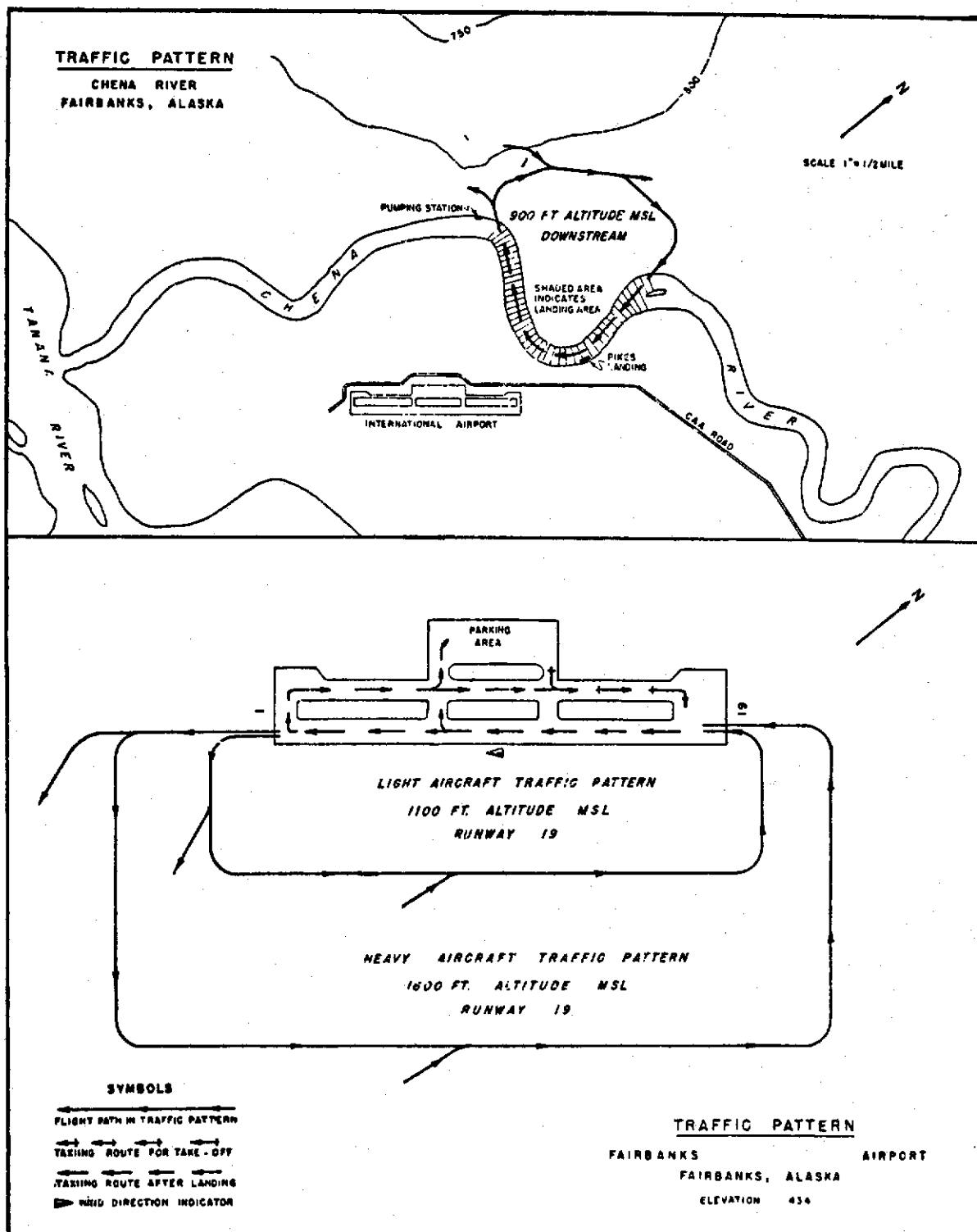
(b) *Runway 19.*

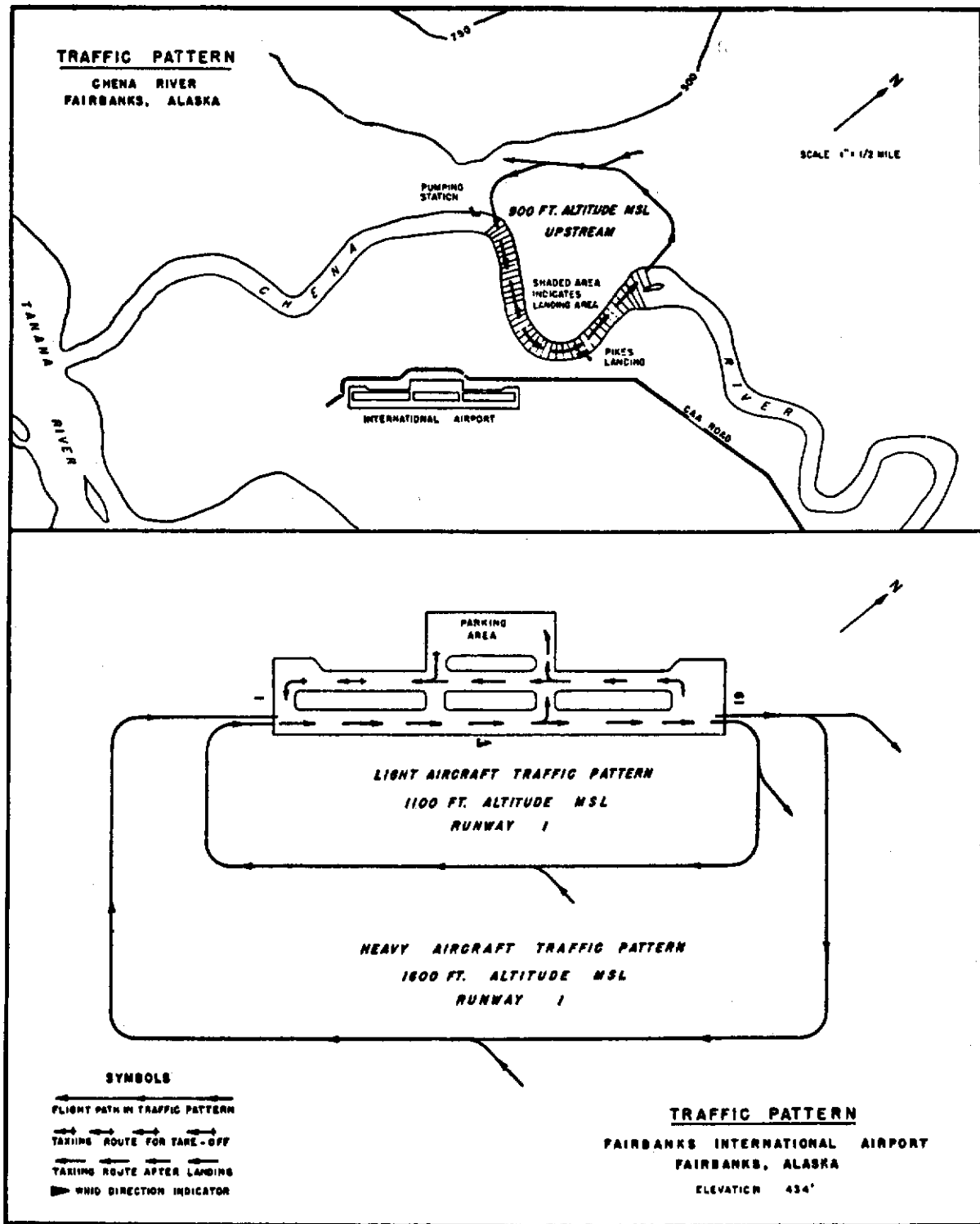
(1) *Light aircraft.* Aircraft shall execute a 90° turn to the left at an altitude of at least 800 feet mean sea level, and at the approximate midpoint of the initial crosswind leg execute a turn of 45° to the right.

(2) *Heavy aircraft.* Aircraft shall execute a 45° turn to the left from the takeoff leg at an altitude of at least 800 feet mean sea level.

(3) *Traffic pattern entry.*

(i) *Light aircraft* shall enter the traffic pattern at an altitude of 1,100 feet mean sea level and at an angle of 45° to the approximate midpoint of the downwind leg.





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(ii) Heavy aircraft shall enter the traffic pattern at an altitude of 1,600 feet mean sea level and at an angle of 45° to the approximate midpoint of the downwind leg.

(4) *Landing.*

(i) Light aircraft shall be operated so as to enter the final approach at a distance of at least 1,000 feet from the approach end of the runway.

(ii) Heavy aircraft shall be operated so as to enter the final approach at a distance of at least 1,500 feet from the approach end of the runway.

(b) *Chena River Landing Area.*

(1) *Landing area.* The landing area shall be defined as those portions of the Chena River upstream and downstream from a place on the river commonly known and identified as Pike's Landing, and extending downstream to the pumping station and upstream to the first right turn from Pike's Landing.

(2) *Traffic control.*

(i) Aircraft operating in the traffic patterns defined in this chapter will not normally be controlled by the Fairbanks Control Tower.

(ii) Any traffic control instructions issued by the Fairbanks Tower to aircraft landing

at or taking off from the defined landing area on the Chena River will be issued only with respect to existing traffic at the Fairbanks Airport. Separation of surface traffic, therefore, will be the responsibility of the aircraft operator.

(3) *Traffic patterns.*

(i) Traffic patterns for the defined landing area on the Chena River shall be circular, shall lie to the west side of the river, and shall not extend east of the defined landing area on the Chena River as illustrated on the diagram set forth below.

(ii) Landing or takeoff upstream (north or east) shall be to the left.

(iii) Landing or takeoff downstream (south or west) shall be to the right.

(4) *Departure from traffic pattern.* Aircraft shall depart from the traffic pattern on a westerly heading.

(5) *Entrance to traffic pattern.* Aircraft shall enter the traffic pattern on an easterly heading at an altitude of 900 feet mean sea level.

(Published in 16 F. R. 6831, July 17, 1951, effective 0001 A. S. T., July 14, 1951, and amended in 20 F. R. 5676, Aug. 6, 1955, effective Sept. 1, 1955.)

[The next page is 72.]

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【Page 72 follows. Section 60.18-8 on pages 68 through 72 were removed by Supplement No. 6, January 1, 1962.】

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60.21-1 *Air traffic clearance*⁶ (*FAA policies which apply to sec. 60.21*). (a) When an air traffic clearance has been obtained under either VFR or IFR rules, the pilot in command may not deviate from the provisions thereof unless an amended clearance is obtained or an emergency exists. Pilots desiring to make a change in altitude, route, or destination should request the change from an appropriate communications facility and receive Air Traffic Control approval prior to making the change.

(b) In case emergency authority is used to deviate from provisions of an air traffic clearance, the pilot in command should notify Air Traffic Control as soon as possible and obtain an amended clearance.

(c) In an emergency situation which results in no deviation from the rules prescribed in Part 60, but which requires Air Traffic Control to give priority to an aircraft, the pilot of such aircraft should make a report within 48 hours of such emergency to the nearest regional office of the Administrator.

(d) An amendment to the initial clearance may be issued to a flight at any time Air Traffic Control deems such action necessary to avoid

⁶ An air traffic clearance is an authorization by Air Traffic Control for an aircraft to proceed under specified traffic conditions within a control zone or control area. It is issued for the purpose of preventing collision between aircraft known to Air Traffic Control and does not constitute authority to violate any provision of the CAR. A traffic clearance issued by a center and relayed through a communications facility is prefixed by "ATC clears." Other Air Traffic Control messages originated by a center for relay to a pilot will be prefixed by "ATC advises," or "ATC requests," as appropriate. Traffic clearances are issued to flights through ground-air radio communication facilities, such as radio range stations, airport traffic control towers, and air carrier and military communications stations, or on direct communications channels.

An air traffic clearance provides separation from other aircraft only during that portion of a flight conducted in weather conditions less than VFR minimums. It is the direct responsibility of the pilot to avoid other aircraft when flying in VFR conditions even with a traffic clearance. The initial traffic clearance issued to an aircraft prior to departure will normally authorize flight to the point of first intended landing, with instructions to maintain the altitude at which the aircraft enters the next control area. The pilot should request any desired altitude changes en route.

Air Traffic Control normally attempts to issue a traffic clearance specifying the altitude and route proposed in the flight plan. However, due to traffic conditions, it is frequently necessary that Air Traffic Control specify an altitude or route different from that requested by the pilot. It is important that pilots pay particular attention to the air traffic clearance and not assume that the route and altitude are the same as requested in the flight plan. It is suggested that pilots make a written record of clearances at the time they are received, and verify the clearance with Air Traffic Control if any doubt exists.

possible conflict between en route, landing, or departing aircraft.

(e) A flight is always cleared to a specific point or location (radio or visual reporting point), defined as a clearance limit. When two-way radio failure is experienced and the pilot proceeds according to the latest traffic clearance, he is expected to observe the following, unless other instructions to the contrary are received:

(1) If the pilot has received and acknowledged a clearance to the destination airport or the radio facility serving that point, he should continue flight at the altitude(s) last assigned by Air Traffic Control, or the minimum instrument altitude,⁷ whichever is the higher, to the radio facility servicing the destination airport.

(2) If the pilot has received and acknowledged a clearance to a point other than the destination airport or the radio facility serving the destination airport, he should continue flight at the altitude(s) last assigned by Air Traffic Control or the minimum instrument altitude, whichever is the higher, to the radio facility serving the destination airport.

(3) If holding instructions have been received, the pilot should comply with these instructions until such time as it will be necessary to continue flight so as to arrive at the radio facility serving the destination airport at the expected approach time last received and acknowledged, maintaining the last assigned altitude or the minimum instrument altitude, whichever is the higher.

(4) If holding instructions have been received, but no expected approach time has been received, the pilot should comply with these instructions until the time Air Traffic Control has specified that further clearance may be expected. He should then continue, maintaining the last assigned altitude or the minimum instrument altitude, whichever is the higher.

60.21-2 *Emergency descent* (*FAA policies which apply to sec. 60.21*). Upon receipt of

⁷ The minimum instrument altitude referred to is the minimum established for that portion of the route over which the operation is conducted, regardless of the direction of flight. If deviation from the altitude assigned by Air Traffic Control is necessary in order to comply with a higher minimum instrument altitude, any subsequent descent required in order to comply with a lower minimum instrument altitude should not be made below the altitude last assigned by Air Traffic Control.

advice that an aircraft in flight within a control area or control zone has encountered an emergency which may affect other air traffic, Air Traffic Control will act to give the aircraft encountering the emergency priority over any other aircraft involved. Should it become necessary for an aircraft holding to make an emergency descent for a landing through other traffic, the pilot of that aircraft should so advise Air Traffic Control through appropriate communications facilities.

Upon receipt of advice that an aircraft is making an emergency descent through traffic assigned altitudes over the airport, Air Traffic Control will immediately broadcast, or cause to be broadcast, on radio range frequency the following:

EMERGENCY TO ALL CONCERNED -----
 EMERGENCY LANDING AT -----
 AIRPORT
 ALL AIRCRAFT BELOW -----
 THOUSAND FEET
 WITHIN ----- MILES OF -----
 RADIO RANGE/OMNI
 LEAVE ----- COURSES/RADIALS
 IMMEDIATELY

Upon receipt of such a broadcast, pilots of aircraft affected should clear specified areas in accordance with the emergency instructions. Air Traffic Control will issue further directions through appropriate communications facilities immediately following the emergency broadcast. When terrain or other factors make it impractical for an aircraft to maintain the last assigned altitude, Air Traffic Control will issue specific directions to the aircraft.

60.23-1 *Aircraft lights in Alaska (FAA rules which apply to sec. 60.23).* In Alaska the lights required by this section shall be displayed when any unlighted aircraft or other unlighted prominent objects cannot readily be seen beyond a distance of 3 miles, or when the sun is more than 6° below the horizon.⁸

(Published in 14 F. R. 38, Jan. 5, 1949, effective upon publication.)

⁸ The duration of civil twilight is the interval in the evening from sun set until the time when the center of the sun is 6° below the horizon; or the corresponding interval in the morning between sunrise and the time at which the sun was still 6° below the horizon. "Tables of Sunrise, Sunset, and Twilight," United States Naval Observatory, 1946, p. 9.

60.23-2 *Operations before sunrise and after sunset (FAA policies which apply to sec. 60.23).* It is the policy of the Administrator to issue a Certificate of Waiver or Authorization for operation before sunrise and after sunset without lights only for agricultural or industrial operations, in accordance with section 60.1-2(b).

60.24-1 *Approval of flight test areas (FAA policies which apply to sec. 60.24).* Flight test areas will be approved only over open water or sparsely populated areas where the conduct of tests will be a minimum hazard to persons or property. In approving a flight test area, consideration will be given to such factors as the type of flying, air speeds, altitudes involved, the amount of traffic being operated in the area and any other factors essential to safety.

(Published in 22 F. R., Mar. 1, 1957, effective Mar. 1, 1957.)

60.24-2 *Application for approval of flight test area (FAA policies which apply to sec. 60.24).* Any person may apply for approval of a test area^{8a} by making application in triplicate by letter addressed to the local district office. The application is to contain the following information:

(a) Aeronautical chart showing geographical boundaries of the area to be used (latitude, longitude, highways, railroads, or similar landmarks, readily discernible from operating altitudes).

(b) Hours during which operations are to be conducted.

(c) Conditions for operating: VFR, ceiling, visibility, altitudes, etc.

(d) Nature of flight tests to be performed (production, experimental, prototype, etc.).

(Published in 22 F. R., Mar. 1, 1957, effective Mar. 1, 1957; amended in 22 F. R. 5541, effective Aug. 1, 1957.)

60.24-3 *Duration and renewal of test area approval (FAA policies which apply to sec. 60.24).*

(a) Approval of a flight test area will be given for a period not to exceed 24 months subject to earlier cancellation where the Administrator finds that changed conditions would not justify original approval. Can-

^{8a} Aircraft having experimental airworthiness certificates shall operate in accordance with the area limitations prescribed within their respective airworthiness certificates.

cellation will be effective upon receipt of written notice from the Administrator or his representatives.

(b) Approval of a flight test area may be renewed by making application in the form prescribed in section 60.24-2. The renewal request need contain only changes made in the original application. Items unchanged should be incorporated by reference.

(Published in 22 F. R., Mar. 1, 1957, effective Mar. 1, 1957; amended in 22 F. R. 5541, effective Aug. 1, 1957.)

60.24-4 *Traffic rules for flight test areas designated by the Administrator (FAA rules which apply to sec. 60.24).* No person shall flight test an aircraft within an area designated^{8b} by the Administrator for such purposes except in accordance with the following:

(a) *Filing of flight plan.* A flight plan shall be filed with Air Traffic Control and shall contain at least the following information:

- (1) Aircraft identification and type.
- (2) Proposed departure time.
- (3) Estimated duration of flight.
- (4) Altitude or altitudes to be used within the test area.

(5) Proposed time of entry into and egress from test area.

(b) *Filing of position reports.* IFR flights (in addition to those reports normally required of IFR operations within controlled airspace), and VFR flights with a functioning two-way radio, shall report actual time of entry and egress of the test area.

(c) *Deviations from flight plan.* No person shall deviate from the provisions of his flight plan unless Air Traffic Control is advised in advance.

NOTE: In addition to special traffic rules or procedures prescribed for operations within approved or designated flight test areas, the provisions of CAR 60 are applicable.

(Published in 22 F. R., Mar. 1, 1957, effective Mar. 1, 1957.)

60.24-5 *Sparsely populated areas having light air traffic (FAA policies which apply to sec. 60.24 (a) (1)).*

^{8b} Designated flight test areas are those areas, other than approved flight test areas, which are designated after appropriate hearings are conducted through the Airspace Subcommittee of the Air Coordinating Committee, and may be used by any person in accordance with the rules set forth herein.

(a) For the purpose of approving flight test areas, sparsely populated areas are areas in which cities, towns, and villages are sufficiently widely scattered to permit the users to avoid all congested areas when conducting flight test operations; and light air traffic areas^{8c} are those areas not located within (1) main arterial airways (colored and VOR), (2) control zones, (3) high density traffic zones, and (4) portions of control areas used for VFR departures and arrivals, such as areas used for noise abatement procedures.

(Published in 22 F. R. 5541, effective Aug. 1, 1957.)

Visual Flight Rules (VFR)

60.30-1 *Authorization by Air Traffic Control (FAA policies which apply to sec. 60.30).* Authorization by Air Traffic Control to enter or depart control zones under VFR when the ceiling is less than 1,000 feet, and to fly closer to clouds than 500 feet vertically below, 1,000 feet vertically above, and 2,000 feet horizontally within a control zone will be issued in the form of an air traffic clearance. This clearance may be obtained by contacting the Flight Service Station or airport control tower in the control zone concerned. An appropriate clearance for such flight should conform closely to the following example:

ATC clears (aircraft ident.) out of/to enter control zone (number of) miles (direction) of (airport) cruise not above (altitude) while in control zone.

60.31-1 *Air traffic clearance for takeoff or landing (FAA policies which apply to sec. 60.31).* A VFR takeoff or landing may be made at an airport within a control zone when the flight or ground visibility is less than 3 miles only if an air traffic clearance has been received. A takeoff or departure clearance will normally contain specific instructions as to the direction of takeoff, turn after takeoff, track and altitude to be maintained, and any other necessary maneuver.

60.32-1 Deleted

(Deletion published in 24, F. R. 7253, Sept. 9, 1959, effective Sept. 9, 1959.)

^{8c} Areas above 25,000 feet above the surface under certain stipulated circumstances, dictated by local conditions, may be considered as being light traffic areas.

60.32-2 Deleted

(Deletion published in 24, F. R. 7253, Sept. 9, 1959, effective Sept. 9, 1959.)

60.33-1 *VFR flight plans (FAA policies which apply to sec. 60.33)*. VFR flight plans may be filed in person or by telephone or radio with any Flight Service Station or control tower operator.

Good operating practices in connection with planning a flight, filing flight plan, flying the flight plan, carrying out radio communications procedures for all purposes can be found in the FAA Technical Manual No. 102, "Pilots' Radio Handbook."⁹

Instrument Flight Rules (IFR)¹⁰

60.46-1 *Standard instrument approach procedures (FAA rules which apply to sec. 60.46)*. Standard instrument approach procedures prescribed by the Administrator are published in Part 609 of Regulations of the Administrator.

(Published in 16 F. R. 7351, July 27, 1951, effective upon publication.)

60.46-2 *Instrument approach ceiling and visibility minimums (FAA policies which apply to sec. 60.46)*. Authorization for lower instrument approach ceiling and visibility minimums than those prescribed by the Administrator in Part 609 of the Regulations of the Administrator may be issued for approaches at those airports where the minimums have not been revised in accordance with the new policy.¹¹ The issuance

⁹ For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. The price of the manual is 60 cents.

¹⁰ For information concerning instrument flight operations, see the following:

(1) The Flight Information Manual which may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

(2) Instrument Approach and Landing Charts which may be purchased from the U.S. Coast and Geodetic Survey, Department of Commerce, Washington 25, D.C., at 10 cents each.

(3) Air Traffic Control Procedures, ATM-2-A, November 1, 1960, may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. The price including supplementary revision service is \$2.00 domestic; \$2.75 foreign.

¹¹ In accordance with the present policy, ceiling and visibility minimums for approaches are being revised for all airports. Such minimums are based on obstruction clearance criteria and are the lowest minimums which can be used by anyone. Ultimately all airports will have the revised minimums in effect. During the interim period minimums established under the old policy will exist at some airports. Authorization to use lower minimums may be granted for these airports.

of an authorization is subject to the following conditions:

(a) *Application.*

(1) Application will be made on Form ACA-400, Application for Certificate of Waiver. The application, in triplicate, will be submitted to any local Bureau of Flight Standards District Office.

(2) Arrange with Bureau of Flight Standards District Office for inspection of the aircraft equipment and instrument competency flight test for each pilot in command who will operate the aircraft under the lower ceiling and visibility minimums.

(b) *Issuance requirements.* The authorization for lower minimums may be issued to the owner of the aircraft, the operator, individual pilot, or pilots employed by the owner or operator, upon compliance with the following:

(1) *Aircraft.* Aircraft must be equipped with approved type radio equipment appropriate for the types of approaches requested.

(2) *Pilots.* Each pilot-in-command will be properly certificated, hold a currently valid instrument rating, and demonstrate to an inspector his competency to execute safely the approach procedures for each type of approach to the minimums requested. This flight test will be conducted by an inspector and will include pertinent items of the standard instrument rating test on the systems to be used.

(3) *Aircraft more than 12,500 pounds.* When aircraft of more than 12,500 pounds are used, each pilot-in-command and copilot will be required to successfully complete an equipment check to determine his familiarity with the aircraft. The equipment check is to be conducted by a representative of the Administrator, and based on the aircraft manufacturer's specifications.

(4) *Pilot training program.* The applicant should provide a pilot training program which should include training on instrument approach procedures, air traffic control procedures, and other subjects deemed necessary by the inspector to assure continuing proficiency on the types of instrument approaches involved; and at least two instrument approaches, actual or hooded flight, every 30-day period on each type of approach for which authority is requested.

Approaches made to the minimums authorized during the course of regular trips can be counted toward meeting these requirements.

(c) *Operational requirements.*

(1) Instrument approach may not be conducted below the minimums established for air carrier use, and never lower than the minimums to which the pilots have demonstrated their competency.

(2) Current information on scheduled air carrier minimums for the airports into which operations are to be conducted are to be readily available in the cockpit at all times during flight.

(3) Each pilot-in-command is expected to successfully complete requalifying instrument competency checks within 6 months prior to exercising the authority for lower minimums. The recheck is to be conducted by a representative of the Administrator. When aircraft of over 12,500 pounds are utilized, each pilot in command and copilot is expected to successfully complete an equipment check each 6 months prior to exercising authority for lower minimums.

(4) There is expected to be available in the cockpit at all times during flight, current flight information data, such as Radio Facility Guide, Airman's Guide, Approach Procedures, and maps.

(5) Special provisions applicable to the type of operation and aircraft equipment may be entered on and become a part of the authorization. These may include any or all, but are not limited to, those listed in appendix C.

(d) *Duration.*

(1) The authorization is valid for a period of 12 months, but may be surrendered by the holder or terminated by the Administrator at any time.

(2) Failure to comply with any of the conditions under section 60.46-1 (b) and (c), or the Special Provisions appended to the authorization, is considered sufficient grounds for terminating the authorization for lower minimums.

(e) *Reissuance.*

(1) The authorization may be reissued for a period of 12 months, upon application.

(2) Requirements for reissuance are identical to those for original issuance.

60.47-1 *Route of flight and communications procedures (FAA policies which apply to sec. 60.47).*

(a) *Off-airway operation.* If a flight is to be conducted over an off-airway route which joins or crosses federal airways, or terminates within federal airways, the route of flight should be indicated, and check points within control zones or areas over which the flight will pass are to be selected. The check points selected are to be points over which the position of the aircraft can be accurately determined or regularly designated reporting points.

(b) *Change of flight plan.* Any change of altitude or route of flight from that specified in the traffic clearance, should be reported to the air traffic control center or flight advisory area before the change is made. A change of flight plan should be reported and approval received before the change is made while operating within a control area; or, if outside of control area, prior to entering a control area.

60.49-1 *Two-way radio failure procedures (FAA policies which apply to sec. 60.49 (b)).*

(a) *General.* In the event of two-way radio communication failure, air traffic control will be accomplished in accordance with the following procedures.

(b) *En route procedure.* When the aircraft is proceeding in accordance with the latest traffic clearance but the pilot has not received and acknowledged a clearance for an instrument approach, the following procedures apply:

(1) If the pilot has received and acknowledged a clearance to the destination airport or the radio facility serving that airport, he will continue flight at the altitude(s) last assigned by Air Traffic Control, or the minimum instrument altitude,¹² whichever is higher, to the radio facility serving the destination airport;

(2) If the pilot has received and acknowledged a clearance to an en route point other than the destination airport or the radio facility serving that airport and—

¹² The minimum instrument altitude referred to is the minimum en route IFR altitude established in Part 610 of the Regulations of the Administrator for that portion of the route over which the operation is conducted, regardless of the direction of flight. If deviation from the altitude assigned by Air Traffic Control is necessary in order to comply with a higher minimum instrument altitude, any subsequent descent required by a lower minimum instrument altitude shall not be made below the altitude last assigned by Air Traffic Control.

(i) Holding instructions for the en route point have not been received, he will continue flight at the altitude(s) last assigned by Air Traffic Control or the minimum instrument altitude,¹² whichever is higher, to the radio facility serving the destination airport; or

(ii) Holding instructions for the en route point and expected approach time for the airport of destination have been received, the pilot will comply with such instructions and continue flight to arrive at the radio facility serving the destination airport at the expected approach time last received and acknowledged, maintaining the last assigned altitude or the minimum instrument altitude,¹² whichever is higher; or

(iii) Holding instructions for the en route point have been received but no expected approach time for the airport of destination has been received, the pilot will comply with such instructions until the time Air Traffic Control has specified that further clearance may be expected. He shall then continue flight to the radio facility serving the destination airport maintaining the last assigned altitude or the minimum instrument altitude¹² whichever is higher.

Example: A flight is cruising at 8,000 feet (last assigned altitude) on an IFR flight plan when radio failure occurs. After passing the next fix, the minimum en route altitude is 10,000 feet and climb is made to that altitude. On the last leg of the flight the minimum en route altitude is 3,500 feet. The flight descends back to 8,000 feet after passing the fix defining the termination of the 10,000-foot minimum en route altitude segment since the last assigned altitude (8,000 feet) is higher than the MEA (3,500 feet).

(3) If holding is necessary at the radio facility serving the destination airport and no holding clearance has been received and acknowledged:

(i) Holding will be accomplished on the side of the final approach course on which the procedure turn is prescribed; or

(ii) Where approved military jet penetration procedures have been published for the airport of destination, holding by military jet aircraft will be accomplished at the last assigned

altitude or flight level in accordance with the holding procedure depicted on the jet approach and landing chart for that airport.

NOTE: Detailed approach and landing procedures, approved for military jet aircraft, are published in the U. S. Air Force-U. S. Navy "Flight Information Publication—Terminal—High Altitude" by the Aeronautical Chart and Information Center, St. Louis, Missouri.

(c) *Instrument letdown.*

(1) If a clearance for an approach has not been received and acknowledged, descent from the altitude maintained to the radio facility serving the destination airport will start at the expected approach time last received and acknowledged, or if no expected approach time was received and acknowledged, descent will be started at the estimated time of arrival indicated by the elapsed time specified in the flight time or as soon as possible thereafter. A full approved instrument approach procedure will be executed unless VFR conditions are encountered and the pilot elects to continue descent and approach in accordance with VFR.

(2) If a clearance for an approach at the airport of intended landing has been received and acknowledged, comply with the clearance or other instructions¹³ and make normal descent for landing.

(3) *Shuttle.*

(i) Descent to the appropriate altitude for the execution of the instrument approach on the radio facility serving the destination airport will be accomplished by a holding pattern on the side of the final approach course on which the procedure turn is prescribed; or

(ii) Where approved military jet penetration procedures have been published for the airport of destination, military jet aircraft will descend to initial penetration altitude or flight level while executing the holding procedure depicted on the jet approach and landing chart for that airport.

(Published in 22 F. R. 9046, Nov. 14, 1957, effective Dec. 11, 1957; as amended in 22 F. R. 10304, Dec. 20, 1957, effective Dec. 20, 1957; amended in 24 F. R. 6388, Aug. 8, 1959, effective Aug. 8, 1959.)

¹² See footnote on page 76.

¹³ Air Traffic Control may issue appropriate instructions by means of "blind" transmissions on radio frequencies directly available or may authorize "blind" transmissions of appropriate instructions over air carrier radio facilities (for air carrier aircraft), and/or over suitable radio range facilities. Instructions should not be broadcast unless authorized by Air Traffic Control.

Appendix A

Bureau of Flight Standards Field Offices

Region 1

FAA Regional Office: New York International Airport
Jamaica, Long Island, N.Y.
Telephone: OLYMPIA 9-7000

No.	City	Address	Telephone
GENERAL AVIATION DISTRICT OFFICES			
1	Albany, N.Y.	Albany Airport, Watervliet P.O. Box 577, Latham, N.Y.	UNion (Colonie) 9-7411.
2	Washington, D.C.	West Lab, Public Roads Building, Rm. 157, Washington National Airport, Washington 1, D.C.	MEtropolitan 8-0979.
3	Allentown, Pa.	Allentown-Bethlehem-Easton Airport, Allentown, Pa.	COngress (Catasauqua) 4-2431, 4-8321.
4	Charleston, W. Va.	P.O. Box 5275, Capitol Station, Kanowha County Airport, Charleston 1, W. Va.	DIckens 3-8161.
5	Cincinnati, Ohio	Lunken Airport, Administration Building, Cincinnati 26, Ohio.	EAst 1-7171.
6	Cleveland, Ohio	Cleveland-Hopkins Airport, S-21, Cleveland 35, Ohio.	WInton 1-3030.
7	Columbus, Ohio	Box 214, Administration Building, Port Columbus Airport, 4600 E. 17th Ave., Columbus 19, Ohio.	BElmont 7-3741.
9	Philadelphia, Pa.	Administration Building, North Philadelphia Airport, 1st Floor, Philadelphia 36, Pa.	ORchard 3-0250.
10	Harrisburg, Pa.	Harrisburg-York State Airport, P.O. Box 508, New Cumberland, Pa.	CEdar 4-0193.
11	Lindenhurst, N.Y.	Zahns Airport, North Wellwood Ave., Lindenhurst, N.Y.	TUrner 8-1440.
12	Louisville, Ky.	Administration Building, Bowman Field, Louisville 5, Ky.	GLendale 8-1314.
13	Norwood, Mass.	Municipal Airport, Norwood, Mass.	NORwood 7-2438.
14	Pittsburgh, Pa.	Allegheny County Airport, Dravosburg, Pa.	HOmestead 1-2726, 1-7800.
15	Portland, Me.	Municipal Airport, Portland, Me.	SPruce 4-1452.
16	Richmond, Va.	Byrd Field, Sandston, Va.	REpublic 7-8256, 7-0891.
17	Rochester, N.Y.	Municipal Airport, Rochester, N.Y.	BEverly 5-3438.
18	Teterboro, N.J.	Teterboro Air Terminal, Teterboro, N.J.	ATlas 8-1745, 6, 7.
19	Westfield, Mass.	Barnes-Westfield Municipal Airport, P.O. Box 544, 1st Floor, Terminal Building, Westfield, Mass.	LOgan 8-8691.
21	Baltimore, Md.	Pier "C" Terminal Building, Friendship International Airport, Baltimore, Md.	SOuthfield 1-2610.
AIR CARRIER DISTRICT OFFICES			
31	Jamaica (Idlewild), N.Y.	Federal Bldg., N.Y., International Airport, Jamaica 30, Long Island, N.Y.	OLympia 9-7000, Ext. 423, 424, 309.
32	Utica, N.Y.	Oneida County Airport, R.F.D., Oriskany, N.Y.	REdwood 6-6981.
33	Boston, Mass.	161 Prescott St., East Boston 28, Mass.	LOgan 7-1224.
34	Flushing (LaGuardia), N.Y.	TWA Hangar No. 4, Box 575, New York. Airport Station, Flushing, 71, N.Y.	HAvenmeyer 6-9729.
35	Newark, N.J.	Room 221 Airmail and Express Terminal, Newark Airport, Newark 5, N.J.	MIttchell 2-3730
37	Washington, D.C.	West Lab., Public Roads Bldg., Washington National Airport, Washington 1, D.C.	NAtional 8-1076, 8-0774; REpublic 7-6131, Ext 296, 297.
38	Pittsburgh, Pa.	Room M-165, Administration Building, Greater Pittsburgh Airport, Pittsburgh, Pa.	SPaulding 1-2868.
39	Tulsa, Okla.	7809 E. Admiral Pl., Tulsa, Okla.	TEmples 5-2378.

No.	City	Address	Telephone
ENGINEERING AND MANUFACTURING DISTRICT OFFICES			
41	Stratford, Conn.-----	Sikorsky Aircraft Div., Stratford, Conn.-----	DRexel 8-6361, Ext. 437-439.
42	Windsor, Conn.-----	181 Broad St., Windsor, Conn.-----	MURdock 8-9902.
43	Williamsport, Pa.-----	Lycorning Div., AVCO Mfg. Corp., Box 928, Williamsport, Pa.	Williamsport 2-8241.
44	Hagerstown, Md.-----	P.O. Box 1036, Hagerstown, Md.-----	REgent 9-3295.
45	Teterboro, N.J.-----	Teterboro Airport, Control, Tower, 4th Floor, Teter- boro, N.J.	ATlas 8-4180.
46	Bethpage, L.I., N.Y.-----	Grumman Aircraft Engineering Corp., Plant 1, Bethpage Long Island, N.Y.	WElls 8-2277; OLYmpia 8-5300, Ext. 3640.
48	Vandalia, Ohio.-----	P.O. Box 385, Dayton Municipal Airport, Vandalia, Ohio.	TWinoaks 8-6931.
City		Address	Telephone
FACILITIES FLIGHT CHECK DISTRICT OFFICES			
Bedford, Mass.-----		P.O. Box 271, Lexington 73, Mass.-----	CRestview 4-6247, 4-9375.
Columbus, Ohio.-----		Room P-10 New Terminal Area, Port Columbus Air- port, Columbus, Ohio.	BElmont 5-7106, 1-3045.
Richmond, Va.-----		Room 202 Municipal Building, Byrd Field, P.O. Box 146, Sandston, Va.	REpublic 7-4829, 7-1845.
New York, N.Y.-----		Seaboard and Western Building No. 178, New York International Airport, Jamaica, Long Island, N.Y.	OLympia 9-7000; Ext. 437, 438, 328, 329, 567, 568.
FAA AIRCRAFT MAINTENANCE BASES			
Columbus, Ohio.-----		Lane Memorial Hangar, Port Columbus, Columbus, Ohio.	OLympia 6-5548.
Jamaica, N.Y.-----		New York International Airport, Hangar 11, Jamaica, Long Island, N.Y.	

Region 2

FAA Regional Office: P.O. Box 1689, Ft. Worth 1, Tex.

Telephone: MARket 6-8221

No.	City	Address	Telephone
GENERAL AVIATION DISTRICT OFFICES			
1	Amarillo, Tex.....	P.O. Box 2306 (Tradewind Airport), Amarillo, Tex...	DRake 6-9481.
2	Atlanta, Ga.....	Federal Aviation Bldg., Fulton Co. Airport, Atlanta 11, Ga.	DIamond 4-8033, 4-3034.
3	Birmingham, Ala.....	Municipal Airport, Birmingham, Ala.....	LYric 2-6371.
4	Brownsville, Tex.....	Admin. Bldg., Rio Grande Valley International Airport, Brownsville, Tex.	LIncoln 2-5681.
5	Charlotte, N.C.....	Municipal Airport Branch, P.O. Charlotte, N.C.....	EXpress 2-3214.
6	Columbia, S.C.....	P.O. Box 368, Columbia Airport, W. Columbia, S.C.....	SWift 4-3789.
7	Dallas, Tex.....	c/o Southwest Airmotive, Inc., Love Field, 7515 Lemmon Ave., Dallas 9, Tex.	FLeetwood 2-8453.
8	Fort Worth, Tex.....	P.O. Box 1689, Meacham Field, Fort Worth, Tex...	MARket 4-1184
9	Houston, Tex.....	P.O. Box 60158, International Airport, Houston 17, Tex.	OLive 4-6557.
10	Jackson, Miss.....	P.O. Box 1727 (Woodrow Wilson Ave. West), Jackson 5, Miss.	FLeetwood 3-4429.
11	Jacksonville, Fla.....	P.O. Box 1504, Jacksonville 1, Fla.....	ELgin 4-7111.
12	Little Rock, Ark.....	Terminal Annex Bldg., Adams Field, Little Rock, Ark.	FRanklin 2-5930.
13	Miami, Fla.....	P.O. Box 59-2014, AMF Branch, Miami 59, Fla...	NEwton 4-4511.
14	Midland, Tex.....	(Midland Air Terminal), P.O. Box 198, Terminal, Tex.	MUtual 2-3338.
15	Nashville, Tenn.....	Berry Field, Nashville 10, Tenn.....	ALpine 5-7791.
16	New Orleans, La.....	(New Orleans Airport), P.O. Box 26428, CHEF Menteur Br., New Orleans, La.	WHitehall 4-6706.
17	Oklahoma City, Okla....	Tulakes Airport, Terminal Bldg., Bethany, Okla....	WHitney 9-5684.
18	Raleigh, N.C.....	Raleigh Durham Airport, P.O. Box 1858, Admin. Bldg., Raleigh, N.C.	TEmples 2-6160.
19	San Antonio, Tex.....	371 N. Terminal Dr., Rm. 2, International Airport, San Antonio 9, Tex.	TAylor 6-2355.
20	Shreveport, La.....	Downtown Airport, Shreveport 194, La.....	2-6919.
21	St. Petersburg, Fla.....	Pinellas County International Airport, St. Petersburg, Fla.	HEmlock 6-9072.
22	Tulsa, Okla.....	Administration Building, Room 107, Municipal Airport, Tulsa, Okla.	TEmples 5-4429.
23	Memphis, Tenn.....	(Municipal Airport), P.O. Box 7097, Memphis 18, Tenn.	WHitehall 8-3919.
AIR CARRIER DISTRICT OFFICES			
31	Atlanta, Ga.....	Municipal Airport, P.O. Box 738, Atlanta 20, Ga...	POplar 7-1512.
32	Dallas, Tex.....	c/o Southwest Airmotive, Inc., 7515 Lemmon Ave., Love Field, Dallas 9, Tex.	FLeetwood 7-8297.
33	Ft. Worth, Tex.....	P.O. Box 2506, Amon Carter Field, Ft. Worth, Tex...	ATlas 4-6775.
34	Houston, Tex.....	8345 Telephone Rd., P.O. Box 60158, International Airport, Houston, Tex.	OLive 4-6557.
35	Nashville, Tenn.....	Berry Field, Nashville 10, Tenn.....	ALpine 5-7791.
36	Miami, Fla.....	P.O. Box 59-2014, AMF Branch, International Airport, Miami 59, Fla.	NEwton 4-4511.
37	San Antonio, Tex.....	371 N. Terminal Drive, Room 3, International Airport, San Antonio 12, Tex.	TAylor 4-6373.
38	Winston-Salem, N.C.....	Terminal Bldg., Smith-Reynolds Airport, Winston-Salem, N.C.	PArk 5-0601, 2.
40	San Juan, P.R.....	Puerto Rico International Airport, San Juan, P.R...	9-0374.

No.	City	Address	Telephone
ENGINEERING AND MANUFACTURING DISTRICT OFFICES			
41	Bethany, Okla.	Aero Design & Engr. Co., P.O. Box 118, Tulakes Airport, Bethany, Okla.	WHitney 9-5404; WHitney 9-5674, Ext. 213.
42	Ft. Worth 1, Tex.	c/o Bell Helicopter Corp., P.O. Box 482, Ft. Worth 1, Tex.	ATlas 4-2625; ATlas 4-3434, Ext. 521.
43	Miami 59, Fla.	P.O. Box 59-2014, AMF Branch, Miami 59, Fla.	NEwton 4-4511.
44	Dallas, Tex. (Garland) ..	P.O. Box 6191 c/o TEMCO, Garland Plant, Dallas, Tex.	BRoadway 6-6848, Ext. 3247.
45	Marietta, Ga.	c/o Lockheed Aircraft Corp., Ga. Div., Marietta 12, Ga.	MArietta 8-1712; JA 3-1411, Ext. 4245.
46	San Antonio, Tex.	371 N. Terminal Dr., Room 1, San Antonio International Airport, San Antonio, Tex.	TAylor 6-2355

City	Address	Telephone
FACILITIES FLIGHT CHECK DISTRICT OFFICES		
Fort Worth, Tex.	P.O. Box 1689, Fort Worth, Tex.	MArket 4-7263, MArket 6-1191.
Atlanta, Ga.	3999 Gordon Road, S.W., Atlanta, Ga.	DIamond 4-3220, DIamond 4-3221.
Orlando, Fla.	P.O. Box 672, Orlando, Fla.	GArden 5-5465.

FAA AIRCRAFT MAINTENANCE BASES		
Atlanta, Ga.	Fulton County Airport, 4165 Gordon Road, S.W., Atlanta, Ga.	PLaza 3-2171.
Fort Worth, Tex.	FAA Hangar Meacham Field, Fort Worth, Tex.	MArket 4-8708.

Region 3

FAA Regional Office: 4825 Troost Ave., Kansas City 10, Mo.

Telephone: PLaza 3-4900

No.	City	Address	Telephone
GENERAL AVIATION DISTRICT OFFICES			
1	Bismarck, N. Dak.	Box 805, Municipal Airport, Bismarck, N. Dak.	Capitol 3-3414.
2	Cedar Rapids, Iowa	Administration Building, Municipal Airport, P.O. Box 1907, Cedar Rapids, Iowa.	EMpire 3-5872.
3	Chicago, Ill.	P.O. Box 337, DuPage Co. Airport, West Chicago, Ill.	Area Code 312, JUnio 4-4490.
4	Des Moines, Iowa	Air National Guard, Administration Building, 4200 S.W. 34th St., Des Moines, Iowa.	CHerry 4-6133.
5	Detroit, Mich.	Old Administration Building, Metropolitan Airport, Mich.	WHitney 1-1000.
6	Dodge City, Kans.	Municipal Airport, P.O. Box 550, Dodge City, Kans.	HU 3-4021
7	Fargo, N. Dak.	Administration Building, Hector Field, P.O. Box 1756, Fargo, N. Dak.	AD 5-5032
8	Grand Rapids, Mich.	Kent Co. Airport, Grand Rapids 8, Mich.	CHerry 1-0155
9	Sioux Falls, S. Dak.	Foss Field Tower Building, Sioux Falls, S. Dak.	ED 8-2381
10	Indianapolis, Ind.	Administration Building, Weir Cook Municipal Airport, Indianapolis, Ind.	CHapel 4-2473
11	Kansas City, Kans.	Second Floor Administration Building, Fairfax Airport, Kansas City, Kans.	ATwater 1-3491
12	Lincoln, Nebr.	P.O. Box 1748 Municipal Airport (Union), Lincoln 1, Nebr.	INGersoll 6-5164.
13	Milwaukee, Wis.	General Mitchell Field Milwaukee 7, Wis.	SHeridan 4-9202.
14	Minneapolis, Minn.	2721 E. 42d St., Minneapolis, Minn.	PArkway 9-7301.
15	North Platte, Nebr.	128 Administration Building, Municipal Airport, P.O. Box 581, North Platte, Nebr.	LEnox 2-4533.
16	Rapid City, S. Dak.	P.O. Box 27, Rapid City, S. Dak.	FIllmore 2-3738
17	St. Louis, Mo.	Box 6127, St. Louis-Lambert Airport, St. Louis 21, Mo.	PERshing 1-0930
18	South Bend, Ind.	St. Joseph Co. Airport, South Bend, Ind.	CEntal 2-5843
19	Springfield, Ill.	Box 197, Capital Airport, Springfield, Ill.	LA 3-3657
20	Springfield, Mo.	Municipal Airport, Rt. 6, Box 502A, Springfield, Mo.	UNiversity 4-9933
21	Wausau, Wis.	Municipal Airport, Wausau, Wis.	3901
22	Wichita, Kans.	Room 210, Terminal Building, Municipal Airport, Wichita 9, Kans.	WHitehall 3-3244
AIR CARRIER DISTRICT OFFICES			
31	Chicago, Ill.	5448, S. Kildare Ave., Chicago 32, Ill.	LUdlow 1-2626, 7, 8, 9.
32	Indianapolis, Ind.	Administration Bldg., Weir Cook Municipal Airport, Indianapolis 47, Ind.	CHapel 1-9296.
33	Kansas City, Kans.	Third Floor Administration Building, Fairfax Airport, Kansas City, Kans.	ATwater 1-3493.
34	Minneapolis, Minn.	6301-34th Ave., South, Wold Chamberlin Field, Box 1, Minneapolis 50, Minn.	PArkway 1-1653.
35	St. Louis, Mo.	P.O. Box 6127, Lambert Field, St. Louis 34, Mo.	PERshing 1-6800.
36	Ypsilanti, Mich.	Terminal Bldg., Willow Run Airport, Ypsilanti, Mich.	HU 2-7725.
ENGINEERING AND MANUFACTURING DISTRICT OFFICES			
41	Muskegon, Mich.	P.O. Box 538, Muskegon, Mich.	PArkway 2-6370.
42	Indianapolis, Ind.	c/o Allison Division GMC: Plant 5, P.O. Box 894, Indianapolis 6, Ind.	CHapel 1-2134.
43	Wichita 9, Kans.	Third Floor, Control Tower Bldg., Municipal Airport Wichita 9, Kans.	WHitehall 3-1225.

City	Address	Telephone
FACILITIES FLIGHT CHECK DISTRICT OFFICES		
Minneapolis, Minn.-----	Fleming Field, South St. Paul, Minn.-----	GLenview 1-2281.
Kansas City, Kans.-----	450 E. Donovan Rd., Kansas City 15, Kans.-----	ATwater 1-0440, 1-3025.
Battle Creek, Mich.-----	P.O. Box 1110 Battle Creek, Mich.-----	WOodward 3-1513.
FAA AIRCRAFT MAINTENANCE BASES		
Kansas City, Kans.-----	410 E. Donovan Rd., Fairfax Airport, Kansas City 15, Kans.	DRexel 1-2877.
South St. Paul, Minn.-----	c/o Facilities Flight Check District Office No. 2, Fleming Field, South St. Paul, Minn.	

REGION 4

FAA Regional Office: 5651 W. Manchester Ave., Los Angeles, Calif.

Mailing address: P.O. Box 90007, Airport Station, Los Angeles 45, Calif.

Telephone: ORchard 2-5041

No.	City	Address	Telephone
GENERAL AVIATION DISTRICT OFFICES			
1	Los Angeles, Calif.	3308 Airport Ave., Santa Monica, Calif.	EXmont 1-5753.
2	Oakland, Calif.	Municipal Airport, Box 2397, Oakland, Calif.	NEptune 8-5711.
3	Seattle, Wash.	Box 18, Boeing Field, Seattle, Wash.	Parkway 3-5600.
4	Portland, Oreg.	5410 NE. Marine Dr., Portland, Oreg.	ATlantic 8-5846.
5	Denver, Colo.	District Office Bldg., Stapleton Airfield, Denver 7, Colo.	DExter 3-5473.
6	Phoenix, Ariz.	2800 Sky Harbor Blvd., Sky Harbor Airport, Phoenix, Ariz.	BRidge 5-6276
7	Salt Lake City, Utah.	Municipal Airport No. 1, Salt Lake City, Utah.	ELgin 5-2951.
8	Boise, Idaho.	1412 Idaho St., Boise, Idaho.	2-2861.
9	Albuquerque, N. Mex.	225 San Pedro Dr. NE., Albuquerque, N. Mex.	AMherst 5-1539.
10	Helena, Mont.	Municipal Airport, Box 1167, Helena, Mont.	HIckory 2-4230.
11	Reno, Nev.	Room 9, Xavier Bldg., Box 499, 210 W. 2d St., Reno, Nev.	FAirview 2-3790.
12	Cheyenne, Wyo.	Municipal Airport, Box 2166, 4101 Evans Ave., Cheyenne, Wyo.	6-6037.
13	Van Nuys, Calif.	Van Nuys Airport, 16700 Roscoe Blvd., Van Nuys, Calif.	STate 5-8624.
14	Spokane, Wash.	Box 247, Parkwater Station, Spokane, Wash.	KEystone 5-1601.
15	Fresno, Calif.	5444 Perimeter Rd., Fresno 27, Calif.	CLinton 1-6056.
16	San Diego, Calif.	3110 Goddard Ways, Lindbergh Field, San Diego 1, Calif.	CYpress 5-3112.
17	Sacramento, Calif.	Municipal Airport, Sacramento, Calif.	GArden 8-9614.
18	Ontario, Calif.	Admin. Bldg., International Airport, Ontario, Calif.	YUkon 4-2411.
19	Yakima, Wash.	2300 W. Washington Ave., Yakima, Wash.	GLencourt 2-8523.
20	Long Beach, Calif.	Admin. Bldg., Municipal Airport, Long Beach, Calif.	HArrison 1-8287.
21	Palo Alto, Calif.	1901 Embarcadero Rd., Palo Alto, Calif.	DAvenport 6-5880.
22	Medford, Oreg.	Municipal Airport, Box 832, Medford, Oreg.	SPring 3-4033.
23	Billings, Mont.	Municipal Airport, Box 2078, Billings, Mont.	CHerry 5-7910.
AIR CARRIER DISTRICT OFFICES			
31	Los Angeles, Calif.	9205 Sepulveda Blvd., Los Angeles 45, Calif.	ORchard 1-7543, 1-7544, ORegon 8-7875, 8-7876.
32	Burbank, Calif.	Hangar No. 4, Lockheed Air Terminal, 2761 N. Hollywood Way, Burbank, Calif.	TRiangle 7-3317, THornwall 8-0845.
33	San Francisco, Calif.	Rm. 404 Main Terminal Bldg., San Francisco International Airport, San Francisco 28, Calif.	JUmo 8-3827.
34	Denver, Colo.	FAA District Office Bldg., Stapleton Field, Denver 7, Colo.	DExter 3-5475.
35	Seattle, Wash.	P.O. Box 17, FAA Bldg., Boeing Field, Seattle, Wash.	PArk 3-5604.

No.	City	Address	Telephone
ENGINEERING AND MANUFACTURING DISTRICT OFFICES			
41	San Diego, Calif.-----	c/o Convair, Bldg. 33, Lindbergh Field, San Diego 12, Calif.	CYpress 6-6611, Ext. 669 or 245.
42	Santa Monica, Calif.-----	c/o Douglas Aircraft Co., Inc., 3009 Ocean Park Blvd., Santa Monica, Calif.	EXbrook 6-8719, UPTon 0-1211, Ext. 3821.
43	Burbank, Calif.-----	c/o Lockheed Aircraft Corp., Plant A-1, Bldg. 19, Burbank, Calif.	TRiangle 7-3614, TRiangle 7-2711, Ext. 1324.
46	Seattle, Wash.-----	Box 17, Boeing Field, Seattle 8, Wash.	PArkway 3-2564
48	Long Beach, Calif.-----	c/o Douglas Aircraft Co., Inc., Location C-8, Bldg. 83, 3855 Lakewood Blvd., Long Beach, Calif.	HArrison 1-2494.
	City	Address	Telephone
FACILITIES FLIGHT CHECK DISTRICT OFFICES			
	Santa Monica, Calif.-----	Room 202, 710 Wilshire Blvd., Santa Monica, Calif.-----	EXbrook 3-0276.
	Oakland, Calif.-----	Hangar 27, c/o Lockheed Aircraft Service, Oakland Municipal Airport, Oakland 14, Calif.	LOckhaven 8-8981.
	Seattle, Wash.-----	P.O. Box 18, Boeing Field Seattle 8, Wash.-----	PArkway 3-8440.
	Spokane, Wash.-----	S. 3905 Davidson Blvd., Spokane 82, Wash.-----	TEmples 8-8092.
	Denver, Colo.-----	FAA District Office Building, Stapleton Airfield, Denver, Colo.	FLorida 5-0765.
	Salt Lake City, Utah.-----	P.O. Box 22, Airport Station, Salt Lake City 16, Utah.-----	EMpire 4-7641.
	Phoenix, Ariz.-----	Sky Harbor Airport, 2800 Sky Harbor Blvd., Phoenix, Ariz.	BRidge 5-6701
FAA AIRCRAFT MAINTENANCE BASES			
	Santa Monica, Calif.-----	FAA Hangar, 3219 Airport Ave., Santa Monica Airport, Santa Monica, Calif.	EXmont 8-5727.
	Salt Lake City, Utah.-----	P.O. Box 1, Airport Station, Salt Lake City, Utah.-----	EMpire 4-1126.

REGION 5

FAA Regional Office: P.O. Box 440, Anchorage, Alaska

Telephone: BRoadway 7-1401

No.	City	Address	Telephone
GENERAL AVIATION DISTRICT OFFICES			
1	Anchorage, Alaska-----	Communications Building, Merrill Field, P.O. Box 440, Anchorage, Alaska.	BR 7-1401, Ext. 215, 213, or BR 2-4611.
AIR CARRIER DISTRICT OFFICES			
31	Anchorage, Alaska-----	P.N.A. Building, International Airport, P.O. Box 6261, Anchorage, Alaska.	BR 7-1401, Ext. 218 or BR 4-1965.
COMBINED AIR CARRIER AND GENERAL SAFETY DISTRICT OFFICES			
2	Fairbanks, Alaska-----	Arctic Airways Hangar, International Airport, Fairbanks, Alaska.	GL 6-5122, GL 6-7901, or GL 6-7902. 6-3755 (General), 6-3700 (Air Carrier).
3	Juneau, Alaska-----	Juneau Airport, P.O. Box 2449, Juneau, Alaska-----	
FAA AIRCRAFT MAINTENANCE BASE			
	Anchorage, Alaska-----	International Airport, P.O. Box 440, Anchorage, Alaska.	MAin 2-6001.

REGION 6

FAA Regional Office: P.O. Box 4009, 645 Halekauwila St., Honolulu 12, Hawaii

Telephone: 58831 LOC-560

No.	City	Address	Telephone
GENERAL AVIATION DISTRICT OFFICES			
1	Honolulu, Hawaii-----	P.O. Box 4009, Honolulu Airport, Honolulu 12, Hawaii.	813-305.
AIR CARRIER DISTRICT OFFICES			
31	Honolulu, Hawaii-----	P.O. Box 4009, Honolulu Airport, Honolulu 12, Hawaii.	813-305.
FAA AIRCRAFT MAINTENANCE BASE			
	Honolulu, Hawaii-----	FAA Regional Warehouse, P.O. Box 4009, Honolulu, Hawaii.	58831.
Location		Mail	Telephone
WASHINGTON AIRCRAFT FIELD OFFICE			
Washington, D.C.-----	Washington Aircraft Field Office, Hangar 6, Washington National Airport, Washington, D.C.		ST 3-9200, Ext. 3600; Tielin Code 1222 or RE 7-613. Ext. 252.
FACILITIES FLIGHT CHECK FIELD OFFICES			
Washington, D.C.-----	Intermediate Altitude Inspection and Procedures Field Office, FAA, Hangar 8, Room 206, Washington National Airport, Washington, D.C.		ST 3-2100, Ext. 674.
Oklahoma City, Okla.---	Intermediate Altitude Inspection and Procedures Field Office, FAA Aeronautical Center, P.O. Box 1082, Oklahoma City, Okla.		MUtual 1-2311, Ext. 512.
Oklahoma City, Okla.---	Intermediate Altitude Operations Office, FAA Aeronautical Center, P.O. Box 1082, Oklahoma City, Okla.		MUtual 1-2311, Ext. 511.
Los Angeles 64, Calif.---	Intermediate Altitude Inspection and Procedures Field Office, Federal Aviation Agency, 11624 West Pico Blvd., Los Angeles, Calif.		GRanite 8-0567.
Oklahoma City, Okla.---	High Altitude Inspection and Procedures Field Office, Flight Inspection, FAA Aeronautical Center, P.O. Box 1082, Oklahoma City, Okla.		MUtual 1-2311, Ext. 527.

Appendix B

Agricultural and Industrial Operations

1. Dusting.
2. Spraying.
3. Seeding.
4. Fertilizing.
5. Defoliation.
6. Grasshopper baiting.
7. Spraying towns—pest control.
8. Agitating cherry trees.
9. Antifrost agitation.
10. Knocking ripe fruit from trees.
11. Checking fallow land.
12. Chasing birds from rice fields.
13. Checking crops.
14. Powerline patrol.
15. Pipeline patrol.
16. Telephone line patrol.
17. Fence patrol.
18. Border patrol.
19. Highway patrol.
20. Forestry patrol.
21. Truckline patrol.
22. Log patrol.
23. Game and fish patrol.
24. Game survey.
25. Hunting predatory animals.
26. Hunting eagles.
27. Hunting lost persons.
28. Herding wild game.
29. Herding livestock.
30. Checking livestock.
31. Mapping and survey.
32. Aerial photography.
33. Sign towing (see CAM 43).
34. Glider towing (see CAM 43).
35. Skywriting.
36. Aerial advertising (neon lights).
37. Aerial advertising (loudspeaker).
38. Dropping leaflets.
39. Operation of moored balloons (see CAM 48).
40. Sailplane and water-ski towing (see CAM 43).
41. Transportation of explosives (see CAM 49).
42. Transportation of serum and medical supplies.
43. Transportation of fur.
44. Transportation of food in emergency.
45. Transportation of fishing/hunting parties.
46. Transportation of artificial insemination.
47. Transportation of baby chicks.
48. Transportation of feed and equipment.
49. Oil company transportation.
50. Ambulance service.
51. Air police.
52. Oil well service.
53. Mineral prospecting.
54. Oil research (radar-magnetometer).
55. Range survey.
56. Rainmaking.
57. Determining snowfall, high/low water.
58. Spotting schools of fish.
59. Stocking lakes and streams with fish.
60. Dropping beaver and pheasant.
61. Checking windmills/water holes.
62. Locating dam sites and checking irrigation.
63. Forest fire fighting.
64. Appraising and showing farms/ranches.
65. Radio and TV transmitting.
66. Delivery of mail and newspapers.

Appendix C

Special Provisions

Any or all of the following provisions may be made a part of the waiver issued for instrument approach ceiling and visibility minimums lower than those prescribed in Regulations of the Administrator, Part 609.

I. *Navigation and approach information*

(a) It will be the responsibility of the holder of this authorization to obtain from any recognized source all the pertinent information concerning air carrier minimums for all airports at which instrument approaches will be made under the privileges granted by this waiver.

(b) It will be the responsibility of the holder of this waiver to make arrangements through any recognized source that will assure him that all additions, deletions, or amendments to the air carrier minimums will be furnished immediately.

(c) It will be the responsibility of the holder of this waiver to determine that the information referred to in I. (a) and (b) above is readily available in the cockpit at all times during flight.

(d) It will be the responsibility of the holder of this waiver to determine that there is available in the cockpit at all times during flight, current flight information data such as Radio Facility Guide, Airman's Guide, Approach Procedures, maps, etc. These items must be either the official Government publication, or from some recognized and approved source.

(e) (Types of approaches covered by this waiver will be listed.)

II. *Weather minimums*

(a) Authorization is limited to the lowest ceiling and visibility minimums meeting the obstruction clearance criteria, but in no case lower than the minimums to which the pilot has demonstrated competency.

(b) No instrument approach to an airport shall be started where the reported ceiling and/or visibility is below those published in Regulations of the Administrator, Part 609 unless the pilot in command has the latest air carrier information for the airport to which the approach is being made.

III. *ILS minimums*

ILS minimums above apply only when it has been determined that all units of the ILS, both ground and airborne, are fully functioning and only when the landing can be made straight-in on the designated ILS runway following an ILS standard approach procedure for that airport. Circling is permitted only when existing weather is at or above regular minimums. When the use of automatic approach equipment for ILS is desired, the Special Provision should read as follows:

ILS minimums above apply only when it has been determined that all units of the ILS, both ground and airborne, are fully functioning and only when the landing can be made straight-in on the designated ILS runway using the Sperry A-12 automatic approach equipment throughout the ILS standard approach procedure for that airport. Circling approach is permitted only when the existing weather is at or above regular minimums.

IV. *Radio equipment*

No ILS approaches shall be executed unless the airborne equipment is type certificated and has been calibrated within the last 120 days to the standards prescribed by the Radio Technical Committee for Aeronautics. Where instrument approaches are made, using visual courses of VHF range or instrument landing system facilities, descent below the approved

initial approach altitude is not authorized unless the airborne equipment utilized for the reception of navigational signals is equipped with an approved device to automatically indicate failure or malfunctioning of the system.

V. *Pilots and copilots*

This certificate is valid only when the members of the flight crew are properly certificated. Type rating will also be required for the pilot in command of aircraft certificated for a maximum takeoff weight of 12,500 pounds or more. In addition, the pilot in command shall have successfully accomplished an instrument competency check within the preceding 6 months on the same category and class (and type if over 12,500 lbs.) equipment to be flown, using minimums granted in the waiver. In aircraft over 12,500 pounds, when the aircraft specifications require a copilot, both the pilot in command and the copilot shall have accomplished an equipment check on the aircraft being flown.

VI. *Aircraft*

This certificate is valid only for the operation of the following aircraft: (List pertinent information.)

Aircraft make and model.

Registration number.

Registered owner's name and address.

VII. *Weather report*

No instrument approach procedure shall be executed, or landing made, when the latest U. S. Weather Bureau report for that airport indicates the ceiling or visibility is less than that prescribed in Special Provisions.

VIII. *Checklists*

When operating under the terms of this certificate, a cockpit checklist acceptable to the Administrator shall be appropriately used by physical reference by the flight crews on each flight.

IX. *Training*

An adequate training program must be provided by the holder of this certificate of waiver. Such training program must provide for at least two instrument approaches, actual or hooded, every 30-day period on each type of approach approved, using the facilities at and of the airports covered by this authorization. These approaches shall be flown down to the minimums granted in this certificate of waiver. Approaches made to the minimum granted during the course of regular trips can be counted in meeting these minimum training program requirements.

X. *List of pilots*

(Pilots will be listed by name, certificate number, and ratings.)