U. S. DEPARTMENT OF COMMERCE
Sinclair Weeks, Secretary

CIVIL AERONAUTICS ADMINISTRATION
F. B. Lee, Administrator

Air Traffic Rules

April 1955

Civil Aeronautics Manual 60

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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 supersedes: Civil Aeronautics Manual 60, which was last published in August 1, 1950, issue of the Flight Information Manual; Civil Aeronautics Manual 60, Supplement 1, dated June 22, 1950; Supplement 2, dated August 1, 1950 Supplement 3, dated September 5, 1950; Supplement 4, dated September 11, 1950; Supplement 5, dated December 11, 1950; Supplement 6, dated November 30, 1951; and Supplement 7, dated April 1, 1952. 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.

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Air Traffic Rules

General

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

(a) *General.* A Certificate of Waiver or Authorization, Form ACA–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 Aviation Safety Agent:

(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 Aviation Safety Agent. 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, ten 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 ACA–400 (see pages 3 and 4) from the local Aviation Safety 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 Aviation Safety Agent.

(4) Arrange with the local Aviation Safety Agent 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 one 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 agent 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.

60.1–2 *Certificate of Waiver or Authorization for agricultural and industrial operations (CAA policies which apply to sec. 60.1 (b)).* A Certificate of Waiver or Authorization may be issued to operators or individuals engaging in agricultural and industrial operations [2] when such operation involve noncompliance with provisions of this part. Application for a Certificate of Waiver or Authorization is made in accordance with section 60.1–1 (b). A Certificate of Waiver or Authorization issued for an agricultural or industrial operation is subject to provisions appropriate to the type of operation. A Certificate of Waiver or Authorization involving pest control, operations before sunrise and after sunset, photographic flights, hunting of predatory animals, or private pilot spraying and dusting operations, may be issued in accordance with the following:

(a) *Pest control.* Issuance of a Certificate of Waiver or Authorization for pest control operations requiring low flight over cities, towns, settlement, and congested areas is premised primarily on the following:

(1) There is no question as to the airworthiness of 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) A thorough visual inspection of the aircraft, engine, and insecticide apparatus is conducted prior to each day's operation.

(3) A planned course of action is followed with emphasis on available areas for emergency landing.

(4) Pilots used must hold a valid commercial rating, type and/or class ratings appropriate to the aircraft used, and have had at least 100 hours' experience in dusting or spraying.

(5) Application is accompanied by a letter from the mayor, chief of police, or other proper municipal authority, requesting that a waiver be granted.

(b) *Operations before sunrise and after sunset.* The early morning and late evening hours are recognized as being favorable times for conducting certain aerial spraying and dusting activities. The limited useful load of most sprayers and dusters is such that the extra weight imposed by a lighting system may be unwarranted. Issuance of a certificate of waiver or authorization to conduct dusting and spraying operations before official sunrise and after sunset are premised on:

(1) All flights being restricted to the early morning and late evening periods when a prominent unlighted object can be seen for a distance of three miles.

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

(3) Landings and takeoffs not being made at uncontrolled airports without prior consent of the airport manager.

(4) No flights being conducted when other types of operations which require position lights are in progress.

(5) Clearance from air traffic control being obtained before taking off and landing at controlled airports.

(c) *Photographic flights.* A Certificate of Waiver or Authorization to permit aerial photography at low altitudes over cities, towns, settlements, and congested residential areas is issued only when the operation is in the public interest, and the applicant can show that:

(1) The photographic operation cannot be satisfactorily accomplished by the use of a telescopic lens, flying over rivers, harbors, wasteland, or other such areas adjacent to the objective.

(2) There is no question of the airworthiness of the aircraft and no restrictions on the aircraft which does not allow operation in prohibited areas.

[2] See appendix B.

Form ACA-100
(1-42)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

APPLICATION FOR CERTIFICATE OF WAIVER

FORM APPROVED
BUDGET BUREAU NO. 41-R076.4.

APPLICANTS—DO NOT USE THESE SPACES

REGION NO. | DATE

ACTION

☐ APPROVED ☐ DISAPPROVED *(Explain under "Remarks")*

SIGNATURE OF AGENT

To: CIVIL AERONAUTICS ADMINISTRATION.

INSTRUCTIONS

Submit this application in triplicate (3) to your local CAA 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.

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)*	BETWEEN THE HOURS OF—
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

Application for Certificate of Waiver.

Form ACA-400 (1-48)

8. THE AIR MEET WILL BE SPONSORED BY—

9. PERMANENT MAILING ADDRESS	HOUSE NUMBER AND STREET OR ROUTE NUMBER	POST OFFICE	CITY	STATE

10. POLICING (WHAT PROVISION WILL BE MADE FOR POLICING THE MEET?)

11. EMERGENCY FACILITIES

☐ PHYSICIAN ☐ AMBULANCE ☐ FIRE TRUCK ☐ CRASH WAGON

☐ 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 AGENT)

HOUR	DATE	EVENT	PILOT RATING

(If sufficient space is not available, the entire schedule of events may be submitted on separate sheets, in the order and manner indicated above.)

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:

Application for Certificate of Waiver (reverse).

(3) A thorough visual inspection of the aircraft and engine is to be conducted prior to each day's operation.

(4) A planned course of action is to be followed with emphasis on available areas for an emergency landing.

(5) A capable and experienced pilot holding at least a commercial rating is to be utilized.

(d) *Hunting of predatory animals.* A Certificate of Waiver or Authorization to permit hunting of predatory animals is issued only when the operation is in the public interest and is to be conducted by competent and experienced pilots.

(e) *Private pilot privileges.* A Certificate of Waiver or Authorization to permit dusting and spraying by a private pilot is issued when:

(1) The purpose is to spray or dust property owned or leased by the private pilot.

(2) The private pilot submits a written statement from the owner of the property other than his own, which contains a description of the area to be treated and a statement that the pilot or other persons are to receive no remuneration or compensation for the private pilot's services.

60.1–3 *Certificate of waiver for an air show, meet, race, etc. (CAA 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 non-participating 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 CAA which indicates the names of the performers and the minimum distances authorized, or it may be a letter from an agent 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 agent before they may be performed.

(b) Participants in a specific act shall, if required by the local agent, 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 CAA Airway Communications 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 agent 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 agent may deem necessary in the interest of safety.

60.2–1 *Emergency situation, report required within 48 hours (CAA 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 office [3] having jurisdiction over the area in which the incident occurred.

[3] See appendix A.

General Flight Rules (GFR)

60.13–1 *Appropriate authority (CAA interpretations which apply to sec. 60.13).* Appropriate authority, to issue permission for aircraft operation within a prohibited or restricted area, will mean the "Using Agency" as shown on the prohibited or restricted area charts.

Application for permission to operate aircraft within an airspace reservation or prohibited area will be made to the "Using Agency." If an area is listed for which a "Using Agency" is not shown, application can be made to the local Aviation Safety District Office.[3]

Application for permission to operate within the Washington, D. C. airspace reservation will be made to the Civil Aeronautics Administration, General Safety Division, Washington 25, D. C.

Six prohibited or restricted area charts [4] cover the continental United States in approximately equal portions, and are designated as follows:

(a) Prohibited or restricted (danger) area chart (N. W.)
(b) Prohibited or restricted (danger) area chart (N. Central)
(c) Prohibited or restricted (danger) area chart (N. E.)
(d) Prohibited or restricted (danger) area chart (S. E.)
(e) Prohibited or restricted (danger) area chart (S. Central)
(f) Prohibited or restricted (danger) area chart (S. W.)

60.16–1 *Issuance of a waiver or authorization (CAA 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] Published by the Coast and Geodetic Survey, Washington 25, D. C., and are for sale for 5 cents each.

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 (CAA 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 (CAA 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.

(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 (CAA 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 *Traffic patterns for LaGuardia, New York International, and Newark Airports (CAA rules which apply to sec. 60.18 (d)).* Operators of aircraft taking off from or landing at La-Guardia Airport, New York; New York International (Idlewild) Airport, New York; or Newark Airport, N. J., shall adhere to the following traffic patterns and altitudes made a part thereof, unless otherwise authorized or directed by air traffic control:

(a) All aircraft shall be operated to follow a standard left-hand rectangular traffic pattern which, for each runway, is contained within a 5-mile radius of the center of the airport.

(b) Landing aircraft shall be operated so as to join the traffic pattern at or above an altitude of 1,200 feet mean sea level, weather permitting.

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

60.18–5 *Traffic patterns for Anchorage Airport and Lake Hood-Lake Spenard Landing Area (CAA 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-

[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 Aviation Information Office, CAA, Washington 25, D. C.

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 midpoint 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 of 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.

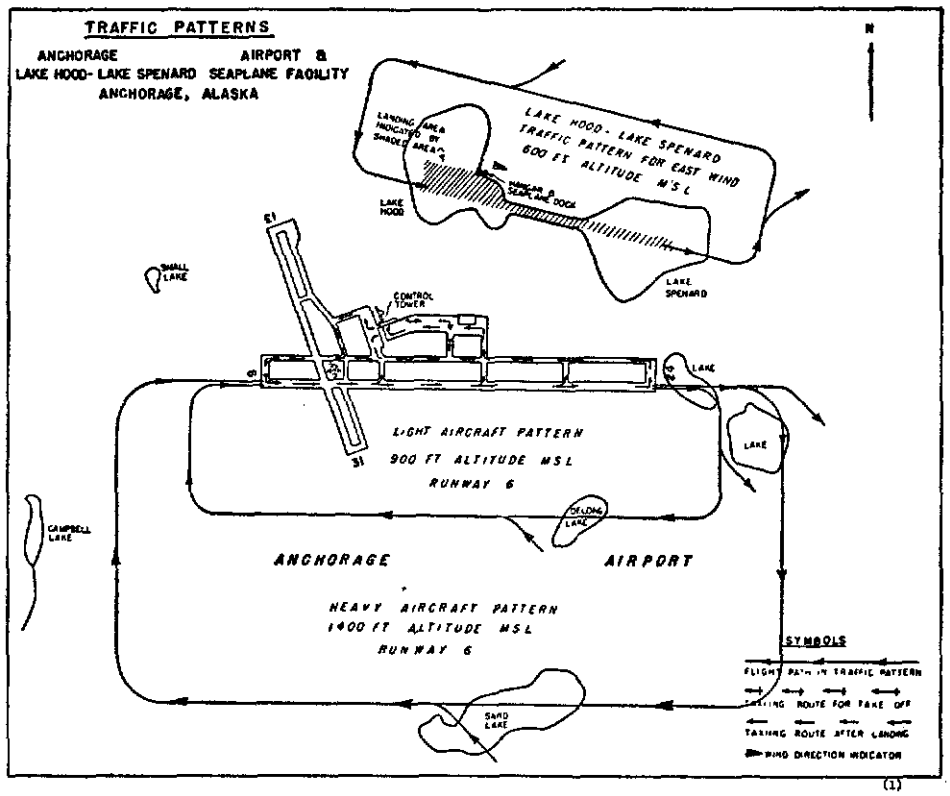
(iii) *Taxiing for a south takeoff from Lake Hood.* Aircraft maneuvering from parking areas for a south takeoff from Lake Hood shall follow a counter-clockwise flow of taxiing traffic in Lake Hood to a takeoff position near the north shore of Lake Hood.

(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.

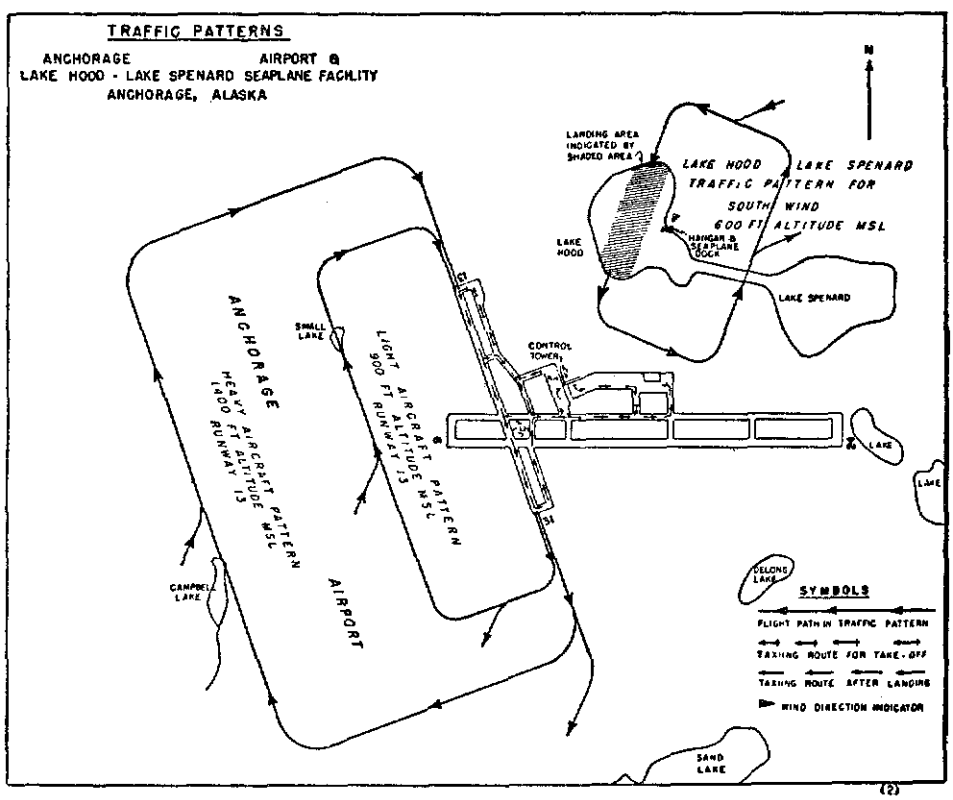
(8) *Taxiing route following landing.*

(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.

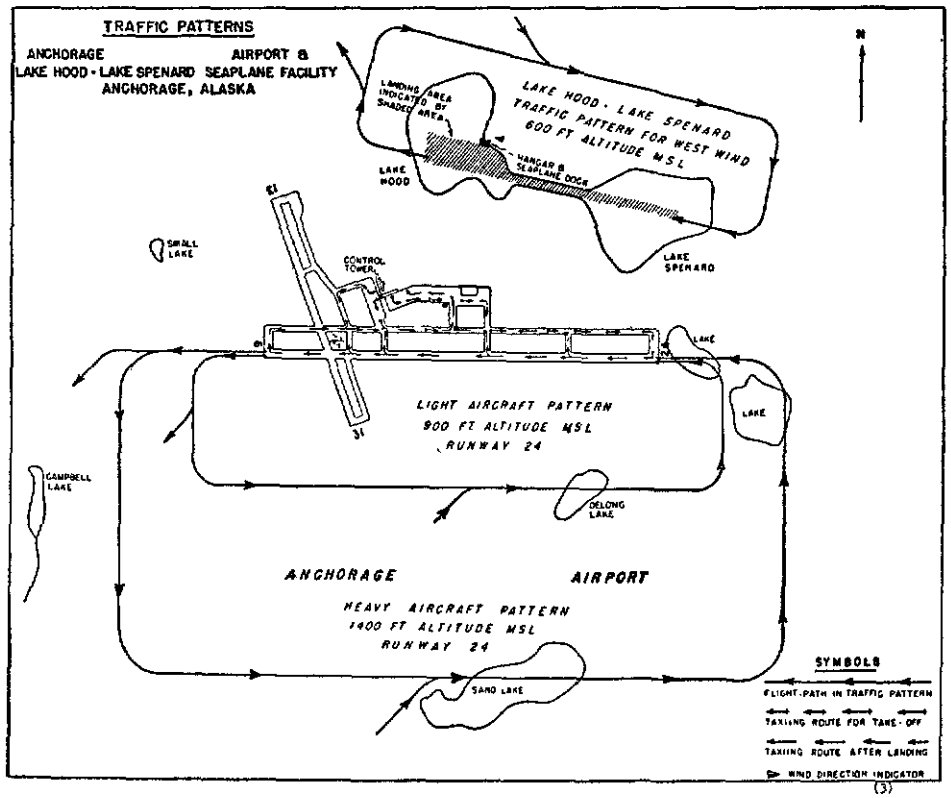
(ii) *Taxiing route after landing to the north on Lake Hood.* At the completion of the land run, the aircraft shall be operated so as to join a clockwise flow of traffic to the aircraft parking area.

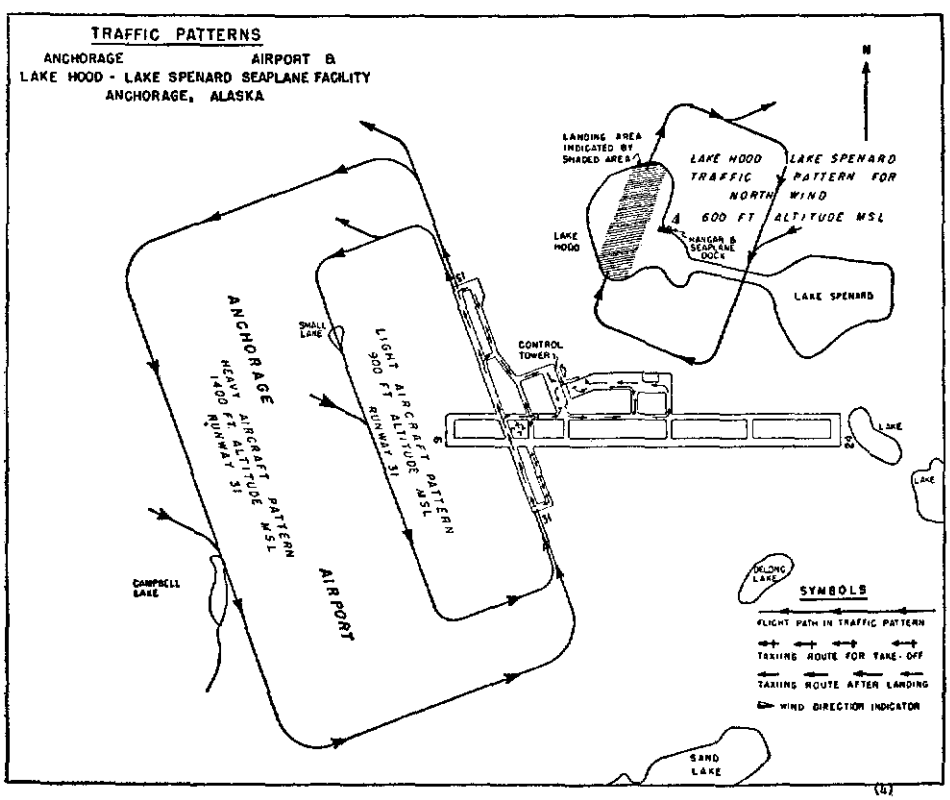

TRAFFIC PATTERNS
ANCHORAGE AIRPORT
LAKE HOOD- LAKE SPENARD SEAPLANE FACILITY
ANCHORAGE, ALASKA
N
LAKE HOOD - LAKE SPENARD
TRAFFIC PATTERN FOR EAST WIND
600 FT ALTITUDE MSL
LANDING AREA INDICATED BY SHADED AREA
LAKE HOOD
HANGAR & SEAPLANE DOCK
LAKE SPENARD
SMALL LAKE
CONTROL TOWER
LIGHT AIRCRAFT PATTERN
900 FT ALTITUDE MSL
RUNWAY 6
DELONG LAKE
CAMPBELL LAKE
ANCHORAGE AIRPORT
HEAVY AIRCRAFT PATTERN
1400 FT ALTITUDE MSL
RUNWAY 6
SAND LAKE
SYMBOLS
FLIGHT PATH IN TRAFFIC PATTERN
TAXIING ROUTE FOR TAKE OFF
TAXIING ROUTE AFTER LANDING
WIND DIRECTION INDICATOR

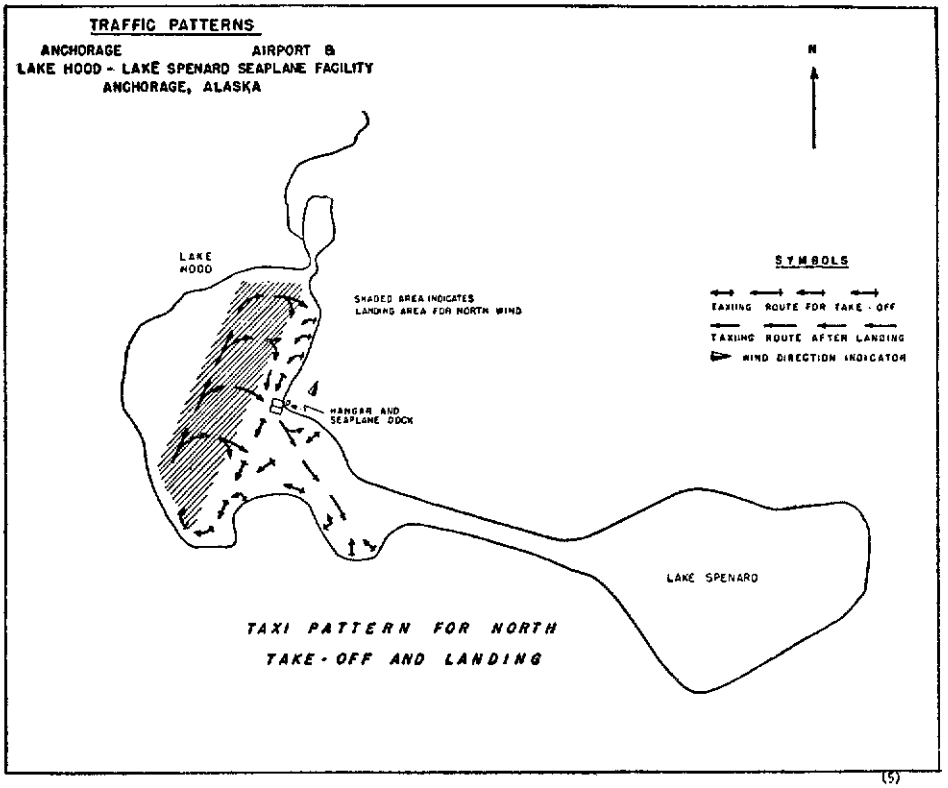
(1)

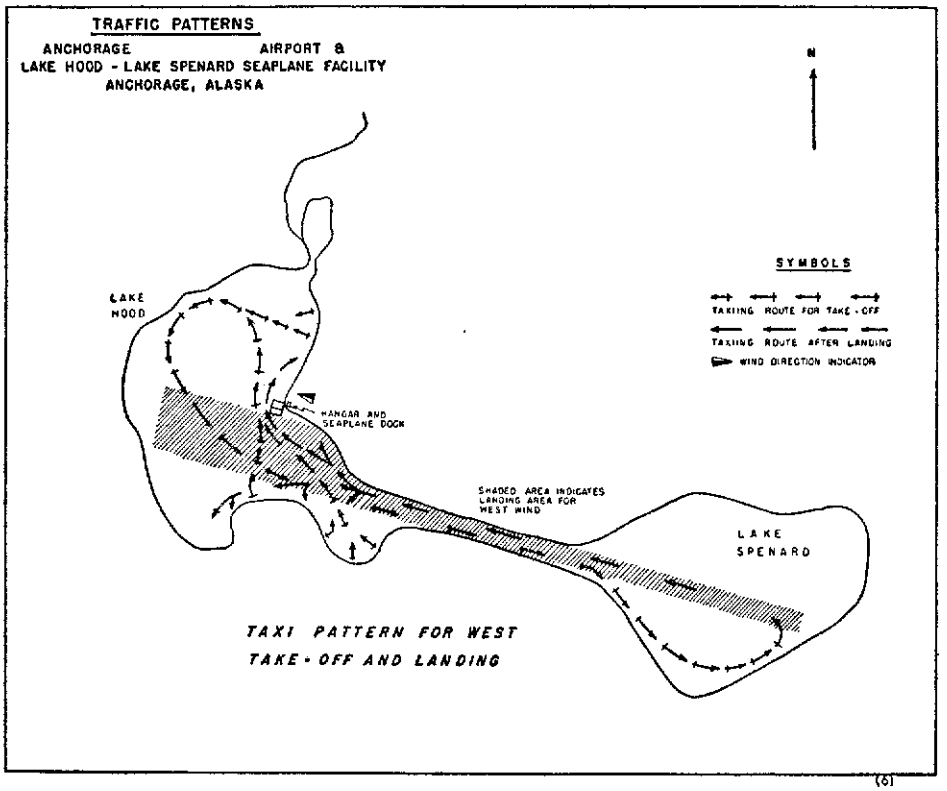

TRAFFIC PATTERNS
ANCHORAGE AIRPORT
LAKE HOOD - LAKE SPENARD SEAPLANE FACILITY
ANCHORAGE, ALASKA
N
LANDING AREA INDICATED BY SHADED AREA
LAKE HOOD LAKE SPENARD
TRAFFIC PATTERN FOR
SOUTH WIND
600 FT ALTITUDE MSL
LAKE HOOD
HANGAR & SEAPLANE DOCK
LAKE SPENARD
SMALL LAKE
CONTROL TOWER
ANCHORAGE AIRPORT
HEAVY AIRCRAFT PATTERN
1400 FT ALTITUDE MSL
RUNWAY 13
LIGHT AIRCRAFT PATTERN
900 FT ALTITUDE MSL
RUNWAY 13
CAMPBELL LAKE
DELONG LAKE
SAND LAKE
SYMBOLS
FLIGHT PATH IN TRAFFIC PATTERN
TAXIING ROUTE FOR TAKE-OFF
TAXIING ROUTE AFTER LANDING
WIND DIRECTION INDICATOR

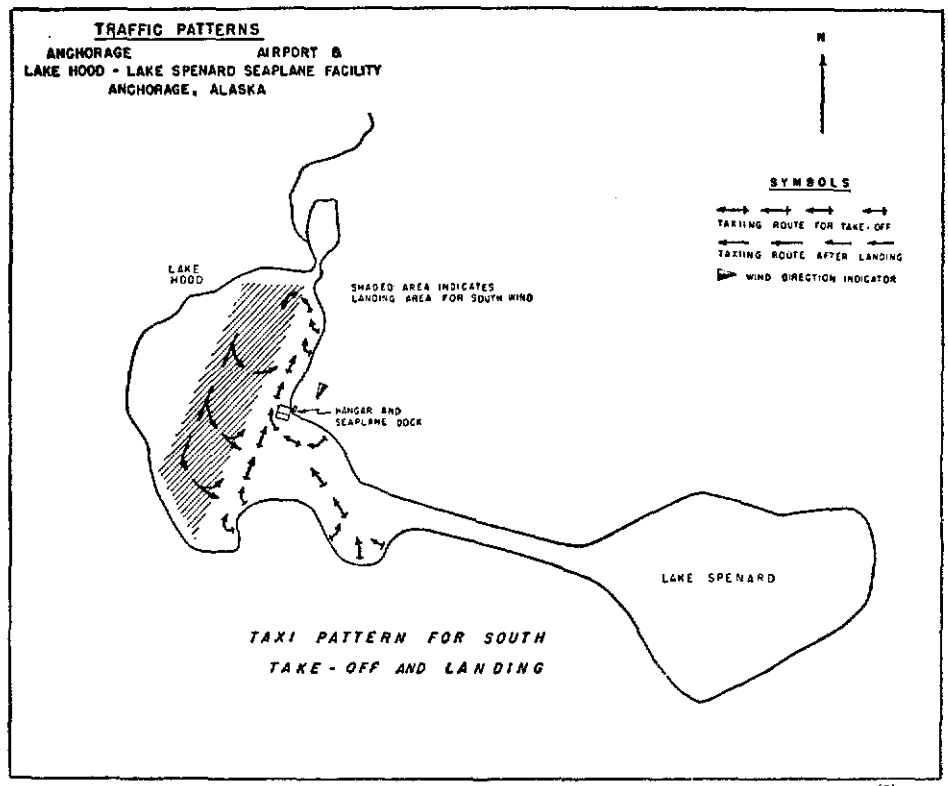
(2)


TRAFFIC PATTERNS
ANCHORAGE AIRPORT &
LAKE HOOD - LAKE SPENARD SEAPLANE FACILITY
ANCHORAGE, ALASKA
N
LANDING AREA INDICATED BY SHADED AREA
LAKE HOOD - LAKE SPENARD TRAFFIC PATTERN FOR WEST WIND 600 FT ALTITUDE M.S.L.
HANGAR & SEAPLANE DOCK
LAKE HOOD
LAKE SPENARD
SMALL LAKE
CONTROL TOWER
LIGHT AIRCRAFT PATTERN 900 FT ALTITUDE MSL RUNWAY 24
CAMPBELL LAKE
DELONG LAKE
ANCHORAGE AIRPORT
HEAVY AIRCRAFT PATTERN 1400 FT ALTITUDE MSL RUNWAY 24
SAND LAKE
SYMBOLS
FLIGHT PATH IN TRAFFIC PATTERN
TAXIING ROUTE FOR TAKE-OFF
TAXIING ROUTE AFTER LANDING
WIND DIRECTION INDICATOR
(3)

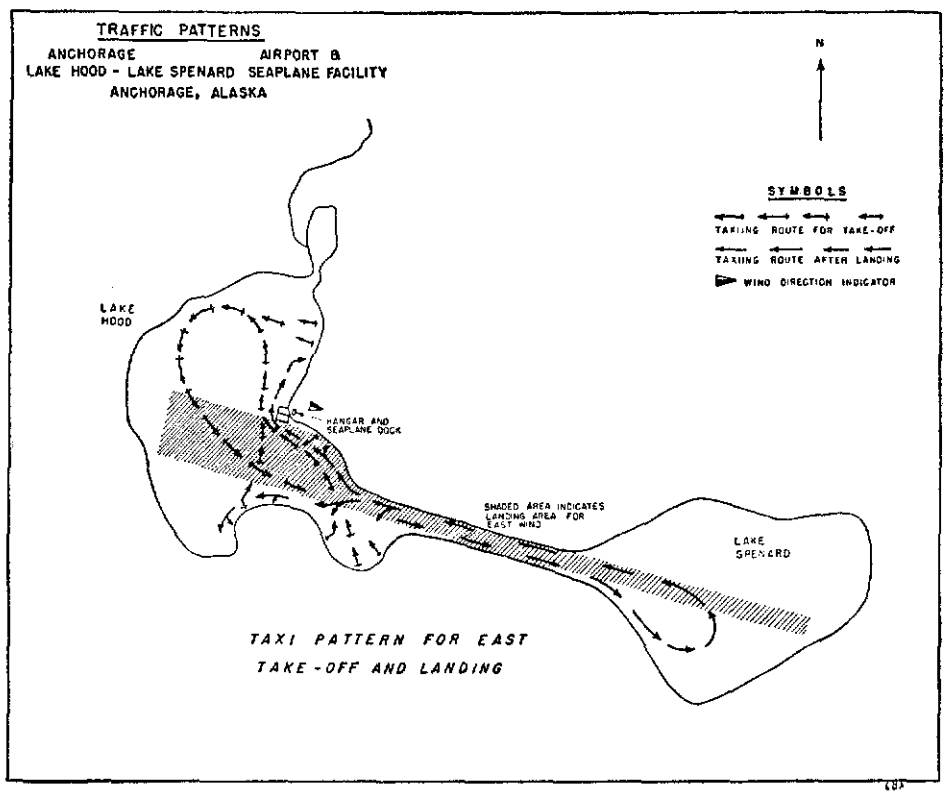

TRAFFIC PATTERNS
ANCHORAGE AIRPORT &
LAKE HOOD - LAKE SPENARD SEAPLANE FACILITY
ANCHORAGE, ALASKA
N
LANDING AREA INDICATED BY SHADED AREA
LAKE HOOD TRAFFIC PATTERN FOR NORTH WIND 600 FT ALTITUDE MSL
LAKE SPENARD
HANGAR & SEAPLANE DOCK
LAKE HOOD
LAKE SPENARD
SMALL LAKE
CONTROL TOWER
ANCHORAGE AIRPORT
HEAVY AIRCRAFT PATTERN 1400 FT ALTITUDE MSL RUNWAY 31
LIGHT AIRCRAFT PATTERN 900 FT ALTITUDE MSL RUNWAY 31
CAMPBELL LAKE
DELONG LAKE
SAND LAKE
SYMBOLS
FLIGHT PATH IN TRAFFIC PATTERN
TAXIING ROUTE FOR TAKE-OFF
TAXIING ROUTE AFTER LANDING
WIND DIRECTION INDICATOR
(4)


TRAFFIC PATTERNS
ANCHORAGE AIRPORT &
LAKE HOOD - LAKE SPENARD SEAPLANE FACILITY
ANCHORAGE, ALASKA
N
LAKE HOOD
SHADED AREA INDICATES LANDING AREA FOR NORTH WIND
HANGAR AND SEAPLANE DOCK
SYMBOLS
TAXIING ROUTE FOR TAKE-OFF
TAXIING ROUTE AFTER LANDING
WIND DIRECTION INDICATOR
LAKE SPENARD
TAXI PATTERN FOR NORTH
TAKE-OFF AND LANDING
(5)


TRAFFIC PATTERNS
ANCHORAGE AIRPORT &
LAKE HOOD - LAKE SPENARD SEAPLANE FACILITY
ANCHORAGE, ALASKA
N
LAKE HOOD
HANGAR AND SEAPLANE DOCK
SYMBOLS
TAXIING ROUTE FOR TAKE-OFF
TAXIING ROUTE AFTER LANDING
WIND DIRECTION INDICATOR
SHADED AREA INDICATES LANDING AREA FOR WEST WIND
LAKE SPENARD
TAXI PATTERN FOR WEST
TAKE-OFF AND LANDING
(6)


TRAFFIC PATTERNS
ANCHORAGE AIRPORT &
LAKE HOOD - LAKE SPENARD SEAPLANE FACILITY
ANCHORAGE, ALASKA
N
SYMBOLS
TAXIING ROUTE FOR TAKE-OFF
TAXIING ROUTE AFTER LANDING
WIND DIRECTION INDICATOR
LAKE HOOD
SHADED AREA INDICATES LANDING AREA FOR SOUTH WIND
HANGAR AND SEAPLANE DOCK
LAKE SPENARD
TAXI PATTERN FOR SOUTH TAKE-OFF AND LANDING

(T)


TRAFFIC PATTERNS
ANCHORAGE AIRPORT &
LAKE HOOD - LAKE SPENARD SEAPLANE FACILITY
ANCHORAGE, ALASKA
N
SYMBOLS
TAXIING ROUTE FOR TAKE-OFF
TAXIING ROUTE AFTER LANDING
WIND DIRECTION INDICATOR
LAKE HOOD
HANGAR AND SEAPLANE DOCK
SHADED AREA INDICATES LANDING AREA FOR EAST WIND
LAKE SPENARD
TAXI PATTERN FOR EAST TAKE-OFF AND LANDING

(U)

(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 (CAA 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 CAA 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 then 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.

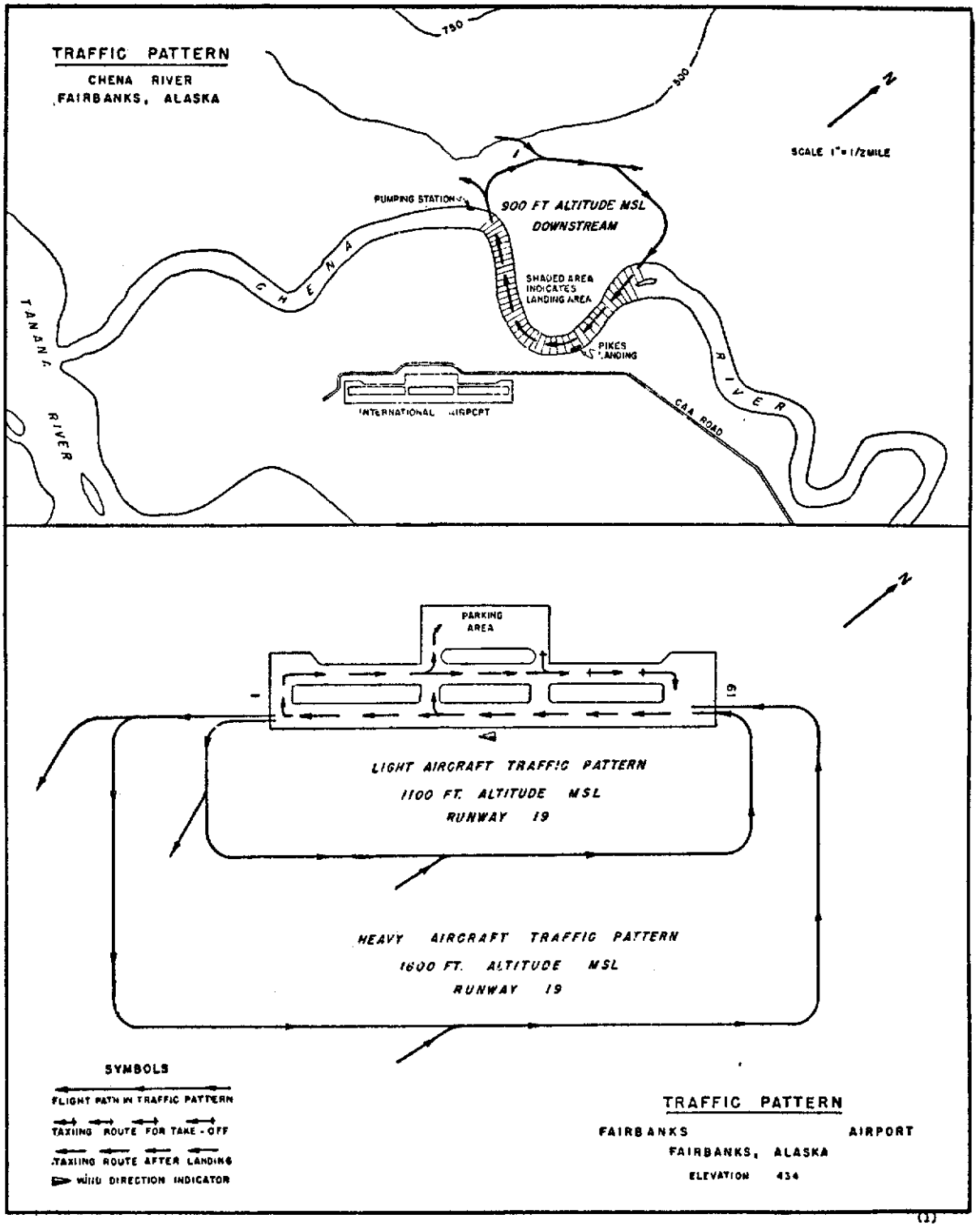
(*b*) *Runway 19.*

(*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.

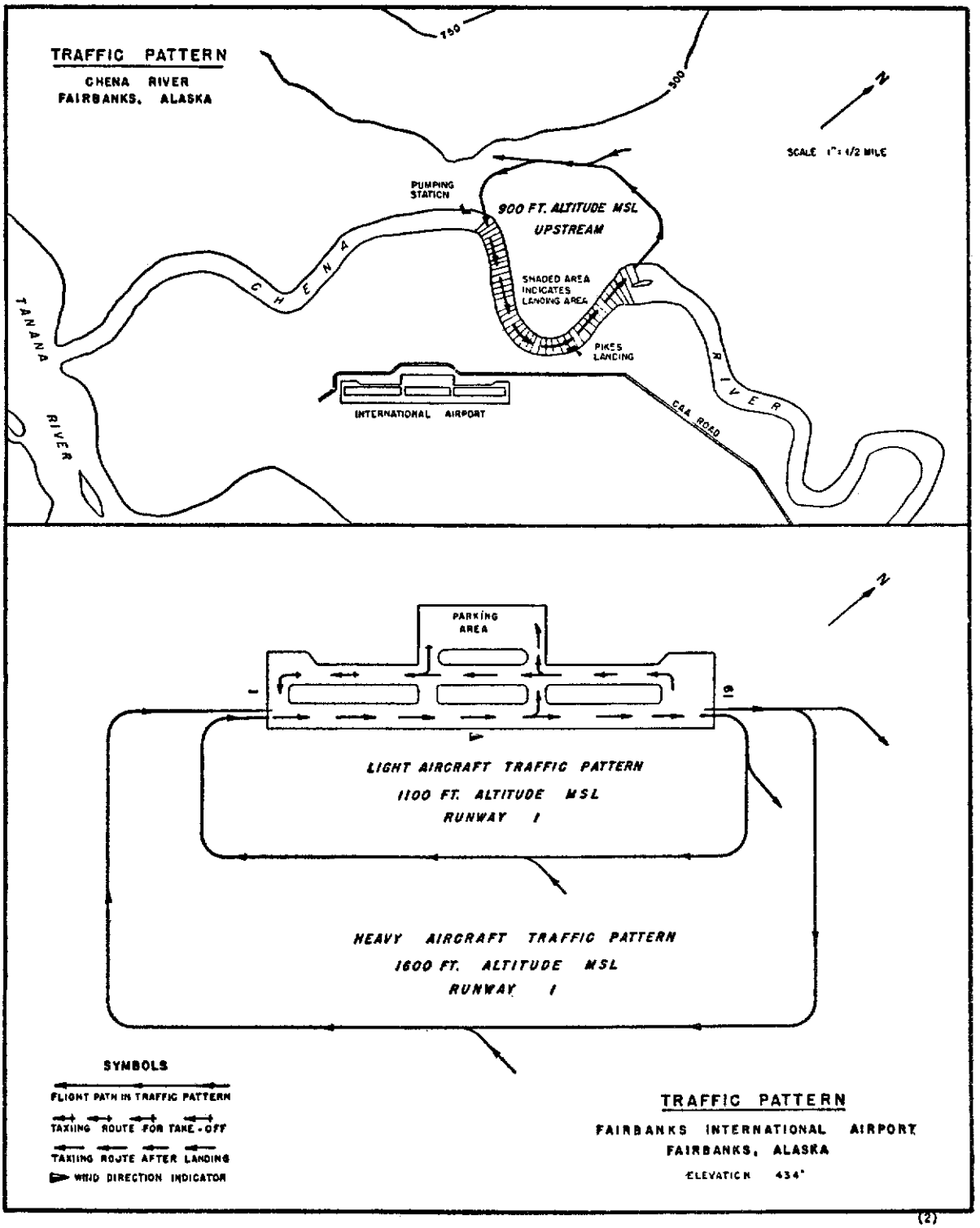
(*2*) *Heavy aircraft.* Aircraft shall execute a 45° turn to the left from the takeoff leg at an altitude of at least 800 feet mean sea level.

(*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.


TRAFFIC PATTERN
CHENA RIVER
FAIRBANKS, ALASKA
750
500
N
SCALE 1"= 1/2MILE
PUMPING STATION
900 FT ALTITUDE MSL
DOWNSTREAM
SHADED AREA
INDICATES
LANDING AREA
PIKES
LANDING
CHENA
TANANA RIVER
RIVER
INTERNATIONAL AIRPORT
CAA ROAD
PARKING
AREA
19
LIGHT AIRCRAFT TRAFFIC PATTERN
1100 FT. ALTITUDE MSL
RUNWAY 19
HEAVY AIRCRAFT TRAFFIC PATTERN
1600 FT. ALTITUDE MSL
RUNWAY 19
SYMBOLS
FLIGHT PATH IN TRAFFIC PATTERN
TAXIING ROUTE FOR TAKE-OFF
TAXIING ROUTE AFTER LANDING
WIND DIRECTION INDICATOR
TRAFFIC PATTERN
FAIRBANKS AIRPORT
FAIRBANKS, ALASKA
ELEVATION 434

(1)


TRAFFIC PATTERN
CHENA RIVER
FAIRBANKS, ALASKA
750
500
N
SCALE 1" = 1/2 MILE
PUMPING STATION
900 FT. ALTITUDE MSL
UPSTREAM
SHADED AREA INDICATES LANDING AREA
PIKES LANDING
CHENA
TANANA RIVER
INTERNATIONAL AIRPORT
CAA ROAD
RIVER
PARKING AREA
19
1
LIGHT AIRCRAFT TRAFFIC PATTERN
1100 FT. ALTITUDE MSL
RUNWAY 1
HEAVY AIRCRAFT TRAFFIC PATTERN
1600 FT. ALTITUDE MSL
RUNWAY 1
SYMBOLS
FLIGHT PATH IN TRAFFIC PATTERN
TAXIING ROUTE FOR TAKE-OFF
TAXIING ROUTE AFTER LANDING
WIND DIRECTION INDICATOR
TRAFFIC PATTERN
FAIRBANKS INTERNATIONAL AIRPORT
FAIRBANKS, ALASKA
ELEVATION 434'

(2)

(*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 100 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.)

60.18–7 *Traffic patterns for Washington National Airport (CAA rules which apply to Sec. 60.18(d)).* Operators of aircraft taking off from or landing at Washington National Airport under VFR shall adhere to the following traffic patterns and altitudes made a part thereof unless otherwise authorized or directed by air traffic control:

(a) Traffic shall remain west of the Potomac River while in the vicinity of Washington, D. C.

(b) Flights over residential areas shall be at altitudes above 1,200 feet whenever practicable.

(c) Safe distances shall be maintained from all buildings and from all other aircraft.

(d) The minimum traffic pattern altitude shall be 1,200 feet MSL.

(e) A standard left-hand traffic pattern shall be used when winds are from northerly directions, and a standard right-hand traffic pattern shall be used when winds are from southerly directions.

(f) The Northwest Passage or the Riverdale Lane, indicated in the following traffic patterns, may be used by traffic to and from the northeast.

(g) The applicable airport traffic pattern drawn and otherwise provided in paragraphs (h) through (o) of this section shall be used. On the drawings



shall indicate the traffic pattern,



shall indicate the traffic pattern entry,

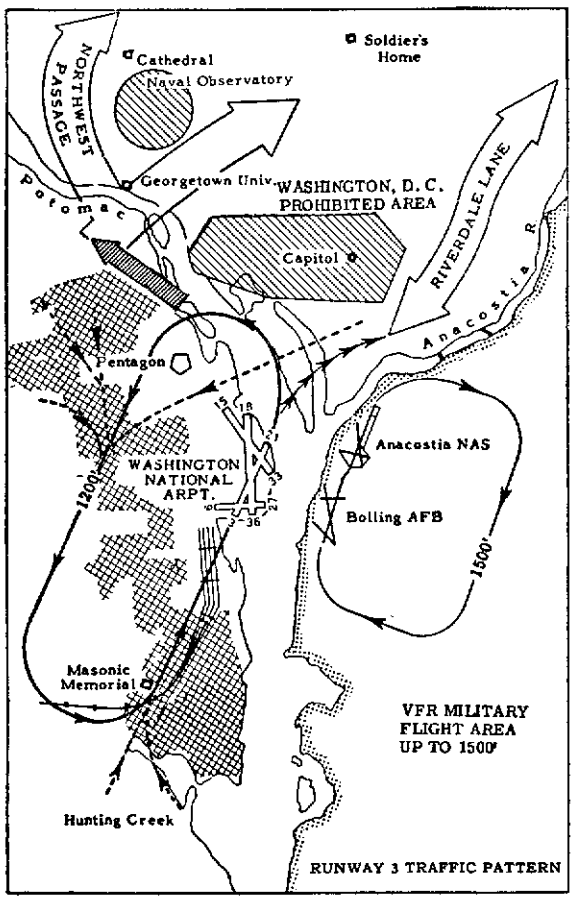


shall indicate the traffic pattern departure, and



shall indicate the traffic pattern with Washington tower approval.

(h) The traffic pattern for runway 3 shall be:



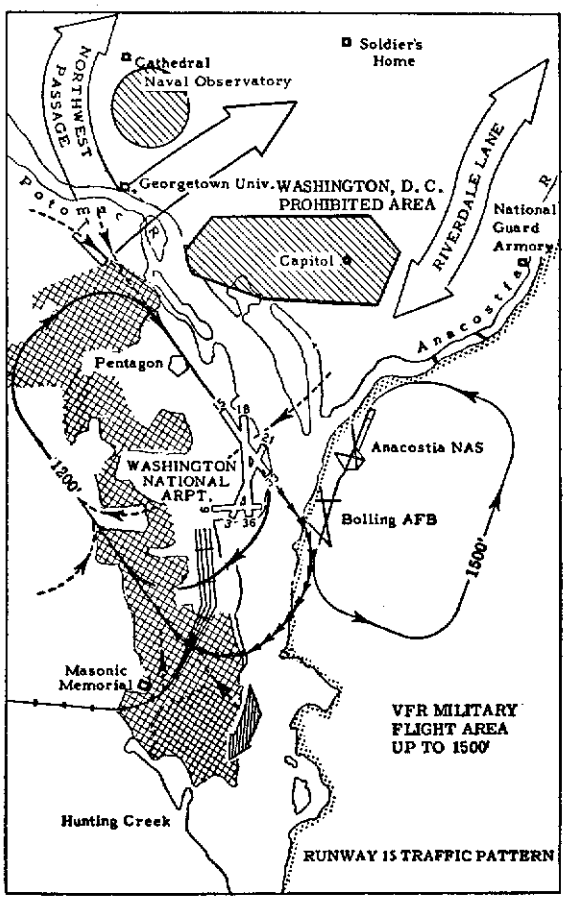
(1) An aircraft landing shall maintain at least 1,200 feet as long as practicable.

(2) An aircraft making a straight-in approach, when authorized by the Washington tower, shall maintain at least 1,200 feet until it intercepts the railroad near the Masonic Temple.

(3) An aircraft taking off shall climb to at least 1,200 feet over the Potomac River. With the approval of the Washington tower, a northeastbound aircraft may make a right turn after taking off.

(i) The traffic pattern for runway 9 shall be specified by the Washington tower.

(j) The traffic pattern for runway 15 shall be

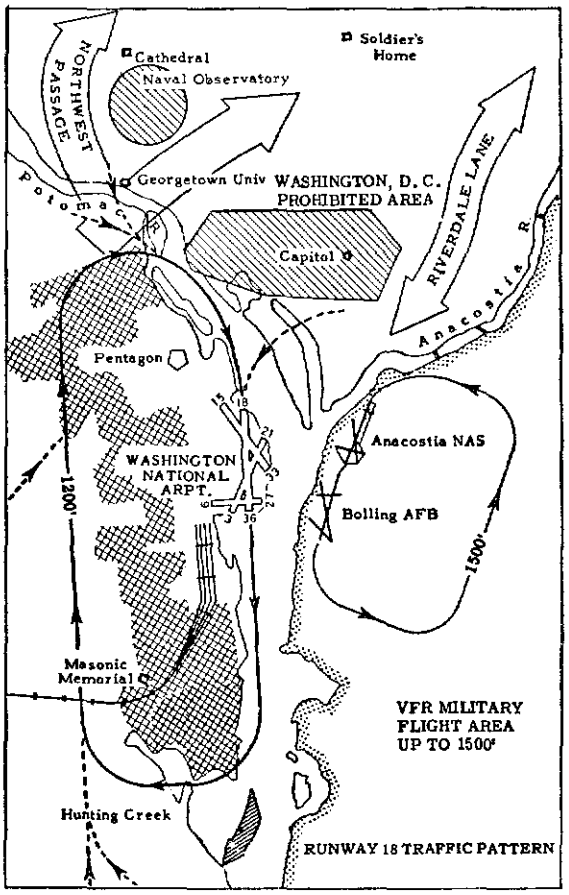


(1) An aircraft landing shall maintain at least 1,200 feet until it turns on its base leg clear of the Pentagon.

(2) An aircraft making a straight-in approach, when authorized by the Washington tower, shall maintain 1,200 feet as long as practicable.

(3) An aircraft taking off shall climb to at least, 1,200 feet over the Potomac River.

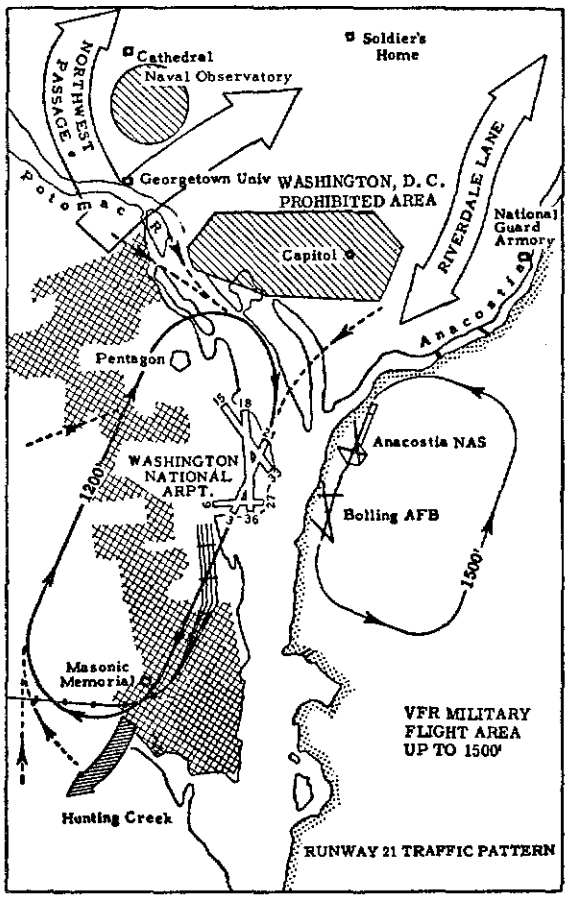
(k) The traffic pattern for runway 18 shall be:



(1) An aircraft landing shall maintain at least 1,200 feet until it turns on its base leg. It shall follow the pattern clear of the Pentagon.

(2) An aircraft taking off shall climb to at least 1,200 feet over the Potomac River.

(l) The traffic pattern for runway 21 shall be:



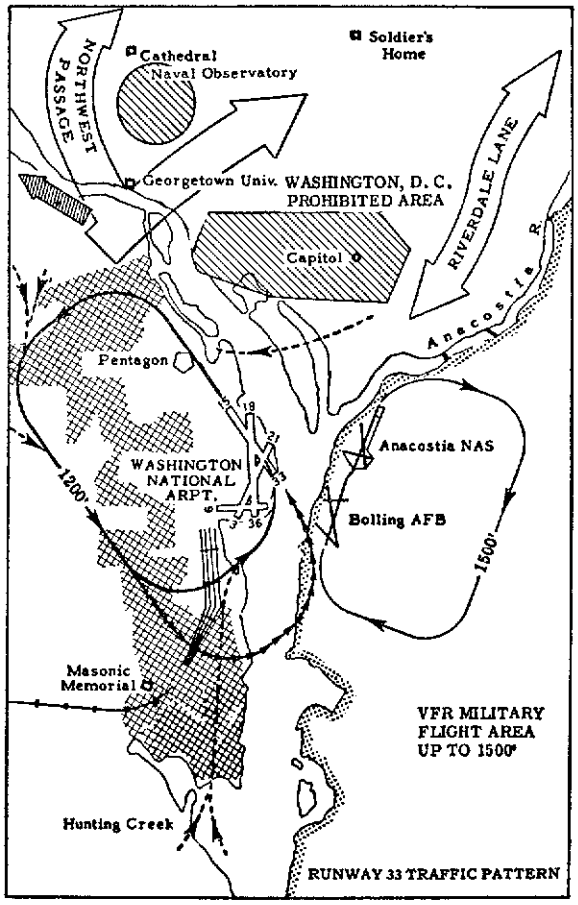
(1) An aircraft landing shall maintain at least 1,200 feet until it turns on its base leg.

(2) An aircraft making a straight-in approach, when authorized by the Washington tower, shall maintain at least 1,200 feet until it has passed the National Guard Armory.

(3) An aircraft taking off shall climb to at least 1,200 feet straight ahead.

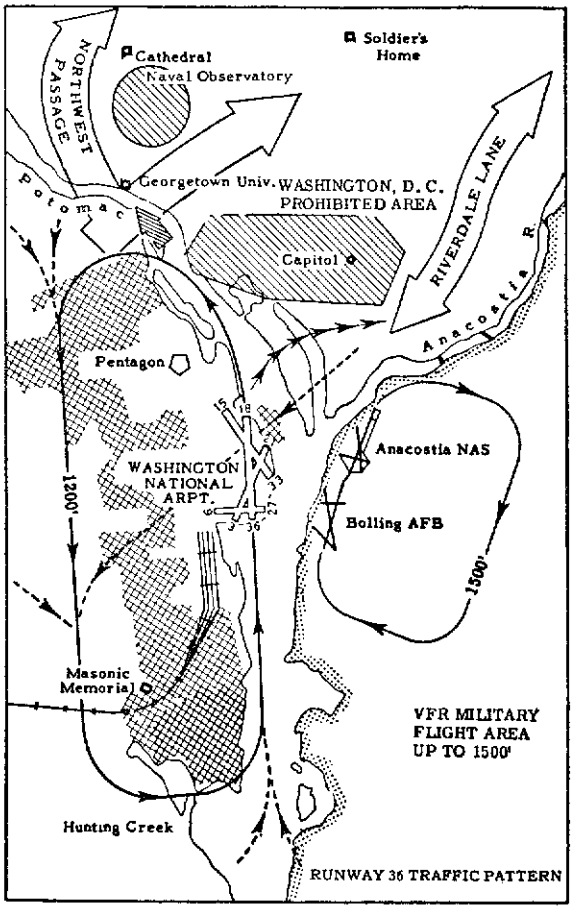
(m) The traffic pattern for runway 27 shall be specified by the Washington tower.

(n) The traffic pattern for runway 33 shall be:



(1) An aircraft landing shall maintain at least 1,200 feet over the Potomac River. It shall avoid flight over the Pentagon if practicable.

(o) The traffic pattern for runway 36 shall be:



(1) An aircraft landing shall maintain at least 1,200 feet until it is over the Potomac River on its final approach.

(2) An aircraft taking off shall climb to at least 1,200 feet over the Potomac River.

(Published in 17 F. R. 7178, Aug 7, 1952, effective upon publication.)

60.21–1 *Air traffic clearance* [6] *(CAA policies which apply to sec. 60.21).* 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.

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.

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.

An amendment to the initial clearance may be issued to a flight at any time Air Traffic Control deems such action necessary to avoid possible conflict between en route, landing, or departing aircraft.

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:

(a) 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.

(b) 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.

(c) 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.

(d) 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 (CAA policies which apply to sec. 60.21).* Upon receipt of 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

[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 advised," 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.

[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.

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 (CAA 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, January 5, 1949, effective upon publication.

60.23–2 *Operations before sunrise and after sunset (CAA 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).

[8] The duration of civil twilight is the interval in the evening from sunset 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.

Visual Flight Rules (VFR)

60.30–1 *Authorization by Air Traffic Control (CAA 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 Airway Communications 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 (CAA 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 *Odd or even altitudes on airways (CAA rules which apply to sec. 60.32(a)).* When an aircraft is operated in level cruising flight at 3,000 feet or more above the surface, within the boundaries of a civil airway, it shall be flown at the following altitudes:

(a) RED or GREEN airway—Eastbound, ODD thousand-foot altitudes (3,000; 5,000; etc.)—Westbound, EVEN thousand-foot altitudes (4,000; 6,000; etc.).

(b) AMBER or BLUE airway—Northbound, ODD thousand-foot altitudes (3,000; 5,000; etc.)—Southbound, EVEN thousand-foot altitudes (4,000; 6,000; etc.).

(c) EVEN numbered VOR airway—Eastbound, ODD thousand-foot altitudes (3,000; 5,000; etc.)—Westbound, EVEN thousand-foot altitudes (4,000; 6,000; etc.)

(d) ODD numbered VOR airway—Northbound, ODD thousand-foot altitudes (3,000; 5,000; etc.)—Southbound, EVEN thousand-foot altitudes (4,000; 6,000; etc.).

(e) Exceptions to the rules stated in paragraphs (a) through (d) are:

(1) Where a color airway coincides with a VOR airway, the color airway shall take preference, and the ODD or EVEN altitude rule for the appropriate color airway shall apply.

(2) Where no color airway is involved and an EVEN and ODD VOR airway coincide, the EVEN numbered VOR airway shall take preference, and the ODD or EVEN altitude rule for the EVEN numbered VOR airway shall apply.

The odd or even altitude rule applicable to an airway is determined by the direction of the airway between its two terminal points, without regard to the direction of any segment or portion of the airway. Example: A green airway has one terminal point in California and the other in New York, but in Ohio a portion between fixes runs due north and south. In this case, the odd or even altitude rule for a flight eastbound or westbound applies to the entire flight along the airway.

"Odd or even" altitude indicators for the airways are shown on Radio Facility Charts. Additional information regarding odd and even flight altitudes on civil airways appears in the Flight Information Manual.

60.33–1 *VER flight plans (CAA policies which apply to sec. 60.33).* VFR flight plans may be filed in person or by telephone or radio with any Airway Communications 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 CAA Technical Manual No. 102, "Pilots' Radio Handbook."[9]

[9] For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. The price of the manual is 55 cents.

Instrument Flight Rules (IFR)[10]

60.46–1 *Standard instrument approach procedures (CAA 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 (CAA 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 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 Aviation Safety District Office.

(2) Arrange with Aviation Safety 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.

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

(1) The Flight Information Manual which may be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. at 50 cents.

(2) ANC Procedures for the Control of Air Traffic, available from the Superintendent of Documents, Government Printing Office, Washngton 25, D. C.; the price including supplementary revision service is $1.

(3) Instrument Approach and Landing Charts which may be purchased from the Coast and Geodetic Survey, Department of Commerce, Washington 25, D. C., at 5 cents each.

[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.

(2) *Pilots.* Each pilot in command will be properly certificated, hold a currently valid instrument rating, and demonstrate to an agent 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 agent 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 agent 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 (CAA 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 civil airways, or terminates within civil 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 (CAA policies which apply to sec. 60.49 (b)).*

(a) *En route procedures.* If the pilot proceeds according to the latest traffic clearance but has not received and acknowledged a clearance for an approach and if other instructions to the contrary are not received, he will be expected to observe the following, and control will be effected accordingly:

(1) If the pilot has received and acknowledged a clearance to the destination airport or the radio facility serving that point, he shall continued flight at the altitude(s) last assigned by Air Traffic Control, or the minimum instrument altitude [12] (minimum en route IFR altitudes published under Part 610 of the Regulations of the Administrator) whichever is the higher, to the radio facility serving 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 and

(3) Holding instructions have not been received, he shall continue flight at the altitude(s) last assigned by Air Traffic Control or the minimum instrument altitude,[12] whichever is the higher, to the radio facility serving the destination airport or

(4) Holding instructions and expected approach clearance time have been received, the pilot shall comply with these instructions until such time as 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,[12] whichever is the higher, or

(5) Holding instructions have been received but no expected approach time has been received, the pilot shall comply with these instructions until the time Air Traffic Control has specified that further clearance may be expected. He shall then continue, maintaining the last assigned altitude or the minimum instrument altitude,[12] whichever is the 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).

(b) *Instrument letdown.* Descent from the altitude maintained to the radio facility serving the destination airport shall be made on the final approach course and shall start at the expected approach time last received. If no expected approach time was received, descent shall be started at the last estimated arrival time specified by the pilot, or as soon as possible thereafter. A full standard instrument approach shall be executed unless a VFR approach can be made.

If a clearance for an approach at the airport of intended landing has been received and acknowledged, the pilot shall be expected to comply with any special instructions contained in the clearance or other instructions [13] and make normal descent for landing.

[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 he altitude last assigned by Air Traffic Control.

[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

Aviation Safety Regional and District Offices

Region 1

REGIONAL OFFICE: International Airport, Jamaica, Long Island, N. Y.

DISTRICT OFFICES

State	City	Location	Mailing address
Connecticut	Bridgeport	Sikorsky Aircraft Corp	Care Sikorsky Aircraft Corp.
	Windsor Locks	Bldg. 229, Bradley Field	Care Kaman Aircraft Corp., P. O. Box 73, Bloomfield.
Delaware	New Castle	Bellanca Aircraft Corp	Care Bellanca Aircraft Corp., Bellanca Airport.
District of Columbia	Washington	Hangar Six, Washington National Airport	Hangar Six, Washingron National Airport.
Kentucky	Louisville	Administration Bldg., Bowman Field	Administration Bldg., Bowman Field.
Maine	Portland	Municipal Airport	Municipal Airport.
Maryland	Baltimore	Glenn L. Martin Co., 19 B Bldg. Balcony, Middle River.	Care Glenn L. Martin Corp., 19 B Bldg. Balcony, Baltimore 3.
Massachusetts	Boston	287 East Marginal St	287 East Marginal St., East Boston 28.
	Norwood	Municipal Airport	Municipal Airport.
	Westfield	Barnes Westfield Airport	P. O. Box 464.
New Hampshire	Concord	Municipal Airport	Municipal Airport.
New Jersey	Haddonfield	Echelon Airport	P. O. Box 154.
	Newark	Room 221, Old Administration Bldg. Newark Airport.	Room 221, Old Administration Bldg., Newark Airport.
	Teterboro	Teterboro Air Terminal	Teterboro Air Terminal.
New York	Albany	Albany Airport, Watervliet	P. O. Box 577, Latham.
	Ithaca	Cornell University Airport	Cornell University Airport.
	New York	Terminal Bldg., La Guardia Field	P. O. Box 575, La Guardia Airport Station, Flushing 71.
	do	Rooms 102-103, Federal Bldg., International Airport.	Rooms 102-103, Federal Bldg., International Airport, Jamaica.
	Lindenhurst	Zahn's Airport, North Wellwood Ave	Zahn's Airport, North Wellwood Ave.
	Rochester	Rochester Municipal Airport	Rochester Municipal Airport.
Ohio	Cincinnati	Administration Bldg., Lunken Airport	Administration Bldg., Lunken Airport.
	Cleveland	Cleveland Hopkins Airport	Cleveland Hopkins Airport, 6200 Rocky River Dr., Cleveland 11.
	Columbus	Room 220-223, Administration Bldg., Port Columbus Airport.	Room 220-223, Administration Bldg., Port Columbus Airport.
	Middletown	Aeronca Manufacturing Corp	Care Aeronca Manufacturing Corp.
Oklahoma	Tulsa	American Airlines Bldg. Municipal Field	P. O. Box 8186.
Pennsylvania	Allentown	Allentown-Bethlehem-Easton Airport	Allentown-Bethlehem-Easton Airport.
	Harrisburg	Harrisburg State Airport, New Cumberland	Harrisburg State Airport, New Cumberland.
	Pittsburgh	Room 303, Administration Bldg., Greater Pittsburgh Airport.	Room 303, Administration Bldg., Greater Pittsburgh Airport.
	do	Allegheny County Airport, Dravosburg	Allegheny County Airport, Dravosburg.
	Williamsport	Lycoming Division, Aviation Corp	P. O. Box 928.
Virginia	Alexandria	Beacon Field, 2013 Richmond Highway	Beacon Field, 2013 Richmond Highway.
	Richmond	Byrd Field, Sandston	Byrd Field, Sandston.
West Virginia	Charleston	Kanawha County Airport	P. O. Box 5276, Capitol Station.

Region 2

REGIONAL OFFICE: P. O. Box 1689, Fort Worth 1, Texas

DISTRICT OFFICES

State	City	Location	Mailing address
Alabama	Birmingham	Municipal Airport	Municipal Airport.
Arkansas	Little Rock	Adams Field	RFD 77.
Florida	Jacksonville	Room 221-225, U. S. Post Office and Court House Bldg., 311 West Monroe St.	P. O. Box 1504, Jacksonville, 1.
	Miami	International Airport	P. O. Box 226, International Airport Branch, Miami 48.
	Tampa	Peter O. Knight Airport	P. O. Box 2112.
Georgia	Atlanta	Bldg. No. 5, Municipal Airport	P. O. Box 738, Municipal Airport.
	do	3999 Gordon Rd., Fulton County Airport	3999 Gordon Road.
Louisiana	New Orleans	New Orleans Airport	P. O. Box 8068 Gentilly Branch, New Orleans Airport.
	Shreveport	Administration Bldg., Down Town Airport	P. O. Box 86, Down Town Airport.
Mississippi	Jackson	Army Air Base	P. O. Box 1727.
North Carolina	Charlotte	1315 Independence Bldg	P. O. Box 598.
	Raleigh	506-507 Commercial Bldg	P. O. Box 1858.
	Winston-Salem	Terminal Bldg., Smith Reynolds Airport	Terminal Bldg., Smith Reynolds Airport.
Oklahoma	Bethany	Tulakes Airport	c/o Aero Design and Engineering Co. P. O. Box 118.
	Oklahoma City	Municipal Airport	P. O. Box 5158, Farley Station.
	Tulsa	do	P. O. Box 8186.
South Carolina	Columbia	Capital Airport	P. O. Box 368, West Columbia.
Tennessee	Memphis	2488 Winchester	P. O. Box 7097.
	Nashville	Berry Field	Berry Field.
Texas	Amarillo	Tradewind Airport	P. O. Box 2306.
	Brownsville	Rio Grande International Airport	Administration Bldg., International Airport.
	Dallas	Room 241, Terminal Bldg., Love Field	Room 241, Terminal Bldg., Love Field.
	do	Room 244, Terminal Bldg., Love Field	Room 244, Terminal Bldg., Love Field.
	Fort Worth	Meacham Field	P. O. Box 1679, Meacham Field.
	do	Amon Carter Field	P. O. Box 2506
	Garland	Temco Aircraft Corp., Garland Plant	P. O. Box 397.
	Hurst	Bell Aircraft Corp	Care Bell Aircraft Corp., P. O. Box 486, Fort Worth, Tex.
	Houston	Second Floor, National Guard Hangar, Municipal Airport.	Second Floor, National Guard Hangar, Municipal Airport.
	do	Room 204, Administration Bldg	P. O. Box 12387.
	Midland	Midland Air Terminal	P. O. Box 198, Terminal, Texas.
	San Antonio	International Airport	International Airport.

Region 3

REGIONAL OFFICE: 911 Walnut Street, Kansas City 6, Mo.

DISTRICT OFFICES

State	City	Location	Mailing address
Illinois	Chicago	6013 South Central Ave	6013 South Central Ave., Chicago 38.
	do	Du Page County Airport, St. Charles	P. O. Box 337, West Chicago.
	Springfield	Capital Airport	P. O. Box 197.
Indiana	Indianapolis	Administration Bldg., Weir-Cook Municipal Airport.	Administration Bldg., Weir-Cook Municipal Airport.
	South Bend	Bendix Field	Bendix Field.
Iowa	Cedar Rapids	Administration Bldg., Municipal Airport	P. O. Box 1907.
	Des Moines	228 Administration Bldg., Municipal Airport	228 Administration Bldg., Municipal Airport.
Kansas	Dodge City	Municipal Airport	P. O. Box 550.
	Kansas City	Third Floor, Administration Bldg., Fairfax Airport.	Third Floor, Administration Bldg., Fairfax Airport.
	Wichita	Third Floor, Tower Bldg., New Municipal Airport.	P. O. Box 2497, West Wichita Station, Wichita, 13.
	do	Beech Aircraft Corp	Care Beech Aircraft Corp.
	do	Cessna Aircraft Co	Care Cessna Aircraft Co.
Michigan	Grand Rapids	Kent County Airport	Kent County Airport.
	Detroit	Administration Bldg., Detroit-Wayne Major Airport, Inkster.	Administration Bldg., Detroit-Wayne Major Airport, Inkster.
	Muskegon	Continental Aviation and Engineering Corp	P. O. Box 538.
Minnesota	Minneapolis	Administration Bldg., Wold-Chamberlain Field.	Box 1, Administration Bldg., Wold-Chamberlain Field.
	do	6355 34th Ave, South, Wold-Chamberlain Field.	6355 34th Ave., South, Wold-Chamberlain Field.
Missouri	Springfield	Municipal Airport, Route 6	Box 502A, Municipal Airport, Route 6
	St. Louis	Administration Bldg., Lambert Field	Box 127, Lambert Field, St. Louis 21.
Nebraska	Lincoln	Terminal Bldg., Municipal Airport (Union)	P. O. Box 1748, Terminal Bldg., Municipal Airport (Union).
	North Platte	128 Administration Bldg., Municipal Airport	P. O. Box 581.
North Dakota	Bismarck	Municipal Airport	P. O. Box 207.
	Fargo	Administration Bldg., Hector Airport	P. O. Box 1756.
South Dakota	Huron	Municipal Airport	P. O. Box 96.
	Rapid City	do	P. O. Box 27.
Wisconsin	Milwaukee	General Mitchell Field	General Mitchell Field, Milwaukee, 7.
	Wausau	Wausau Municipal Airport	Wausau Municipal Airport.

Region 4

REGIONAL OFFICE: 5651 Manchester Avenue, Los Angeles 45, Calif.

DISTRICT OFFICES

State	City	Location	Mailing address
Arizona	Phoenix	Sky Harbor Airport	3000 Sky Harbor Blvd., Sky Harbor Airport.
California	Burbank	Hangar No. 4, Lockheed Air Terminal	Hangar No. 4, Lockheed Air Terminal.
	do	Lockheed Aircraft Corp., Plant A-1, Bldg. 19.	Care Lockheed Aircraft Corp., Plant A-1, Bldg. 19.
	Fresno	Fresno Air Terminal	P. O. Box 691.
	Long Beach	Administration Bldg., Municipal Airport	Administration Bldg., Municipal Airport.
	Los Angeles	5651 West Manchester Ave	5651 West Manchester Ave., Los Angeles 45
	Oakland	Municipal Airport	Municipal Airport, Oakland 14.
	Ontario	Administration Bldg., Ontario International Airport.	Administration Bldg., Ontario International Airport.
	Palo Alto	Municipal Airport	P. O. Box 1240.
	do	Hiller Helicopters, 1350 Willow Rd	Care Hiller Helicopters, 1350 Willow Rd.
	Sacramento	Municipal Airport	Municipal Airport.
	San Diego	Administration Bldg., Lindbergh Field	Administration Bldg., Lindbergh Field.
	do	Consolidated-Vultee Aircraft Corp., Bldg. 33, Lindbergh Field.	Care Consolidated-Vultee Aircraft Corp., Bldg. 33, Lindbergh Field, San Diego, 12.
	Santa Monica	Douglas Aircraft Co., Inc., 3000 Ocean Park Blvd.	Care Douglas Aircraft Co., Inc., 3000 Ocean Park Blvd.
	San Francisco	Room 404, Terminal Bldg., International Airport.	Room 404, Terminal Bldg., International Airport, South San Francisco.
	Van Nuys	7550 Hayvenhurst Ave., San Fernando Valley Airport.	7550 Hayvenhurst Ave., San Fernando Valley Airport.
Colorado	Denver	CAA District Office Bldg., Stapleton Airfield	CAA District Office Bldg., Stapleton Airfield.
	Grand Junction	Walker Field	P. O. Box 1046.
Idaho	Boise	1412 Idaho St	1412 Idaho St.
Montana	Billings	Administration Bldg., (Second Floor), Municipal Airport.	P. O. Box 1698.
	Helena	Municipal Airport	P. O. Box 1167.
Nevada	Las Vegas	Administration Bldg., McCarran Field	P. O. Box 1752.
	Reno	328 Gazette Bldg	P. O. Box 499.
New Mexico	Albuquerque	2029 Yale Blvd	2029 Yale Blvd., SE.
Oregon	Eugene	Municipal Airport Medford, Oregon	P. O. Box 832.
	Portland	Service Office Bldg., 5410 Northeast Marine Dr.	Service Office Bldg., 5410 Northeast Marine Dr., Portland 13.
Utah	Salt Lake City	Municipal Airport No. 1	Municipal Airport No. 1, Salt Lake City 3.
Washington	Seattle	CAA Bldg., Boeing Field	P. O. Box 18, Seattle 8.
	do	do	P. O. Box 17, Seattle 8.
	Spokane	Administration Bldg., Felts Field	P. O. Box 247, Parkwater Station.
	Yakima	2300 West Washington Ave	2300 West Washington Ave.
Wyoming	Cheyenne	Municipal Airport, 3801 Evans Ave	Box 2068, Airport Station.

Region 5

REGIONAL OFFICE: P. O. Box 440, Anchorage, Alaska

DISTRICT OFFICES

Territory	City	Location	Mailing address
Alaska	Anchorage	Communications Bldg., Merrill Field	P. O. Box 440.
	do	Anchorage International Airport Terminal Bldg., Ramp Level	P. O. Box 440.
	Fairbanks	Wien Alaska Airlines Hangar, Fairbanks Airport	P. O. Box 510.
	Juneau	McKinley Bldg	P. O. Box 2449.

Region 6

REGIONAL OFFICE: P. O. BOX 4009, Honolulu, T. H.

CAA International District Offices

Location	Mail address	Areas of responsibility
Fort Worth, Tex., Building 1, Room 103, Second Regional Office.	P. O. Box 1689	Mexico.
Kansas City, Kans., Administration Bldg., Rooms 310-313, Fairfax Airport.	Administration Bldg., Fairfax Airport.	(No geographical area assigned.)
Miami, Fla., 656 East Drive, Miami Springs, Fla.	P. O. Box 234, International Airport, Miami 48.	Bahama Islands, Cuba, Jamaica, Guatemala, El Salvador, Honduras, British Honduras, Nicaragua, Costa Rica, Colombia (Barranquilla and Cartagena only).
Minneapolis, Minn., 6201-34th Ave., South Wold-Chamberlain Field.	6355-34th Ave., S., Wold-Chamberlain Field.	Western Canada.
New York, N. Y., Federal Bldg., N. Y. International Airport, Jamaica, Long Island, N. Y.	Federal Bldg., N. Y. International Airport, Jamaica, Long Island, N. Y.	Iceland, Eastern Canada, Newfoundland, Labrador, Bermuda,[1] Azores,[1] Dakar,[1] Liberia,[1] Accra,[1] Leopoldville,[1] Johannesburg.[1]
San Francisco, Calif., Rooms 101-107, International Terminal Bldg., International Airport, South San Francisco.	Room 101, International Terminal Bldg., International Airport, South San Francisco.	Solomons, New Guiana, New Zealand, Samoa, New Hebrides, Taamotu, Australia, Fiji Islands, New Caledonia, Norfolk Island.

[1] Primary Operational Coverage.

CAA International Field Offices

Location	Mail address	Areas of responsibility
Bangkok, Thailand, United States Embassy, 95 Wireless Rd.	c/o United States Embassy Bangkok	Thailand, Malay States, French Indo-China, Burma, India, Pakistan.[1]
Beirut, Lebanon, American Embassy #7	c/o American Embassy	Iran, Trans-Jordan, Saudi Arabia, Yemen, Pakistan,[1] India,[1] Egypt, Sudan, Eritrea, Ceylon, Ethiopia, Libya, French Somaliland, British Somaliland, Uganda, Kenya, Tanganyika, Aden, Afghanistan.
Buenos Aires, Argentina, Florida 935, 2C	c/o United States Embassy Avda. R. S. Pena 567.	Argentina, Uruguay, Paraguay, Chile.
Lima, Peru, CORPAC Terminal Bldg., Limatambo Airport.	c/o United States Embassy	Peru, Bolivia, Ecuador, Colombia (Except Barranquilla and Cartagena), Panama, Canal Zone.
London, England, United States Embassy, No. 1 Grosvener Square, London, W. 1.	c/o United States Embassy	Sweden, Norway, Denmark, Finland, Netherlands, Great Britain, Ireland, Austria, Yugoslavia, Belgium, Germany.
Manila, P. I., Embassy Compound, Quonset #3	c/o United States Embassy, A. P. O. 928, c/o Postmaster, San Francisco, Calif.	Philippine Islands, Celebes, Borneo, Java, Sumatra, Formosa, Hong Kong, Guam, Marianas, Marcus Island.
Paris, France, Room 321, Embassy F 1 Rue de Poesbourg United States Embassy.	A. P. O. 230—c/o Postmaster, New York, N. Y.	Sicily, France, Algeria, Corsica, Portugal, Italy, Sardinia, Spain, Switzerland, Tunisia, Morocco (French-Spanish), Israel, Luxembourg, Tangier, Greece.
Rio de Janeiro, Brazil, United States Embassy, Av. Presidente Wilson 147, Room 411.	c/o United States Embassy	Brazil.
San Juan, P. R., Isla Grande Airport	P. O. Box 4764	Haiti, Dominican Republic, Puerto Rico, Virgin Islands, Lesser Antilles, Netherlands West Indies, Venezuela, British Guiana, French Guiana, Surinam.
Tokyo, Japan, American Embassy Annex, Room 206, Mantetsu Bldg., No. 2, Akasaka Aoi-cho, Minato-ku.	c/o American Embassy, A. P. O. 500, c/o Postmaster, San Francisco, Calif.	Japan, Korea, Kurile Islands, Okinawa, Volcano Islands.

[1] Shared with Beirut IFO by agreement.

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 by the Administrator and publisher in the Flight Information Manual.

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 the Flight Information Manual 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 and 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.)