CIVIL AERONAUTICS BOARD

WASHINGTON, D. C.

CIVIL AIR REGULATIONS

PART 61.—
SCHEDULED AIR CARRIER RULES (INTERSTATE)



As Amended to January 1, 1941

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1941

For sale by the Superintendent of Documents, Washington, D. C. - - - Price 5 cents

FOREWORD

This edition of Part 61 of the Civil Air Regulations is not a general revision of this Part. However, it incorporates all of the amendments to Part 61 made prior to January 1, 1941.

CIVIL AIR REGULATIONS

PART 61.—SCHEDULED AIR CARRIER RULES (INTERSTATE)

Sec.
61.0 Provision for issuance.
61.00 Certificate required.
61.01 Violation of terms.
61.1 Service.
61.10 Service performed and changes.
61.11 Schedules.
61.2 Route.
61.20 Route operation and changes.
61.21 Regular route.
61.22 Regular stops.
61.23 Alternate airports.
61.24 Alternate route.
61.3 Aircraft.
61.30 Aircraft operation and changes.
61.31 Single-engine aircraft.
61.32 Multi-engine aircraft.
61.33 Instruments.
61.34 Equipment.
61.35 Maintenance.
61.4 Maintenance manual.
61.40 Necessity for.
61.41 Contents.
61.42 Form.
61.43 Delivery of copies.
61.44 Record of copies.
61.45 Changes.
61.46 Retirement of parts program.
61.5 Airmen.
61.50 Airmen utilization and changes.
61.51 First pilot.
61.52 Second pilot.
61.53 Pilot technique maintenance.
61.54 Radio operator.
61.55 Dispatchers.
61.6 Weather.
61.60 Reports.
61.7 Flight operations.
61.70 Prior to clearance.
61.71 Dispatching rules (for clearance).
61.72 Flight preparation and take-off rules.
61.73 Flight course and enroute rules.
61.74 Flight altitude rules.
61.75 Instrument approach rules.
61.76 Landing rules.
61.77 Flight interruption rules.
61.78 General pilot rules.
61.79 Miscellaneous rules.
61.8 Operations manual.
61.80 Necessity for.
61.81 Contents.
61.82 Form.
61.83 Delivery of copies.
61.84 Record of copies.
61.85 Changes.
61.9 Reports.
61.90 General.
61.91 Monthly report.
61.92 Mechanical interruption.
61.93 Weather interruption.
61.94 Mechanical record.
61.95 Irregularity report.

61.0 Provision for issuance. Pursuant to the provisions of the Civil Aeronautics Act of 1938, as amended, empowering the Administrator of Civil Aeronautics to issue air carrier operating certificates and the Board to establish minimum safety standards for the operation of air carriers to whom such certificates are issued, and for prohibiting the operation or navigation of aircraft of such air carriers in violation thereof, the following rules and regulations for the operation of scheduled air carriers engaged in interstate air transportation, in addition to those prescribed elsewhere in the Civil Air Regulations, are hereby prescribed.

61.00 Certificate required. No scheduled air carrier shall be operated in interstate air transportation for the carriage of mail, goods, or persons, or any combination thereof, unless—

(*a*) possessed of a valid air carrier operating certificate (or temporary air carrier operating certificate) issued by the Administrator of Civil Aeronautics, and

(*b*) possessed of valid competency letters (or temporary letters) relating to service, route, aircraft, maintenance, airmen, and weather, issued by the Administrator of Civil Aeronautics and appended to such certificate and deemed a part thereof.

61.01 Violation of terms. No scheduled air carrier shall be operated in interstate air transportation for the carriage of mail, goods, or persons, or any combination thereof, in violation of any of the terms, conditions, specifications, limitations, or other provisions—

(*a*) contained in its air carrier operating certificate or temporary air carrier operating certificate, or

(*b*) contained in any current competency letter or temporary letter relating to service, route, aircraft, maintenance, airmen, or weather.

61.1 Service.

61.10 Service Performed and Changes. No scheduled air carrier shall perform or render any service, as related to the carriage of mail, goods, or persons, or to day or night operation, until rated competent to render such service in an appropriate competency letter issued by the Administrator. When an air carrier desires to effect a change in the kind of service offered with respect to the above, application for a competency rating therefor shall be made to the Administrator in accordance with § 40.710.

61.11 Schedules.

61.110 Operations schedules. Shall be set up with due regard to sufficient time for the adequate servicing with fuel and oil at intermediate stops and to prevailing winds, and on the basis of a cruising speed of the aircraft at not to exceed the specified cruising power output of the engines as operated in the aircraft. All air carrier aircraft when being tested for ratings will be checked to determine cruising speeds that are to be approved. Block-to-block time shall be used in establishing time from stop to stop.

61.2 Route.

61.20 Route operation and changes. No scheduled air carrier shall operate over any route or part thereof until rated competent to operate thereover in an appropriate competency letter, issued by the Administrator. When an air carrier desires to effect a change in the route flown over, application for a competency rating therefor shall be made to the Administrator in accordance with § 40.710.

61.21 Regular route. The conduct of operations by a scheduled air carrier shall at all times be in strict accordance with the terms of its route competency letter.

61.22 Regular stops. Regular terminals and intermediate stops shall be used only as specified in the route competency letter.

61.23 Alternate airports. Regular terminals, intermediate stops or other adequate airports, may be used as alternates when used for the purpose of complying with clearance requirements, provided such alternates are listed as such in the route competency letter.

61.24 Alternate route. No scheduled air carrier shall operate over any alternate route until rated competent to operate thereover in an appropriate competency letter issued by the Administrator, and the

conduct of operations by such air carrier shall at all time be in strict accordance with the terms of its route competency letter.

61.3 Aircraft.

61.30 Aircraft operation and changes. No scheduled air carrier shall operate any aircraft until rated competent with respect thereto in an appropriate competency letter issued by the Administrator. When an air carrier desires to effect a change in the model of aircraft utilized, application for a competency rating therefor shall be made to the Administrator in accordance with § 40.710.

61.31 Single-engine aircraft.

61.310 Day operation over land. No single-engine seaplane shall be operated over land with passengers unless such aircraft can, at all times, reach open water suitable for a landing in the event of complete power failure.

61.311 Night operation over land. No single-engine aircraft shall be operated at night with passengers.

61.312 Day operation over water. The following rules shall govern the operation of single-engine aircraft in day operation over water:

61.3120 (*a*) No single-engine land aircraft shall be operated over water unless such aircraft can at all times reach land suitable for a landing in the event of a complete power failure.

61.3121 (*b*) No single-engine water aircraft may be operated over water unless a landing may be effected at all times within a distance of eight miles from shore, in the event of a complete power failure.

61.3122 (*c*) No single-engine water aircraft shall be operated over water, except during such time and seasons as permit the use of such water for landing without any hazard from floating ice or freezing water spray.

61.313 Night operation over water. No single-engine aircraft shall be operated at night with passengers.

61.32 Multi-engine aircraft.

61.320 Day operation over land. No multi-engine seaplane shall be operated over land more than 50 miles from open water suitable for a landing.

61.321 Night operation over land. No multi-engine seaplane shall be operated at night over land with passengers, nor shall any such seaplane be operated at night over land with goods more than 50 miles from open water suitable for a landing.

61.322 Day operation over water. The following rules will govern the operation of multi-engine aircraft in day operation over water:

61.3220 (*a*) No multi-engine land aircraft shall be operated over water, beyond gliding distance from shore without the aid of power, unless completely equipped for over-water flying, as provided in § 40.233.

61.3221 (*b*) No multi-engine aircraft shall be operated over water unless such aircraft can, at all times, maintain an altitude of at least 1,000 feet above the water, with any one engine inoperative and with the authorized load for the route or part thereof.

61.3222 (*c*) No multi-engine seaplane shall be operated over water except during such time and seasons as permit take-off and landing

without any hazard from floating ice or freezing water spray, at terminals and intermediate stops.

61.3223 (*d*) When one engine fails in a twin-engine land aircraft operating over water, the aircraft shall be headed toward, and thereafter continuously flown toward, a point on the nearest shore in terms of time where a safe landing may be made.

61.323 Night operation over water. The following rules will govern the operation of multi-engine aircraft in night operation over water:

61.3230 (*a*) Same as § 61.3220.

61.3231 (*b*) Same as § 61.3221.

61.3232 (*c*) Same as § 61.3222.

61.3233 (*d*) Same as § 61.3223.

61.3234 (*e*) No multi-engine water aircraft shall be operated over water at night with passengers.

61.33 Instruments. No aircraft shall be operated in scheduled air transportation service unless such aircraft is possessed of all instruments required by the provisions of §§ 04.52 and 04.53 for the particular flight dispatched.

61.34 Equipment. No aircraft shall be operated in scheduled air transportation service unless such aircraft is possessed of all equipment required by the provisions of §§ 04.52 and 04.53 for the particular flight dispatched, and required by other applicable provisions of the Civil Air Regulations.

61.35 Maintenance.

61.3500 General. Each aircraft operated by a scheduled air carrier shall be maintained in a continuous condition of airworthiness, in accordance with accepted standards and practices, and the terms of the aircraft and maintenance competency letters.

61.3501 Organization. A maintenance organization shall be set up by the air carrier and it shall be responsible for the continuous airworthiness of all aircraft, engines, propellers, accessories, and instruments, for the proper maintenance of adequate facilities, for the adequacy and competence of maintenance personnel and for the preparation and dissemination of such maintenance reports as are required by the Administrator.

61.3502 Supervision. All phases of maintenance duties shall be adequately supervised by qualified mechanics, mechanics in charge, crew chiefs, or foremen.

61.3503 Inspection. An adequate inspection organization shall be set up by the air carrier and it shall be responsible for determining that all maintenance work conforms to Civil Aeronautics Board requirements as to workmanship, methods employed, and materials used, as provided in § 61.35. Each inspector shall hold a valid mechanic's certificate for the type of inspection involved.

61.3504 Workmanship. Workmanship shall be at least equivalent to that generally accepted as conforming to good practice as related to the airworthiness of the aircraft or auxiliary equipment.

61.3505 Methods. Methods employed shall conform to those generally accepted as good practice. Insofar as they apply, the methods provided for in Part 18 shall be utilized.

61.3506 Materials. Materials used shall conform, when possible, to Army, Navy, or Part 18 specifications. In no case shall materials be used of physical properties less than those of the material used by the manufacturer of the equipment or component in question insofar as the airworthiness of such equipment or component is affected.

61.3507 Mechanics. An adequate staff of qualified mechanics and experienced artisans shall be employed by the air carrier and kept available for the performance of functions of maintenance and other duties which are reasonable and necessary to the safe and orderly operation involved. Each such mechanic and artisan shall be relieved of all air carrier duties for a period of at least 24 consecutive hours during each week of duty or equivalent thereof.

61.3508 Training program. A training program shall be maintained so that maintenance personnel may at all times be familiar with the duties required, with particular reference to the introduction into air transportation service of a new or unfamiliar equipment.

61.3509 Distribution of personnel. Sufficient maintenance personnel shall be stationed or provided for along the air carrier route and at such scheduled stops as may be deemed necessary by the Administrator to provide proper service to flight equipment and auxiliaries thereto.

61.3510 Shops and facilities. At least one general overhaul and maintenance shop containing adequate working space and facilities shall be provided for by the operator. Such shop shall be properly lighted, ventilated, and heated.

61.3511 Stock. An adequate quantity of spare parts and supplies shall be kept on hand or readily available at all times.

61.3512 Adequate facilities. Adequate facilities for the proper servicing, maintenance, and repair of air carrier aircraft and auxiliary equipment shall be available at all points along the air carrier's route deemed necessary or advisable by the Administrator.

61.3513 Inflammable material. Including dope, gasoline, etc., shall be kept remote from that portion of shops where sparks or open flames present fire hazards, by their proximity.

61.3514 Refueling requirements. The following rules will govern the operations incident to the refueling of air carrier aircraft:

61.35140 (*a*) Water elimination facilities shall be provided at all refueling points.

61.35141 (*b*) A daily check for the presence of water in fuel and storage and dispensing tanks shall be made and a record of such water checks shall be kept, unless such tanks are equipped with an automatic water eliminator deemed satisfactory by the Administrator.

61.35142 (*c*) Where refueling is accomplished during conditions of rain or snow, precautions shall be taken to prevent the entrance of moisture into the fuel tanks of the aircraft.

61.35143 (*d*) During refueling the aircraft and the fuel dispensing apparatus shall both be grounded to a point or to points of zero electrical potential.

61.35144 (*e*) When refueling is accomplished at night, adequate lights shall be provided to insure proper servicing.

61.35145 (*f*) No smoking and no fires or flames shall be permitted in the immediate vicinity of an aircraft while refueling is being accomplished.

61.35146 (*g*) When practicable, the aircraft electrical switches shall not be switched on or switched off while refueling is being accomplished.

61.35147 (*h*) When passengers are permitted to remain in the cabin while refueling is being accomplished, a responsible cabin attendant shall remain in the cabin at or near the cabin door.

61.3515 Alteration and repairs. Air carrier aircraft, including training aircraft, aircraft engines, propellers and approved components thereof, shall be altered or repaired only in conformity to the procedures provided in Part 18. Reports of such alterations or repairs shall be submitted promptly to the Administrator through the air carrier maintenance inspector of the Administrator having supervision of the operation involved.

61.3516 Records. Current records shall be kept of the total time of service, the time since last overhaul, and time since last inspection, on all aircraft, engines, propellers and where practicable on instruments, equipment, and accessories. Current records shall be kept of all instrument and equipment failures, including partial ones, which occur to the aircraft after it has departed from the block until it has reached the next block.

61.4 Maintenance manual.

61.40 Necessity for. In order to properly maintain flight equipment, each operator of a scheduled air carrier shall prepare and maintain a maintenance manual for the use and guidance of the maintenance personnel.

61.41 Contents. Each maintenance manual shall outline instructions for operations covering the overhaul, check, inspection, and servicing of flight equipment and other equipment auxiliary thereto, and shall also contain a copy of the current maintenance competency letter. The responsibilities of each mechanic in charge, crew chief, foreman, and inspector shall be clearly outlined.

61.42 Form. The maintenance manual shall be loose-leaf in form, and each page therein shall be numbered and dated to show the currency of all material contained therein. All copies of such manual shall at all times be kept up to date.

61.43 Delivery of copies. A copy of the maintenance manual shall be furnished to at least the following persons:

61.430 (*a*) the Administrator of Civil Aeronautics,

61.431 (*b*) the Chief, Air Carrier Service, Civil Aeronautics Administration,

61.432 (*c*) each air carrier maintenance inspector of the Administrator in charge of inspection of any part of the air carrier,

61.433 (*d*) each chief of maintenance of the air carrier,

61.434 (*e*) each chief inspector of the air carrier, and

61.435 (*f*) each mechanic of the air carrier in charge at each station where servicing, inspection, checks, or overhauls is or are done.

61.44 Record of copies. Each air carrier shall keep a complete record of all persons to whom copies of its maintenance manual have been supplied.

61.45 Changes. The following rules will govern changes made in the maintenance manual:

61.450 (*a*) Any change issuing from the Administrator pertaining to the maintenance manual shall be promptly incorporated in the maintenance manual and copy thereof sent, in the form of a new page of such manual, to each person required to hold a copy of the manual. Each amended page of the manual shall be properly dated.

61.451 (*b*) Upon receipt of such amended page or pages the recipient shall insert the current information in the manual.

61.452 (*c*) No change shall be made in any overhaul, check or inspection periods without the approval in writing of the Administrator. Pages of the manual shall be changed accordingly. Notice of such changes shall be promptly given in accordance with § 61.450.

61.453 (*d*) Any data not issuing from the Administrator may be changed by the operator, without the approval of the Administrator, provided such change is not inconsistent with any Federal regulation or competency letter or safe maintenance practice. Notice of such change shall be promptly given in accordance with § 61.450.

61.46 Retirement of parts program. A retirement of parts program shall be set up by the operator based upon the experience of the operator and the best information available including recommendations from the original manufacturer of the equipment.

61.5 Airmen.

61.50 Airmen utilization and changes. No scheduled air carrier shall utilize any pilot or dispatcher until such airman has been rated competent for the particular air carrier operation by the Administrator. When an air carrier desires to effect a change in the airmen listed in the airmen competency letter, application for a competency rating therefor shall be made to the Administrator in accordance with § 40.710.

61.510 Aircraft commander. The first pilot shall be in command of the aircraft at all times during flight, and shall be responsible for the safety of persons and goods carried, and for the conduct and safety of the members of the crew.

61.511 Aircraft competency. The first pilot shall meet the appropriate minimum requirements of Part 40 and be listed in the airmen competency letter as approved for service to be performed.

61.512 Instrument competency. The first pilot, in addition to meeting the minimum requirements for an instrument rating provided for in § 20.21 and the appropriate provisions of Part 21, as the case may be, must prove satisfactorily to the operator's check pilot, at least every six months after entry into service in accordance with the training program required by § 61.53, his ability to pilot and navigate by instruments an aircraft of a make and model to be flown by him in the air carrier service. Additional checks may be required by the Administrator at his discretion.

61.513 Route competency. The first pilot shall meet the appropriate minimum requirements of Part 40 and be listed in the airmen competency letter as approved for the route, or part thereof. No pilot shall be scheduled over an alternate route unless he has met the requirements of § 61.5141 regarding qualification over such route.

61.514 Route competency expiration. The following rules will govern conditions of route competency expiration, as related to first pilots:

61.5140 (*a*) **Regular route.** After 6 consecutive months' absence from flight duty over a regular route, or part thereof, a first pilot will no longer be deemed competent for the carriage of persons in air transportation service over such route or part thereof.

61.5141 (*b*) **Alternate route.** After 12 consecutive months' absence from flight duty over an alternate route, a first pilot will no longer be deemed competent for the carriage of persons in air transportation service over such route.

61.515 Route competency renewal. The following rules will govern conditions of route competency renewal, as related to first pilots:

61.5150 (*a*) A first pilot, who has been absent from flight duty over a regular route, or part thereof, for a period of less than 12 consecutive months and whose route competency has expired in accordance with the provisions of § 61.5140, will be deemed competent for such route, or part thereof, upon completion of one round-trip flight over the route, or part thereof, as pilot (without passengers) or as second pilot (with or without passengers), and upon notice to the Administrator of such flight with weather conditions as outlined in § 40.2613.

61.5151 (*b*) A first pilot, who has been absent from flight duty over an alternate route for a period of more than 12 consecutive months and whose route competency has expired in accordance with the provisions of § 61.5141, will be deemed competent for such alternate route upon compliance with the requirements of § 40.2614 as to such alternate route.

61.516 Logging flight time. A first pilot shall log the total actual flight time elapsing during his command of the aircraft.

61.517 **Logging instrument flight time.** Instrument flight time may be logged as such only when the aircraft is flown solely by reference to instruments either under actual or properly simulated flight conditions. (Over-the-top flying shall not be logged as instrument flight time.)

61.518 Flight time limitations. The following rules will provide the limitations as to the first pilot flight time:

61.5180 (*a*) A first pilot may be scheduled to fly 8 hours or less during any 24 consecutive hours, without a rest period during such 8 hours. If such pilot be scheduled to fly in excess of 8 hours during any 24 consecutive hours, he shall be given an intervening rest period at or before the termination of 8 scheduled hours of flight duty. Such rest period shall equal at least twice the number of hours flown since the last preceding rest period, and in no case shall such rest period be less than 8 hours. During such rest period, the pilot shall be relieved of all duty with the air carrier.

61.5181 (b) When a first pilot has flown in scheduled air transportation service in excess of 8 hours during any 24 consecutive hours, he shall receive 24 hours of rest, excluding dead-head transportation to duty assignment, before being assigned any duty with the air carrier.

61.5182 (*c*) A first pilot shall not fly in excess of 30 hours during any 7 consecutive days. Relief from all duty for not less than 24

consecutive hours shall be provided for and given to such pilot at least once during any 7 consecutive days.

61.5183 (*d*) A first pilot shall not fly in scheduled air transportation service as a member of the crew more than 100 hours in any one month.

61.5184 (*e*) A first pilot shall not fly in scheduled air transportation service more than 1,000 hours in any calendar year.

61.5185 (*f*) All first pilot flight time limitations of these regulations are applicable even though such pilot may be used as a second pilot except when first pilot is qualifying on a regular route or alternate route on which he is not qualified.

61.5186 (*g*) A first pilot shall not do other commercial flying while employed by an air carrier when such flying, in addition to that in scheduled air transportation service, will exceed any flight time limitations specified herein.

61.519 Physical examination. A first pilot shall complete a satisfactory physical examination given by a medical examiner designated by the Administrator in accordance with the requirements of §§ 20.3304 and 21.252, as the case may be. Additional examinations may be required by the Administrator at his discretion.

61.52 Second pilot.

61.520 When required. A second pilot will be required in the following cases when passengers are carried:

61.5200 (*a*) when the aircraft used is of a design incorporating multi-engine features, combined with retractable landing gear or wing flaps or of a single-engine design incorporating both retractable landing gear and wing flaps, or

61.5201 (*b*) when the first pilot is required to fly 5 or more hours during any 24 consecutive hours without an intervening rest period equal to at least 2 hours for each hour flown since the last preceding rest period. Such rest period when required shall not be less than 8 hours, or

61.5202 (*c*) when the operation authorized permits instrument flying, or

61.5203 (*d*) when, in the opinion of the Administrator, the usual and customary duties of a first pilot in the navigation and conduct of a flight would be unduly interfered with through the necessity of performing other duties usually performed by a second pilot.

61.521 Aircraft competency. A second pilot shall meet the minimum requirements prescribed in § 40.262.

61.522 Instrument competency. At least once each 6 months after entry into service as a second pilot, each second pilot shall have his log-book certified to the effect that he is capable of flying by instruments and has demonstrated such fact to a first pilot, check pilot, or to the chief pilot of the air carrier, which person shall so certify.

61.523 Logging flight time. A second pilot may log 50% of the total actual flight time or he may log the full flight time during which he was the sole manipulator of the controls, provided that if such time be in excess of 50% of the total flight time, the time so flown by the second pilot shall be certified by the first pilot.

61.524 Flight time limitations. A second pilot shall not fly as a member of the crew in scheduled air transportation service more than 100 hours in any month.

61.53 Pilot technique maintenance.

61.530 Responsibility of operator. In order to maintain a high standard of pilot technique, the air carrier shall be responsible for proper and periodic instruction, in their respective duties, of all first and second pilots employed by such operator. The instruction so given to first pilots shall at least include operation and approach for landing with one engine fully throttled with maximum load authorized for the route or portion thereof, in each type of aircraft to be used by the pilot in scheduled air transportation service, and instrument approach procedures.

61.531 Transition training. If a first pilot has not flown a particular make and model or aircraft, within the previous 90 days, he shall before being scheduled in such equipment receive flight training on such aircraft, including:

61.5310 (*a*) Five take-offs and landings, with one-half to three-quarters of the useful load aboard.

61.5311 (*b*) One landing of the 5 provided for in § 61.5310, with one engine fully throttled on approach, effective during the day, and where night operation is authorized one landing of the 5 provided for in § 61.5310, with one engine fully throttled on approach, effected at night.

61.532 Persons carried during transition training. During such pilot transition training, no persons other than air carrier personnel on air carrier business may be carried.

61.533 Pilot certification for equipment. When such tests are not conducted by an Administrator of Civil Aeronautics air carrier inspector, an authorized check pilot shall certify to the pilot's capabilities on the equipment involved.

61.534 Check pilots. Each air carrier shall provide a sufficient number of check pilots to insure that each pilot constantly meets and complies with the minimum pilot requirements pertaining to scheduled air transportation service. No check pilot so provided by the operator shall check any first pilots for the air carrier until such check pilot has been approved therefor by the Administrator. No check of pilot capabilities made in behalf of the air carrier abrogates the authority of the Administrator to make whatever pilot checks are deemed by him to be necessary in the interests of safe air carrier operation.

61.535 Training program. A pilot training and instruction program satisfactory to the Administrator shall be maintained by the air carrier. The operator shall submit it to the Administrator within 60 days after certification of the air carrier.

61.54 Radio operator.

61.540 Pilot as operator. The first or second pilot may serve in the capacity of a radio operator, subject to the rules of the Federal Communications Commission in respect to the grade of operator's license required.

61.55 Dispatchers.

61.550 Number required. The air carrier shall provide an adequate number of certificated aircraft dispatchers, necessary for the

type of operation involved, for the purpose of dispatching air carrier aircraft.

61.551 Location. One or more aircraft dispatchers shall be located at such points as may be deemed necessary by the Administrator to insure the safe operation of the air carrier.

61.552 Dispatcher competency certificate. Each dispatcher used by the air carrier for the purpose of dispatching air carrier aircraft shall be possessed of a valid dispatcher certificate, in accordance with the provisions of Part 27, and shall be listed in the airmen competency letter as approved for the route or routes, or parts thereof.

61.553 Qualification for route. The following rules shall govern the qualification of a dispatcher for a particular route:

61.55300 (*a*) He shall have made at least one round trip over the route, or part thereof, on which he is to serve during the previous 90 days prior to dispatching any airplane over such route or part thereof.

61.55301 (*b*) He shall observe and be familiar with the prevailing weather phenomena peculiar to the route, or part thereof, for which qualification is sought.

61.55302 (*c*) He shall be familiar with the air carrier operation over the route, or part thereof, for which qualification is sought.

61.55303 (*d*) He shall be familiar with the contents of the air carrier operations manual.

61.55304 (*e*) He shall be familiar with the airmen and weather competency letters over the route or part thereof for which qualification is sought.

61.55305 (*f*) He shall be familiar with the general and special rules of the air carrier concerning dispatch of aircraft in scheduled operations.

61.55306 (*g*) He shall be familiar with the aircraft used by the air carrier.

61.55307 (*h*) He shall be familiar with the provisions of the aircraft certificates and with the loading charts for the equipment used.

61.55308 (*i*) He shall be familiar with the maximum authorized loads, with respect to the route or part thereof, for the aircraft to be used.

61.55309 (*j*) He shall be familiar with the fuel and oil consumption of the aircraft, with respect to the air carrier operating conditions.

61.55310 (*k*) He shall be familiar with the available charts used to compute the air speed of the aircraft and the fuel consumption, at various altitudes and power outputs of the aircraft engines.

61.55311 (*l*) He shall be familiar with the local United States Weather Bureau and Civil Aeronautics Authority personnel.

61.55312 (*m*) He shall be familiar with the radio facilities in the aircraft used.

61.55313 (*n*) He shall be familiar with the peculiarities and limitations of each radio range and radio marker station over the route, or part thereof, for which route competency is sought.

61.55314 (*o*) He shall be familiar with the effect of weather conditions upon the radio reception by the aircraft to be used.

61.55315 (*p*) He shall be familiar with the timetables which ordinarily apply to the air carrier operation.

61.55316 (*g*) He shall be familiar with any airway facility, additional to those mentioned in § 61.55313 enroute, to, or located at, alternate airports approved as such, for the route or part thereof, in the route and weather competency letter.

61.554 Route qualification maintenance. Each dispatcher listed in the air carrier airmen competency letter shall make at least one round trip over the regular route, or part thereof, on which he dispatches air carrier aircraft in scheduled operations, at least once each 6 months. For an alternate route, or part thereof, the period shall be each 12 months.

61.555 A dispatcher shall not dispatch visual-contact, instrument or over-the-top flights, either day or night, below the respective minimums specified for such flights in the weather competency letter, except as provided in § 61.71094.

61.556 Dispatcher route qualification expiration. After 24 consecutive months' absence from dispatching duty over a route or part thereof, a dispatcher will no longer be deemed qualified to dispatch aircraft in scheduled operations over such route or part thereof.

61.557 Dispatcher time limitations. The following rules will govern the hours of duty for authorized dispatchers:

61.5570 (*a*) **Maximum consecutive hours of duty.** No dispatcher shall be on duty as such for a period of more than 10 consecutive hours.

61.5571 (*b*) **Maximum hours of duty in 24 consecutive hours.** If a dispatcher is scheduled to be on duty as such for more than 10 hours in a period of 24 consecutive hours, he shall be given a rest period of not less than 8 hours, at or before the termination of 10 hours of dispatcher duty except in emergencies due to illness or unavoidable absence of a dispatcher due to weather during a qualification trip or other circumstances beyond the control of the operator.

61.5572 (*c*) **Dispatcher's time off.** Relief from all duty with the air carrier for not less than 24 hours shall be provided for and given each dispatcher at least once during any consecutive 7 days, or equivalent thereto within one calendar month.

61.6 Weather.

61.60 Reports. The following rules shall govern the use of weather reports by scheduled air carriers:

61.600 (*a*) No weather report shall be used to control flight movements unless prepared from observations made and released by the United States Weather Bureau, or by a source approved by such Bureau including pilots' flight observation reports.

61.601 (*b*) The weather reports used shall be the latest reports available.

61.602 (*c*) The last airway weather report entered upon the clearance form or attached thereto shall be not more than one hour and 15 minutes old at the time the aircraft departs on a scheduled flight, except that off-course weather reports or on-call weather reports may be entered thereupon or attached thereto if the last such report is not more than 2 hours old.

61.603 (*d*) Barometric pressures, corrected to sea level readings, shall be utilized exclusively.

61.604 (*e*) All ceiling heights, reported by pilots in flight either by radio or by entry on forms, shall be with reference to altitude above sea level.

61.605 (*f*) Forecasts made by Weather Bureau or company meteorologists, or both, may be used.

61.7 Flight operations.

61.70 Prior to clearance.

61.700 Aircraft to be airworthy. No scheduled air carrier shall operate any aircraft unless, at the time of use, the aircraft is in an airworthy condition, conforms with the terms of its current aircraft certificate and is loaded in conformity with the current loading schedule which is a part of such certificate.

61.701 Adequately serviced. Before departure on any flight, the air carrier aircraft shall be adequately serviced. The first pilot shall be responsible for the proper servicing of the aircraft, although he may delegate supervision of the actual work to a second pilot, or other certificated airman.

61.702 Adequate fuel supply. The following rules shall govern the minimum fuel supply to be carried by all air carrier aircraft:

61.7020 (*a*) **Visual-contact operation (day or night).** No air carrier aircraft shall be dispatched or shall take off without fuel and oil sufficient, considering the wind and other weather conditions to be encountered during the course of the flight, at least—

(1) to complete such flight to the point cleared to, and thereafter

(2) to fly for a period of 45 minutes at normal cruising consumption for the flight.

61.7021 (*b*) **Instrument or over-the-top operation (day or night).** No air carrier aircraft shall be dispatched or shall take off without fuel and oil sufficient, considering the wind and other weather conditions to be encountered during the course of the flight, at least—

(1) to complete such flight to the point cleared to, and thereafter

(2) to fly to and land at the alternate airport designated in the clearance and most distant from the point cleared to, and thereafter

(3) to fly for a period of 45 minutes at normal cruising consumption for the flight.

61.703 Radio ground check. Immediately preceding departure from originating station it shall be determined that both day and night frequencies of the two-way radio, as well as all additional frequencies whose use are contemplated during the flight, are working satisfactorily. The method of determining this shall be by radio contact on each frequency with at least one ground station.

61.704 Passengers aboard during refueling. Passengers may be permitted to remain in the cabin during refueling, *provided*, that

61.7040 (*a*) there is no smoking in the aircraft, and

61.7041 (*b*) there is no smoking on the ground in the vicinity of the aircraft, and

61.7042 (*c*) an employee of the operator is stationed in the entrance to the passenger cabin and remains there alert for any emergency until refueling is completed.

61.705 Notice of other aircraft in flight on route (outside of airway traffic control area). Immediately prior to departure it shall

be the responsibility of the dispatcher dispatching an instrument flight outside of an airway traffic control area to ascertain from the best information available what other aircraft flights affecting the flight are in progress over the route between clearance points, the results of which shall be made known to the pilot. After departure of the scheduled flight the dispatcher will continue to advise his flight or flights the progress of all other known aircraft in flight on the course, crossing courses, converging courses, etc., affecting the flight.

61.71 Dispatching rules (for clearance).

61.7100 Necessity for dispatching authorization. No scheduled air carrier flight shall be started except on the authority of an aircraft dispatcher whose name appears in the airmen competency letter as qualified for the route, or part thereof, on which the flight takes off. No such authority is required for take-off from an intermediate stop between points specified in the original clearance unless the flight has been delayed by weather, delayed for more than 30 minutes by any other cause, or the aircraft has been refueled. (See § 61.7103 for new flight clearance.)

61.7101 Dispatcher reporting for duty. No dispatcher shall clear a flight of an air carrier aircraft unless he has been on duty, at the station from which such clearance is effected, for a period sufficient to become familiar with existing conditions. He shall continue on duty until the aircraft has landed in completion of a trip, or until the dispatching supervision has been taken over by an adjacent aircraft dispatcher or by another dispatcher who has relieved him after such relief dispatcher has been on duty for a period sufficient to become familiar with existing conditions.

61.7102 Clearance and load manifest forms—Approval. The clearance and load manifest forms used shall be approved by the Administrator.

NOTE.—Sample forms which contain substantially the material that would be acceptable may be obtained from the Administrator.

61.7103 Clearance and preparation. A clearance form shall be properly prepared for each flight between specified clearance points. Such form shall be signed by the first pilot and by the authorized aircraft dispatcher or, by duly authorized station personnel of the air carrier after receiving current authority from the authorized aircraft dispatcher, only when the first pilot and the dispatcher both believe the flight may be made with safety. A load manifest form shall be properly prepared and signed for each flight by the personnel of the air carrier who are charged with the duty of supervising the loading of the aircraft and the preparation of the load manifest forms. The aircraft when loaded as shown on the load manifest form shall not exceed the center of gravity limits or maximum allowable weight limits set forth in the aircraft certificate for the particular aircraft. The original copies of both forms shall be given to the first pilot and duplicate copies shall be kept in the station file for a period of at least 30 days.

61.7104 Clearance and load manifest contents. The following rules will govern the clearance and load manifest contents:

61.71040 (*a*) The clearance shall contain or have attached thereto all current weather reports as outlined in § 61.60 over the airway or

part thereof and, when available, any off-airway or on-call weather reports considered necessary or desirable by the pilot or dispatcher to insure the safety of the flight.

61.71041 (*b*) When available, the latest terminal and airway forecasts shall be included in or attached to the clearance and shall be considered by the dispatcher responsible and first pilot before clearance.

61.71042 (*c*) The dispatcher or duly authorized station personnel shall attach or enter all current reports or information pertaining to weather and irregularities of navigational aids and facilities and aircraft instruments and equipment affecting the flight. He shall also inform the pilot, during flight, of any additional or different irregularities, and the flight shall be controlled accordingly.

61.71043 (*d*) The load manifest shall be completed or kept current at each intermediate stop.

61.7105 Clearance request repetition. When a pilot requests clearance from a dispatcher authorized to clear the proposed flight and is refused such clearance, he shall not make a similar request from another dispatcher.

61.7106 Change in clearance by radio. If a change in clearance is desirable while the aircraft is in flight, the pilot may be given a change in clearance by radio by an authorized dispatcher, provided the two-way conversation appears in the radio log. If the pilot is refused such change by one dispatcher, he shall not make a similar request of another dispatcher. No aircraft shall be recleared enroute for instrument flight after clearance for contact flight with any one instrument or unit of equipment not in serviceable condition as provided for in § 61.7114.

61.7107 Weather minimums: general. The following rules relating to weather conditions will govern the dispatching of air carrier aircraft.

61.71070 (*a*) No scheduled air carrier aircraft shall be dispatched unless, at the time of take-off, the ceiling and visibility at the point of departure are equal to or better than those specified for departure in the weather competency letter.

61.71071 (*b*) In the event of ground fog, the dispatcher shall comply strictly with the pertinent procedures specified in the weather competency letter with respect to take-offs and landings.

61.7108 Weather minimums; visual-contact clearance. The following rules relating to weather conditions will govern the dispatching of air carrier aircraft in visual-contact operation. No scheduled air carrier aircraft shall be dispatched unless:

61.71080 (*a*) The hourly weather report sequence and current weather forecasts shall show a trend that gives sufficient indication that the ceilings and visibilities along the route to be flown are and will remain at or above the minimums specified in the weather competency letter until the flight arrives at the point cleared to.

61.71081 (*b*) During day operation minimum visibility shall be one mile except contact flight may be made when visibility is reduced to one-half mile by local smoke, dust, haze, blowing snow, or sand.

61.71082 (*c*) During night operation at least one beacon on the

course shall be visible from the aircraft at all times, unless otherwise specifically authorized by the Administrator.

61.7109 Weather minimums; instrument or over-the-top clearance. The following rules relating to weather conditions will govern the dispatching of air carrier aircraft in instrument or over-the-top operation:

61.71090 (*a*) No scheduled air carrier aircraft shall be dispatched unless the observed weather information and current weather forecasts, pertaining to the point cleared to, give sufficient indication at the time of clearance that the ceiling and visibility are or will be, when the flight would arrive at such point, at or above the minimums specified in the weather competency letter for letting-down-through.

61.71091 (*b*) When the observed weather information and current weather forecasts pertaining to the point cleared to give sufficient indication, at the time of clearance, that the ceilings and visibility are, and will remain until the flight would arrive at such point, at or above the minimums specified in the weather competency letter for letting-down-through, there shall be at least one designated alternate airport specified on the appropriate flight clearance. Such alternate airport or field shall be suitable for landing and be within the fuel and oil requirements as outlined in § 61.702.

61.71092 (*c*) If the alternate referred to in § 61.71091 is equipped with a radio range, the weather conditions existing thereat at the time of clearance must indicate that the ceilings and visibility are, and will remain until the flight would arrive at such point, at or above the minimums specified in the weather competency letter for letting-down-through at such airport when used as an alternate. Such minimums shall in no case be less than one of the following: a ceiling of 1,000 feet with a visibility of 1 mile, a ceiling of 900 feet with a visibility of 1½ miles, or a ceiling of 800 feet with a visibility of 2 miles, and the hourly weather report sequence and current forecasts shall show a trend that gives sufficient indication of weather conditions continuing or improving until the flight would arrive thereat.

61.71093 (*d*) If the alternate referred to in § 61.71091 is not equipped with a radio range, the weather conditions existing thereat at the time of clearance must be equal to, or better than, broken clouds and a ceiling of 1,000 feet and visibility of 2 miles, and the hourly weather report sequence and forecast shall show a trend that gives sufficient indication of weather conditions continuing or improving until the flight would arrive thereat. The Administrator in the interest of safety, may, at his discretion, prescribe higher minimums.

61.71094 (*e*) When the ceiling or visibility at the point cleared to is below the minimum specified in the weather competency letter for landing-down-through, but the weather reports pertaining to such point at such time shall show a trend, by the hourly sequence and current forecast, that gives sufficient indication of the weather conditions improving to or above such minimums upon arrival of the flight thereat, 2 designated alternate airports shall be specified in the appropriate flight clearance. Each such alternate shall be suitable for landing and be within the fuel and oil requirements, as outlined in § 61.702.

61.71095 (*f*) If any one of the alternates, referred to in § 61.71094, is equipped with a radio range, the weather conditions existing at such alternate at the time of clearance shall not be less than the minimums provided for in § 61.71092.

61.71096 (*g*) If any one of the alternates, referred to in § 61.71094, is not equipped with a radio range, the weather conditions existing at such alternate at the time of clearance shall not be less than the minimums provided for in § 61.71093.

61.7110 Clearance of flights on alternate routes. Clearance of flights on alternate routes shall not be permitted unless such route or routes have been approved and listed in the letter of competency, and conditions on the regular route are such that the flight would otherwise be canceled or delayed, or when for the purpose of keeping pilots qualified over such routes. When such flights are made for qualifying pilots, such flights shall be made by visual contact with visibility not less than 5 miles as observed from the aircraft over the entire route. When flights are cleared over alternate routes due to conditions on the regular route being such that flight is considered inadvisable, the weather conditions on the alternate route shall be equal to or better than those listed in the letter of competency for the particular alternate route.

61.7111 Late or off-schedule flights. When variations from the regular schedules occur, the dispatcher shall take such action or issue such special orders as may be necessary and proper.

61.7112 Flight hazards. No scheduled air carrier flight shall be dispatched when, in the opinion of either the first pilot or the dispatcher, such flight cannot be completed with safety. No scheduled air carrier flight shall be continued toward any point cleared to when, in the opinion of either the first pilot or the dispatcher, such continuation cannot be completed with safety unless, in the opinion of either, there is no safer method of procedure. In the latter event continuation shall constitute an emergency situation (see §§ 61.732 and 61.7811).

61.7113 (Unassigned.)

61.7114 Flight equipment. An air carrier shall not dispatch an aircraft in air transportation unless the equipment required by the Civil Air Regulations for the particular type of operation involved, is installed in such aircraft and in serviceable condition and, if any part of such equipment becomes unserviceable in flight, a landing shall be made either at the nearest suitable landing area where a safe landing may be made or, at the next point of intended landing, whichever in the opinion of the pilot and dispatcher is the safest procedure: *Provided*, That the aircraft dispatcher in control of the flight may dispatch or authorize the operation of such aircraft in air transportation to the nearest point where repair or replacement of such equipment can be made if the equipment specified below for the particular type of operation involved is installed in such aircraft and in serviceable condition:

(a) *Visual-contact day operation.*

1. One airspeed indicator.
2. One altimeter.
3. One tachometer for each engine.

4. One oil pressure gauge for each engine.
5. One oil temperature gauge for each engine.
6. One manifold pressure gauge for each engine.
7. One safety belt for each person aboard.
8. Two approved type portable fire extinguishers.
9. One landing gear position indicator or equivalent facility.
10. One first aid kit.
11. One magnetic compass.
12. One fixed fire extinguisher in each engine compartment.
13. One or more storage batteries of sufficient capacity to operate all radio and electrical equipment.
14. Two of the following units of radio equipment:
One transmitter for two-way communication;
One receiver for two-way communication;
One radio range receiver.
15. If such aircraft is a multi-engine aircraft it may be operated with any one of the units of equipment in Items 3, 5, or 6 above inoperative: *Provided*, That in the case of Item 5 a cylinder temperature gauge in serviceable condition is installed on the same engine the inoperative oil temperature gauge is installed.

(b) *Visual-contact night operation.*
1. All equipment required for visual-contact day operation.
2. Forward position and tail lights.
3. Two landing lights.
4. Two 3-minute landing flares.
5. One set of instrument lights.
6. One electrical generator sufficient to operate all electrical and radio equipment.

(c) *Instrument or over-the-top day operation.*
1. All equipment required for visual-contact day operation.
2. A fuel quantity indicator to show the amount of fuel in each of at least two fuel tanks.
3. One additional airspeed indicator.
4. An electrically heated pitot tube for each airspeed indicator.
5. One rate of climb indicator.
6. One gyroscopic rate of turn indicator combined with a bank indicator.
7. One artificial horizon indicator.
8. One directional gyrocompass.
9. Two sensitive type altimeters.
10. One outside air temperature gauge with indicating dial in cockpit.
11. One clock with sweep second hand.
12. One vacuum gauge installed in lines leading to the rate of turn and artificial horizon indicators and the directional gyrocompass.
13. One carburetor ice indicator if the deicing equipment requires manual manipulation.
14. All of the radio equipment required by the Civil Air Regulations for instrument type of operation.
15. One spare set of fuses.

(d) *Instrument or over-the-top night operation.*

1. All equipment required for visual-contact night and instrument or over-the-top day operation.

61.72 Flight preparation and take-off rules.

61.7200 Radio ground check. Before departure from the originating terminal on any scheduled air carrier operation, at least one check shall be made by the pilot of the radio system to be used in flight.

61.7201 Radio check after take-off. When a trailing antenna is used, a precautionary radio check to determine possible loss of such antenna shall be made as soon as practicable after take-off.

61.7202 Control tests. The pilot shall test the flight controls on the ground and determine that they are functioning properly.

61.7203 View of traffic. Immediately prior to take-off, the pilot shall maneuver the aircraft to a position from which he can observe incoming and outgoing aircraft.

61.7204 Engine tests. Before the take-off run, the aircraft engine or engines shall be individually tested at full throttle, except that supercharged engines shall be tested at run-up r. p. m. at the manifold pressure specified by the operator for the particular conditions involved. The engine temperatures (including oil, carburetor, and head temperatures) shall be normal and each magneto shall be individually tested.

61.72040 (*a*) No person other than a certificated airman may run-up the engine or engines of an air carrier aircraft while such engines are installed in an air carrier aircraft.

61.72041 (*b*) Engine run-ups shall be conducted in such a manner as to minimize the possibility of loose gravel, cinders and like material contacting the propeller blades and aircraft control, lift and stabilizing surfaces.

61.7205 Instrument tests. Before the take-off run, as many as possible of the aircraft flight instruments, and particularly all pressure gauges and gyroscopic flight instruments, shall be tested by the pilot to determine that they are all functioning properly.

61.7206 Take-off restrictions. No pilot shall take-off any air carrier aircraft if, in his opinion, the aircraft is not airworthy. No pilot shall take-off any air carrier aircraft at any time when an engine is not functioning properly.

61.7207 Runway utilization. The take-off shall be started from a point which makes available the greatest length of runway, considering the direction of the wind.

61.7208 Restricted-vision take-offs. If a method of take-off under conditions of restricted vision (including conditions of ground fog) is specified in the weather competency letter, it shall be strictly followed.

61.7209 Banking after take-off. So far as practicable, the aircraft shall not be banked immediately after take-off until at least a minimum altitude of 500 feet has been attained.

61.7210 Pilots at controls. Neither pilot shall leave the controls during ascent of the aircraft immediately following take-off.

61.7211 Take-off from fields not designated as airports. No scheduled air carrier aircraft shall take-off with passengers from any field

not designated as an airport until such aircraft has been properly cleared by a dispatcher authorized to act in such an emergency and until a complete agreement has been reached by both the pilot in command of such flight and the authorized dispatcher that such clearance can be accomplished with safety.

61.7212 Ice and snow. No scheduled air carrier aircraft shall take off when the wings or tail surfaces of such aircraft have a coating of ice or snow.

61.73 Flight course and en route rules.

61.730 Weather minimums.

61.7300 Point cleared to. No scheduled air carrier aircraft dispatched in accordance with § 61.71090 through § 61.71099 shall continue toward the point cleared to unless weather conditions at such point remain at or above the minimums specified in the weather competency letter for such airport: *Provided, however*, That such aircraft may be redispatched en route in accordance with § 61.71094 if the weather conditions at the point cleared to drop below the minimum specified in the weather competency letter.

61.7301 Alternate airports. No scheduled air carrier aircraft shall continue toward the point cleared to unless the weather minimums at required alternate airports (§ 61.7102) specified in the clearance remain, throughout the flight, at or above the minimums specified in the weather competency letter for such airport when used as an alternate: *Provided, however*, That the clearance may be amended en route by the substitution of another alternate airport within the fuel range of the aircraft as outlined in § 61.7021 with weather conditions at or above the minimums specified in the weather competency letter for such airport when used as an alternate.

61.731 Deviation from airway. No scheduled air carrier aircraft shall deviate from its prescribed airway or, if there be no airway, an area between two parallel lines parallel to and 10 miles on either side of its prescribed route, unless the circumstances render such deviation necessary as a safety measure. When any such deviation is beyond an area between two parallel lines parallel to and 25 miles on either side of the center line of the prescribed airway or route, such deviation shall be explained by the pilot in a written report to the air carrier operations manager. The operations manager shall furnish a copy of such report, with his comments, promptly to the Administrator.

61.732 Dispatcher emergency decisions. In an emergency situation, arising during the course of the flight, which requires immediate decision and action on the part of the dispatcher, and that is known to him, the aircraft dispatcher shall notify and advise the pilot as to such situation. Further, the dispatcher shall determine from the pilot what final decision has been made by such pilot and shall cause the same to be entered in the station radio log.

61.733 Reporting icing conditions. When a pilot reports an icing condition in accordance with § 61.7700, the pertinent information including time, altitude, location, type and extent of the icing conditions encountered shall immediately be relayed to the nearest United States Weather Bureau airway station and to the appropriate General

supervising and forecasting district headquarters of the United States Weather Bureau.

61.74 Flight altitude rules.

61.740 Visual-contact day or night. Except during take-offs and landings, no scheduled air carrier aircraft shall be flown at an altitude less than 500 feet above the ground, or within 500 feet from any mountain, hill, or other obstruction to flight, except as may be specifically approved by the Administrator.

61.741 Instrument flights. Altitudes established for instrument flights by the provisions of § 60.58 shall be strictly adhered to during such flights. Except during take-offs, and final approaches and landings, no instrument flight shall be conducted within 1,000 feet above the ground or any obstruction.

61.742 Maximum altitude of flight operations. In scheduled air carrier aircraft carrying passengers and operating at an altitude above 15,000 feet above sea level, there shall be a competent cabin attendant provided to observe and care for the passengers. Scheduled air carrier flights above 15,000 feet are prohibited except for the periods of time which are necessary to clear obstructions to flight and to avoid hazardous weather conditions. Scheduled air carrier flights at altitudes above 18,000 feet are prohibited unless specifically permitted by the terms of the weather competency letter.

61.75 Instrument approach rules.

61.750 Altitude maintenance on initial approach. When making an initial approach to a radio range station, on instruments or on top of overcast or clouds, an aircraft in scheduled air carrier operation shall not descend below the pertinent minimum altitude for initial approach specified in the weather competency letter for such station, until arrival over the radio range station has been definitely proved by the method outlined in the appropriate instrument approach procedures of the weather competency letter.

61.751 Letting-down-through procedure. When instrument authority is authorized standard instrument approach procedure shall be established by the operator for each radio range station used or to be used for letting-down-through, and approved by the Administrator and included in the weather competency letter. The letting-down-through methods, procedures and minimums specified, shall be strictly adhered to.

61.76 Landing rules.

61.760 Pilots at controls. The pilots shall remain at their controls during the final approach and landing.

61.761 Restricted-vision landing. The method of landing under conditions of restricted vision, when authorized, will be specified in the weather competency letter and shall be strictly adhered to.

61.762 Provisional weight. No aircraft, the specification for which lists a provisional weight, shall be landed at a weight in excess of standard, except in accordance with the provisions of § 61.7811.

61.763 Fuel dumping. No fuel shall be dumped in effecting a landing except in accordance with § 61.7811, and then only if the pilot deems it safer than landing at a weight in excess of standard.

61.77 Flight interruption rules.

61.770 Weather interruption. If any hazardous flight condition is encountered en route, the pilot shall broadcast information as to the course of action which he is taking and as to his reasons therefor.

61.7700 Icing conditions. No air carrier or employee thereof shall dispatch or operate an aircraft in air transportation into any known or probable icing conditions unless the aircraft is equipped with approved propeller and wing de-icing equipment adequate to assure the safety of the flight under the particular conditions to be encountered. When an icing condition is encountered in flight the pilot shall, if possible, immediately notify his company radio ground station of such fact and the company shall immediately relay such information to the nearest office of the United States Weather Bureau in accordance with § 61.733.

61.771 Mechanical interruptions. In the event of any mechanical failure or interruption (including failure of engine, flight instrument, radio, or other essential component of the aircraft) which may involve the safety of the flight, the pilot shall proceed to and land at the nearest place where a safe landing can be effected. (For general pilot authorization, in emergency situations, see § 61.7811.)

61.772 Other interruptions.

61.7720 Communications failure. In the event of inability to maintain two-way communication with the appropriate communications station or in the event that the pilot does not receive radio range signals sufficient to permit his maintaining an instrument flight on course (see § 60.36) to any point cleared to or otherwise specified in an approved flight plan, one of the following procedures shall be observed.

61.77200 (*a*) **Contact flight.** The aircraft may proceed provided that the flight may be made in accordance with contact flight rules as provided for in § 60.4.

61.77201 (*b*) **Landing.** Landing shall be made at the nearest suitable airport at which favorable weather conditions exist and where no airway traffic control center is located.

61.77202 (*c*) **Emergency procedure.** In the event weather conditions do not permit the procedures provided for in § 61.77200 or § 61.77201, the pilot shall proceed according to his approved flight plan, including any amending instructions issued and acknowledged en route, with particular attention to maintaining his last acknowledged assigned altitude until the approach time last authorized for him, after which landing may be made. Normal traffic will resume as soon as the aircraft has landed or been accounted for, but, in any event, in not more than 30 minutes after the approach time last authorized for the aircraft.

61.78 General pilot rules.

61.7800 Command of flight. The first pilot shall be in command during the flight of the aircraft.

61.7801 Remaining at controls. The pilots shall remain at their posts while the aircraft is in flight and shall not leave the pilots' compartment except when it is necessary in attending to their regular duties or when replaced by a person authorized in § 61.7802. When

a second pilot is required to attend passengers, he shall not, unless the first pilot deems it necessary, leave the pilots' compartment until the aircraft has ascended to its cruising altitude, or during the final stages of an approach for a landing.

61.7802 Manipulation of controls. No person, other than a first or second pilot, shall manipulate the controls of an air carrier aircraft while in scheduled flight: *Provided*, That at the discretion of the first pilot such restriction shall not apply to authorized inspectors of the Administrator or to properly qualified company personnel or to properly qualified personnel of other air carriers.

61.7803 Pilots' compartment. The door or doors between the pilots' compartment and the passenger compartment shall be kept closed when the aircraft is in flight. No person shall be admitted to such pilots' compartment while the aircraft is in scheduled flight except, at the discretion of the first pilot, an employee authorized by the operator, any of the personnel of the Administrator or Board or other technical personnel authorized by the Administrator or Board, or, for the purpose of route or equipment qualification and familiarization, an airman of another air carrier authorized by both air carriers for such purpose.

61.7804 Radio head sets. A radio telephone head set shall be worn by the first pilot or by a second pilot and the radio tuned to appropriate frequencies at least during the time while the aircraft is in flight or taxiing.

61.7805 Time of reporting for duty. The pilot in command of any scheduled flight and the second pilot shall report to the operations office of the operator in sufficient time prior to the start of any scheduled flight to study and familiarize themselves with weather conditions on the route to be flown and for the plan of flight to be executed for the proposed schedule.

61.7806 Local airport rules and interline agreements. Pilots shall at all times comply with accepted safety agreements or practices, including current inter-airline agreements and local airport traffic rules, as approved by the Administrator or Board.

61.7807 Pilot seat belts. Any pilot while actually manipulating or in a situation where he may have to take over the controls shall keep his seat belt fastened at all times.

61.7808 Maneuvers. All aircraft maneuvers not necessary to the safe and orderly progress of the flight shall be avoided.

61.7809 Maps and flight equipment. It shall be the responsibility of the pilot in command before any scheduled flight is started to have in his possession in the cockpit, proper flight and navigational facility maps, including instrument approach procedures when instrument flight is authorized, and such other flight equipment as may be necessary to properly conduct the particular flight proposed.

61.7810 Flashlights. It shall be the responsibility of the pilot in command to see that 2 satisfactory flashlights in good working order are provided in the aircraft and accessible to both pilots.

61.7811 Emergency decisions. The first pilot is authorized, in emergency situations which require immediate decision and action,

to resolve upon a course of action which is required by the factors and information available to him. He may, in such situations, deviate from prescribed methods, procedures or minimums to the extent required by considerations of safety. When such emergency authority is exercised, the pilot shall, to the extent possible, keep the proper control station fully informed regarding the progress of the flight. He shall submit a written report of any such deviation to his operations manager. The operations manager shall furnish a copy of such report, with his comments, promptly to the Administrator.

61.79 Miscellaneous rules.

61.790 Distribution of notices. The operator shall set up some provisions for the prompt transmission of all information pertaining to changes and irregularities of all navigational aids and facilities over his entire system. In addition where inter-airline agreements, airway traffic control regulations, and local airport traffic rules, etc., have been provided and adopted, on any portion of the route or routes, prompt notice and appropriate instructions shall be given to all personnel concerned.

61.791 Air carrier aircraft proving period.

61.7910 (*a*) All air carrier aircraft of a new make or model shall have at least 100 hours of proving tests in the hands of an air carrier under the supervision of an authorized representative of the Administrator, before authority for carrying passengers may be issued. At least 50 hours of such tests shall be in scheduled air carrier operation and include at least 10 hours of night operation.

61.7911 (*b*) In the case of major changes on aircraft previously proved, or the use of the same aircraft on a different operation, 50 hours of proving tests similar to that outlined in the preceding paragraph may be required, at least 25 hours of which shall be in scheduled operation.

61.7912 (*c*) During the tests specified in (*a*) and (*b*) above, passengers other than those essential to the tests are prohibited. Mail, express and cargo may be carried, at the discretion of the Administrator.

61.792 **Smoking rules.** The operator may permit smoking in scheduled air carrier aircraft, except in berths of sleeper planes and during refueling, provided:

61.7920 (*a*) The aircraft carries a second pilot or cabin attendant, who shall notify passengers when and where smoking is prohibited.

61.7921 (*b*) Sufficient ash containers of a suitable type are provided.

61.793 **No smoking signs.** A prominent "No Smoking" sign shall be displayed in berths.

61.794 **Smoking in pilot compartment.** When the operator permits smoking in the pilot compartment, suitable ash containers for the members of crew shall be provided. In no event shall smoking be permitted during take-offs, landing, and refueling.

61.795 **Radio rules.** The following rules will govern the use and operation of radio facilities by an air carrier.

61.7950 (*a*) Radio facilities, exclusive of the emergency equipment in the aircraft, shall be ready for immediate use at all times when the

aircraft is in flight, except as may otherwise be provided for in § 61.7114.

61.7951 (*b*) The radio communications system required by the Civil Air Regulations shall at all times be operated in strict accordance with the rules and regulations provided therefor by the Federal Communications Commission.

61.7952 (*c*) Where a communication channel serves point-to-point contacts in addition to ground to plane, it is required that priority of the circuit be given to plane to ground and ground to plane communication. Where in the opinion of the Administrator the volume of point-to-point traffic is so heavy as to interfere with the primary purpose of the circuit, i. e., plane to ground and ground to plane contacts, the Administrator may require that all other traffic be removed from this circuit.

61.796 Fuel dumping. In circumstances other than those in connection with the effecting of a landing, fuel shall not be dumped except in accordance with § 61.7811, and then only if the pilot deems it safer than any other procedure.

61.8 Operations manual.

61.80 Necessity for. Each operator of a scheduled air carrier shall prepare and maintain an operations manual for the use and guidance of the air carrier flight and ground personnel. If desired by the operator, such manual may be broken down into two or more parts, on a divisional basis, but the manual for each division shall be complete as pertains to such division.

61.81 Contents. Each operations manual, including a divisional manual, shall contain—

61.810 (*a*) a copy of the current route and weather competency letters,

(*b*) a copy of all interline traffic agreements affecting the particular operation involved; and

(*c*) any other data or information which the operator desires to include for the efficiency or safety of the operation.

61.82 Form. The operations manual shall be loose-leaf in form, and each page therein shall be numbered and dated to show the currency of all material contained therein. All copies of such manual shall at all times be kept up to date.

61.83 Delivery of copies. A copy of the operations manual shall be furnished to at least the following persons:

(*a*) the Administrator of Civil Aeronautics;

(*b*) the Chief of the Air Carrier Service, Civil Aeronautics Administration;

(*c*) each air carrier inspector of the Administrator of Civil Aeronautics in charge of inspection of any portion of the route, including any division thereof;

(*d*) each air carrier first pilot;

(*e*) each air carrier second pilot;

(*f*) each person authorized for dispatching duty;

(*g*) each air carrier aircraft radio operator; and at

(*h*) each air carrier terminal and scheduled intermediate stop.

61.84 Record of copies. Each air carrier shall keep a complete record of all persons to whom copies of its operations manual have been furnished.

61.85 Changes. The following rules will govern changes made in the operations manual:

61.850 (*a*) Any change issuing from the Administrator pertaining to the route or weather competency letter shall be promptly incorporated in the operations manual and a copy thereof sent, in the form of a new page of such manual, to each person required to hold a copy of the manual. Each amended page of the manual shall be properly dated.

61.851 (*b*) Upon receipt of such new page or pages, the recipient shall insert the current information in the manual.

61.852 (*c*) No change shall be made in any of the terms, specifications, conditions, limitations, or other provisions appearing in the air carrier operating certificate or in any appended competency letter without the approval, in writing, of the Administrator.

61.853 (*d*) Any data not issuing from the Administrator may be changed by the operator, without approval of the Administrator, provided such change is not inconsistent with any Federal regulation or competency letter. Notice of any such change shall be given promptly in accordance with the provisions of § 61.850.

61.9 Reports.

61.90 General. Each scheduled domestic air carrier shall furnish the Administrator such reports as may be required by him.

61.91. Monthly report. A monthly operations report shall be submitted to the Administrator, on and in accordance with a form supplied for the purpose, not later than the 20th day of the next succeeding month.

61.92. Mechanical interruption. A mechanical interruption report shall be submitted to the Administrator, on and in accordance with a form supplied for the purpose, through the air carrier maintenance inspector of the Administrator assigned to such operations, as soon as possible but not later than 10 days after such mechanical interruption occurs. Any block-to-block instrument or equipment mechanical failure, in whole or in part, shall be reported as above.

61.93 Weather interruption. An air carrier shall maintain and make readily available to inspectors of the Administrator or Board for not less than 1 year from the date of the flight the records pertaining to any flight of aircraft engaged in air transportation which, because of unfavorable weather conditions, was interrupted by either:

(*a*) Failure to land at the point or points to which the flight was cleared;

(*b*) A landing at a point other than that to which the flight was specifically cleared;

(*c*) Landing at points cleared to other than in the progressive order of landing specified in the flight clearance; or

(*d*) A re-clearance by radio during flight.

Such records shall include at least the flight plan, flight log, company clearance form, and weather reports upon which the clearance was based.

61.94 Mechanical record. The records of the air carrier covering mechanical trouble shall be made available upon request to any authorized representative of the Administrator or Board.

61.95 Irregularity report. All airmen, including flight and ground personnel, shall immediately report any irregularity or hazard which exists on or adjacent to any civil airway, and which in their opinion, makes for unsafe operation of aircraft in flight. Such report shall be made to the air carrier operations manager, who shall verify its accuracy to the best of his ability. If the report is justified, notice of the irregularity or hazard shall at once be given to the Administrator.

○