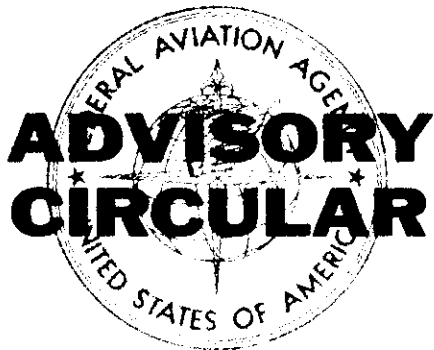


Federal Aviation Agency AC NO: AC 120-14

Canceled See 135.3
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**AIR TAXI OPERATORS
AND
COMMERCIAL OPERATORS
OF SMALL AIRCRAFT**

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Federal Aviation Agency

ADVISORY CIRCULAR

AC NO: 120-14

AIR CARRIER AND
COMMERCIAL OPERATIONS

EFFECTIVE :

7/6/64

SUBJECT : AIR-TAXI AND COMMERCIAL OPERATORS OF SMALL AIRCRAFT

1. PURPOSE.

- a. To explain and clarify the requirements of Federal Aviation Regulations Part 135, Air-Taxi Operators and Commercial Operators of Small Aircraft.
- b. To present, by use of illustrations and examples, additional information not regulatory in nature which will assist in understanding operating privileges and limitations included in this Part.
- c. To supply information which is not otherwise readily available concerning en route performance of certain commonly used multiengine aircraft.

2. GENERAL. Adoption of FAR Part 135, Air-Taxi Operators and Commercial Operators of Small Aircraft, consolidated under a single title rules which were formerly mixed with other parts and newly developed rules pertinent to the title of this Part. FAR Part 135 is the first regulation developed specifically for the use of small aircraft in air transportation. This is the first time privileges such as limited IFR operations have been provided for in the Federal Aviation Regulations. These added privileges are accompanied by specific responsibilities. We believe that this advisory circular will assist the air-taxi/commercial operator in the utilization of these added privileges and will also clarify his responsibilities.

3. APPLICABILITY OF FAR PART 135.

- a. FAR Part 135 applies to all air-taxi operators and commercial operators using small aircraft. (Hereafter, air-taxi operators, or commercial operators of small aircraft, or operators who conduct both air-taxi operations and commercial operations of small aircraft will be referred to as operators).

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- b. Previous regulations required commercial operators of small aircraft to comply with the operating rules of Civil Air Regulations Part 42a but did not require certification. FAR Part 135 requires certification of commercial operators as well as air-taxi operators. Since the certification requirements are identical, the two were combined under a single certificate entitled "Air-Taxi/Commercial Operator." The Economic Regulations of the Civil Aeronautics Board provide the criteria which identify the operation as being either an air-taxi or a commercial operation. As a matter of information, commercial operation includes operations conducted (1) as a common carrier on an intrastate basis and (2) as a private (or contract carrier) for hire on either an interstate or intrastate basis; however, it does not include interstate operation as a common carrier since such operations are air carrier operations as specified in the Federal Aviation Act of 1958.
- c. FAR Part 135 has been limited to those rules particularly applicable to operations conducted under this part. It does not repeat rules of a general nature such as those contained in FAR Part 91, nor does it relieve the operator from compliance with rules of general applicability contained in other parts of the Federal Aviation Regulations.
- d. There are several other regulations which may affect the operation of an air-taxi. It is suggested that operators may wish to obtain and become familiar with the following:
- (1) CAB Economic Regulation Part 298. Part 298 is the regulation which exempts the air-taxi operator from certain economic requirements of the Civil Aeronautics Board. It also contains special conditions and limitations which apply to engaging in air transportation as an air-taxi operator. Copies of CAB Economic Regulation Part 298 may be obtained from the Civil Aeronautics Board, Washington, D. C. 20428. (No charge)
 - (2) International Civil Aviation Organization - Annex 2. Operators who will be operating in countries other than the United States should obtain a copy of Annex 2, Rules of the Air to the Convention on International Civil Aviation. These rules are applicable when operating in foreign countries which are members of the International Civil Aviation Organization. Copies may be obtained from the Secretary General of ICAO, International Aviation Building, 1080 University Street, Montreal 3, P.Q., Canada. The territorial limits of the United States include airspace extending three miles offshore. Flight operations conducted within this airspace are considered as being conducted within the United States.

- (3) CAB Special Regulation Part 375. Part 375 of the CAB as referred to in FAR 135.1(b)(5) is the Civil Aeronautics Board Special Regulation entitled Navigation of Foreign Civil Aircraft Within the United States.
4. ELIGIBILITY FOR CERTIFICATE AND OPERATIONS SPECIFICATIONS. FAR 135.15(b) states that the applicant must hold such economic authority as may be required by the CAB. The economic authority for the air-taxi operator is contained in CAB Economic Regulation Part 298.
5. APPLICATION FOR AIR-TAXI/COMMERCIAL OPERATOR CERTIFICATE.
- a. Application for an ATCO Certificate should be submitted to the General Aviation District Office responsible for the area in which the applicant's principal business office is located. Application Form FAA-1602 may be obtained from any GADO.
- b. All operating names, principal business offices, and other business offices intended to be used by the operator should be shown on the application as only one certificate will be issued to any person. Person is defined in the regulations as an individual, firm, partnership, corporation, company, association, joint-stock association, or governmental entity.
6. AMENDMENT OF CERTIFICATE. An operator who desires to change his business name or address should make application for amendment in the same manner as he applied for original certification.
7. INFORMING PERSONNEL OF OPERATIONAL INFORMATION. The operator is required to make certain that all employees know the pertinent operating privileges and limitations contained in the operations specifications. The operator, as well as the pilot, will be held responsible for complying with the pertinent provisions thereof. (FAR 135.39 and 135.9)
8. RECORD KEEPING REQUIREMENTS. FAR 135.43 requires, in part, that the operator maintain a current record of the pilot's duties and the date of assignment to those duties.
9. APPROVAL FOR USE OF AN AUTOPILOT.
- a. In order to obtain authorization for the use of an autopilot in lieu of a second pilot, the holder of an ATCO Certificate will be required to show that the autopilot meets the requirements of FAR 135.77 and that his pilot(s) are fully familiar with the operating procedures and limitations of the autopilot system. Familiarization must include the emergency procedures to be followed in case of malfunction or failure of the autopilot system.

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- b. Each pilot to be utilized in operations conducted with autopilot in lieu of a second pilot will demonstrate for initial authorization and during each six-month instrument check thereafter that he can copy and comply with a complex flight clearance competently without the assistance of a second pilot. He will also be required to execute holding patterns, make estimates, hold altitude, heading, and track within the limits required for issuance of an instrument rating, and at the same time maintain appropriate communications with Air Traffic Control. This will be demonstrated with and without the autopilot operating. The pilot will demonstrate his competency in the make and model of aircraft and with the autopilot to be used in the operation.

10. EN ROUTE PERFORMANCE CHARTS OR MANUALS. (FAR 135.71 and 135.145) One-engine inoperative climb data for small multiengine airplanes may be found in the following documents:

- a. The approved Airplane Flight Manual for those airplanes which are required to have such manuals.
- b. The Aircraft Owner's Handbook, Owner's Manual, or Flight Handbook for most small multiengine airplanes with a maximum certificated takeoff weight of 6,000 pounds or less. These handbooks or manuals are not required for certification, and accordingly are not approved by the Federal Aviation Agency. Therefore, although the data shown therein has been established by the manufacturer it may be subject to verification for use under the provisions of this Part.
- c. The operating limitations of airplanes originally certificated under the provisions of CAR Part 4a. The data shown in these operating limitations may be shown only for the maximum certificated takeoff weight and at one altitude expressed as "emergency ceiling" (maximum altitude at which the rate-of-climb is at least 50 feet per minute). To fully utilize the capabilities of these airplanes, additional determination of weights other than the maximum certificated takeoff weight may be necessary.
- d. Attachment 1 to this advisory circular lists the most commonly used airplanes for which performance data is not provided in the manner referred to in subparagraphs a, b, or c. Performance data for other airplanes will be made available upon request to the FAA.

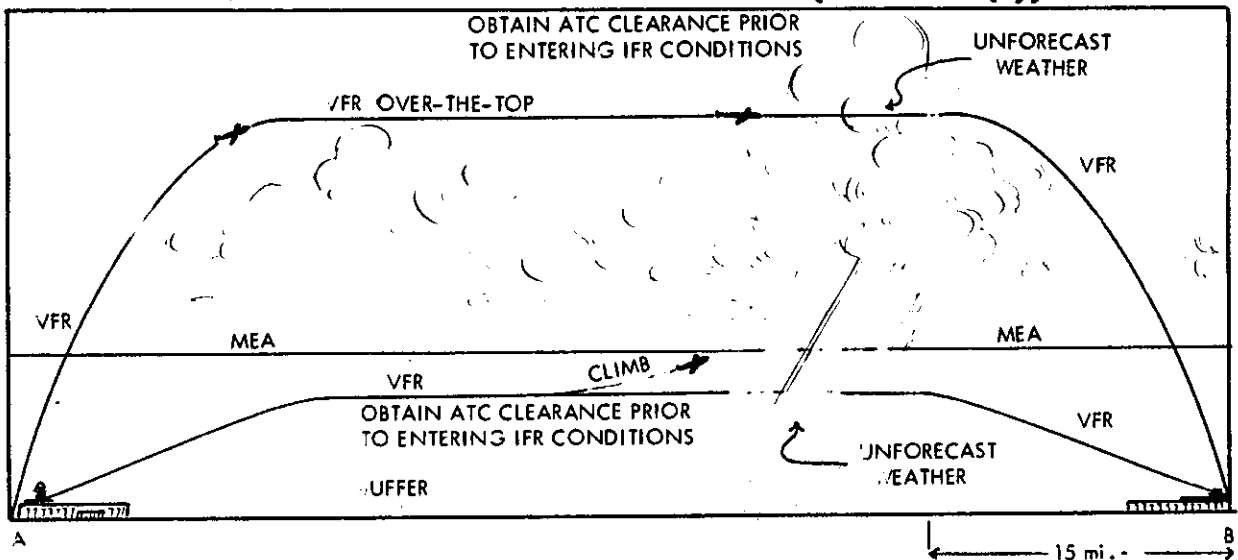
11. EXCEPTION TO SECOND-IN-COMMAND REQUIREMENTS - LIMITED IFR OPERATIONS.
(FAR 135.75) The following diagrams and accompanying explanations may help in understanding the limited IFR privileges permitted, and the conditions and limitations imposed by FAR 135.75.

- a. Limited IFR operations of single-engine or multiengine aircraft which do not meet the performance requirements of FAR 135.145(a)(2) are permitted provided a VFR weather buffer is available beneath the ceiling.
- b. If the pilot-in-command is instrument qualified and meets the recency of experience and flight test requirements of this part for flight in instrument conditions and the airplane is properly equipped for IFR flight, and if two pilots are not required by aircraft operating limitations, the pilot-in-command of an airplane carrying passengers may, without a second-in-command:

(1) Fly IFR en route, provided:

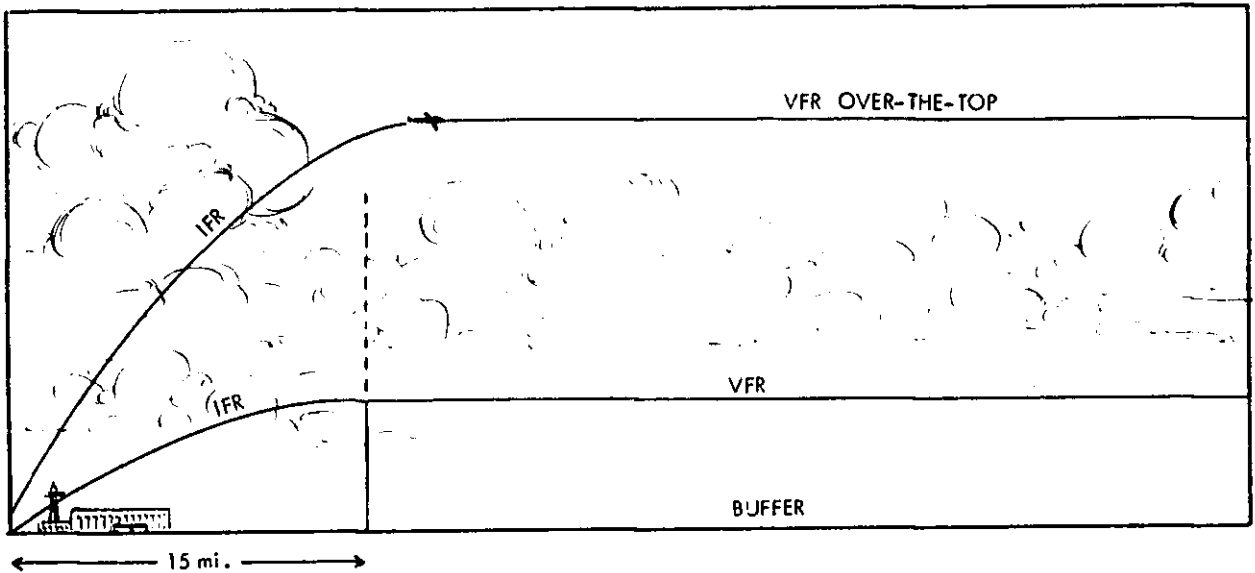
- (a) He started and intended the flight to be VFR or VFR over-the-top,
- (b) While en route, unforecast marginal or IFR conditions are encountered,
- (c) The flight can return to VFR or VFR over-the-top operation before reaching a point within a radius of 15 miles from destination airport, and
- (d) A "buffer zone" exists for single-engine aircraft and multiengine aircraft which do not meet the performance requirements of FAR 135.145(a)(2).

FIGURE 1. LIMITED IFR EN ROUTE LIMITATIONS (FAR 135.75(a))



- (2) Takeoff from departure airport in IFR conditions and fly in IFR conditions to a point no more than 15 miles from the departure airport if weather reports and forecasts indicate that the weather along the planned flight route allows flight under VFR or VFR over-the-top requirements of this Part beginning at a point no more than 15 miles from the departure airport and extending to a point within a 15-mile radius of the destination airport. VFR buffer is required after reaching a point 15 miles from departure if single-engine or multiengine airplane which does not meet performance requirements of FAR 135.145(a)(2) is being utilized.

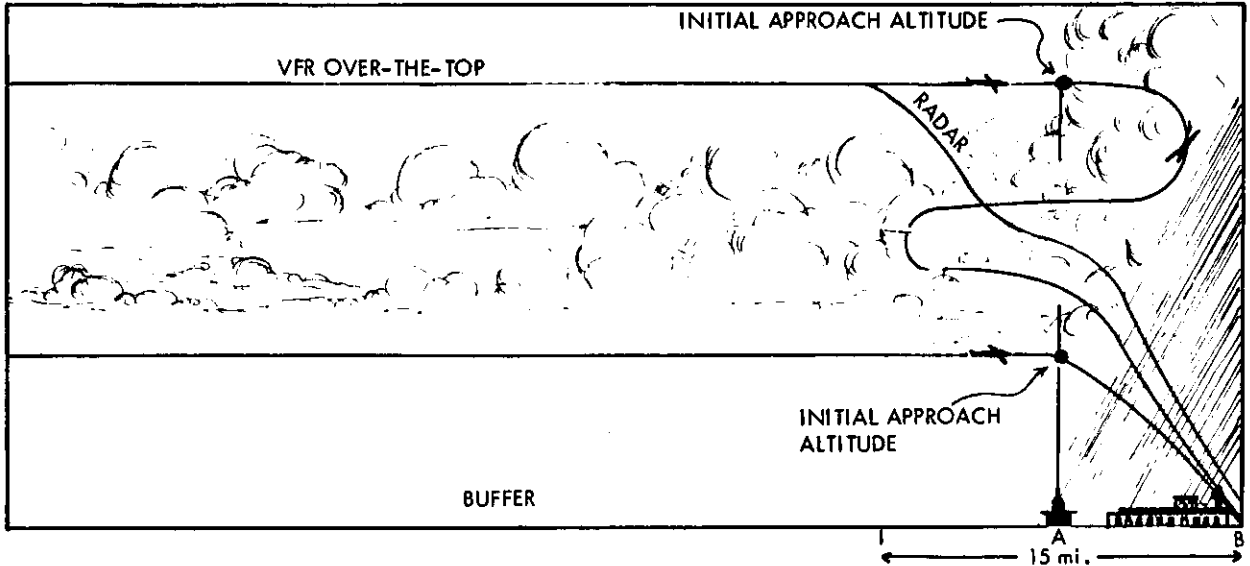
FIGURE 2. LIMITED IFR DEPARTURE LIMITATIONS (FAR 135.75(b)(1))



NOTE: The complete VFR weather buffer as mentioned in 11 a. is not required as illustrated in Figures 2, 3, and 4.

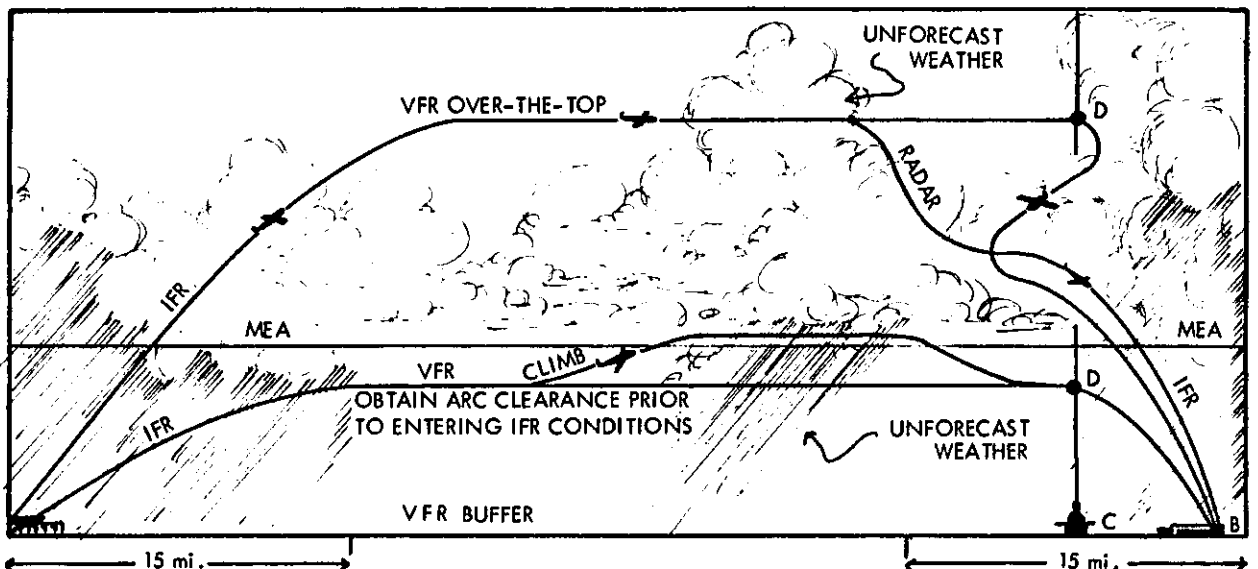
- (3) Make an IFR approach and land at the destination airport in IFR conditions if:
- (a) IFR approach minimums exist, and he flies clear of the clouds until reaching the prescribed initial approach altitude over the final approach facility, or
 - (b) The approach is made with the use of radar as provided in FAR 91.117(f).

FIGURE 3. LIMITED IFR APPROACH LIMITATIONS (FAR 135.75(b)(2))



c. A graphic display of the most adverse conditions permitted under limited IFR without a second-in-command pilot is shown in Figure 4.

FIGURE 4. TOTAL PROFILE OF LIMITED IFR (FAR 135.75(a) and (b))



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12. **ICING CONDITIONS.** (FAR 135.85) Icing conditions are defined as follows by the U.S. Weather Bureau in a publication entitled "Service Operations Issuance 860, Volume 3."
- a. **Light Icing.** An accumulation of ice which can be disposed of by operating the deicing equipment or prevented by anti-icing methods and presents no serious affects. Will not cause alterations in speed, altitude, or track.
 - b. **Moderate Icing.** An accumulation of ice in which deicing (or anti-icing) procedures provide marginal protection. The ice continues to accumulate, but not at a rate sufficiently serious to affect the safety of the flight unless it continues over an extended period of time.
 - c. **Heavy Icing.** An accumulation of ice which continues to build up despite deicing or anti-icing procedures. It is sufficiently serious to cause alterations in the speed, altitude, or track and seriously affect the safety of the flight.
13. **VFR MINIMUM ALTITUDE.** (FAR 135.91) VFR minimum altitude and visibility requirements of FARs 135.91 and 135.93 are in addition to the general requirements of FAR 91.105. These minimums also provide the minimums for the VFR buffer zone when operating single-engine aircraft or multi-engine aircraft which do not meet the performance requirements of FAR 135.145(a)(2).

FIGURE 5. MINIMUM WEATHER CONDITIONS - VFR BUFFER

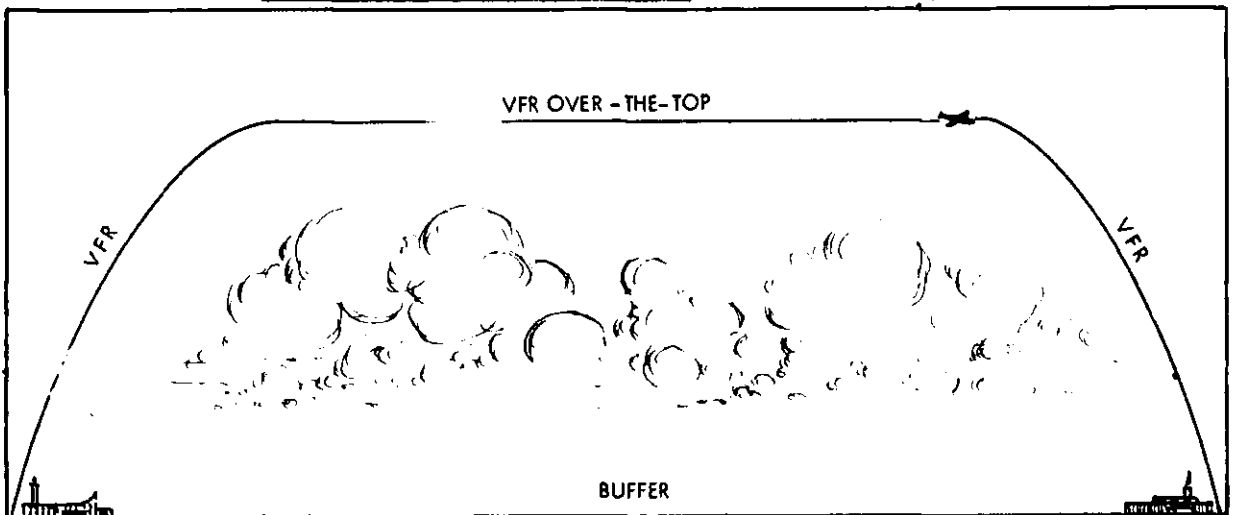
	CEILING	VISIBILITY
Day	1000 Feet 500 Feet	1 Mile 2 Miles <u>1/</u>
Night	1000 Feet	2 Miles
Mountainous <u>3/</u> Area	2000 Feet <u>2/</u>	2 Miles

1/ Two mile visibility required when ceilings are below 1000 feet.
2/ Above highest obstacle within a horizontal distance of five miles from intended course.
3/ Mountainous areas are designated by the Administrator and published in the Flight Information Manual.

14. **VISUAL REFERENCE REQUIRED - HELICOPTER.** (FAR 135.99) For night operation adequate visual ground light reference requirements will be met if the meteorological conditions are such as to provide a distinct horizon or ample ground reference lights are available for control of the helicopter.

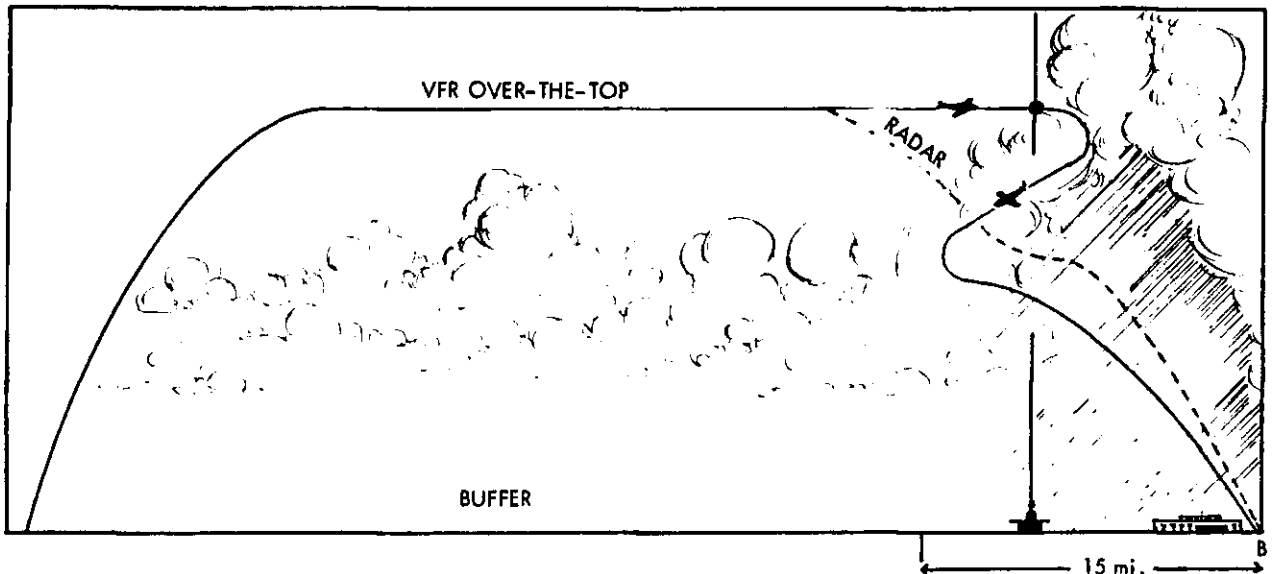
15. EQUIPMENT - GENERAL REQUIREMENTS. (FAR 135.143(b)) Approved instruments and equipment are those which:
- a. Conform to a type certificate, supplemental type certificate, or technical standard order.
 - b. Are approved by the aircraft manufacturer under delegated option authority.
 - c. Are accepted as part of the aircraft on original certification.
 - d. If not covered by the procedures specified in subparagraphs a, b, or c, are specifically approved by an authorized representative of the Administrator.
16. VFR OVER-THE-TOP CARRYING PASSENGERS - OPERATING LIMITATIONS. (FAR 135.99) An aircraft may be operated VFR over-the-top carrying passengers if:
- a. Weather reports and forecasts indicate that the weather at the intended point of termination of over-the-top flight allows a descent to beneath the ceiling under VFR and is forecast to remain so for at least one hour after estimated time of arrival at that point, and
 - (1) A multiengine airplane is used which meets the requirements of FAR 135.145(a)(2), or
 - (2) The pilot is the holder of an instrument rating, (FAR 135.123), and
 - (3) A VFR buffer zone exists for single-engine aircraft and for multiengine airplanes which do not meet the requirements of FAR 135.145(a)(2).

FIGURE 6. VFR OVER-THE-TOP - EN ROUTE (FAR 135.99(a)(1))



- b. Weather reports and forecasts indicate that the weather at the intended point of termination of over-the-top flight allows an IFR approach and landing with flight clear of the clouds until reaching the prescribed initial approach altitude over the final approach facility unless the approach is made with the use of radar as provided in FAR 91.117(f), and
- (1) The pilot is the holder of an instrument rating and meets the requirements of FAR 135.125 and 135.131, and
 - (2) A multiengine airplane is used which meets the requirements of FAR 135.145(a)(2), or
 - (3) An en route VFR buffer zone exists for single-engine aircraft and for multiengine airplanes which do not meet the requirements of FAR 135.145(a)(2).

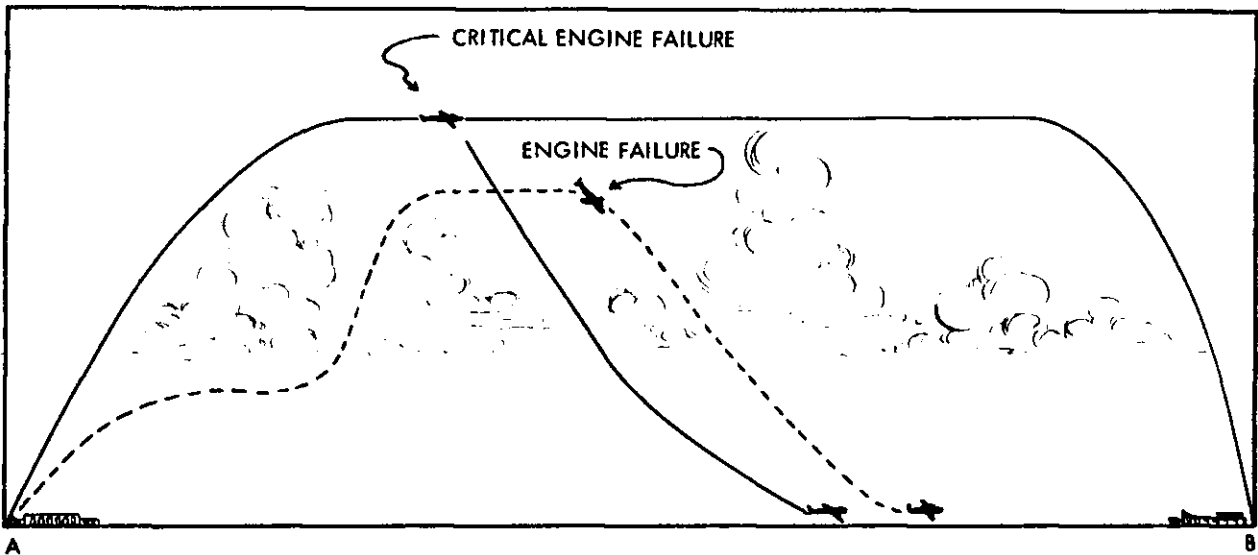
FIGURE 7. VFR OVER-THE-TOP - EN ROUTE AND APPROACH (FAR 135.99(a)(2))



c. It is operated under conditions allowing:

- (1) In the case of multiengine aircraft, descent or continuation of the flight under VFR if its critical engine fails, or
- (2) In the case of single-engine aircraft, descent under VFR if its engine fails.

FIGURE 8. VFR OVER-THE-TOP - NONINSTRUMENT EQUIPPED (FAR 135.99(b)(1) and (2))

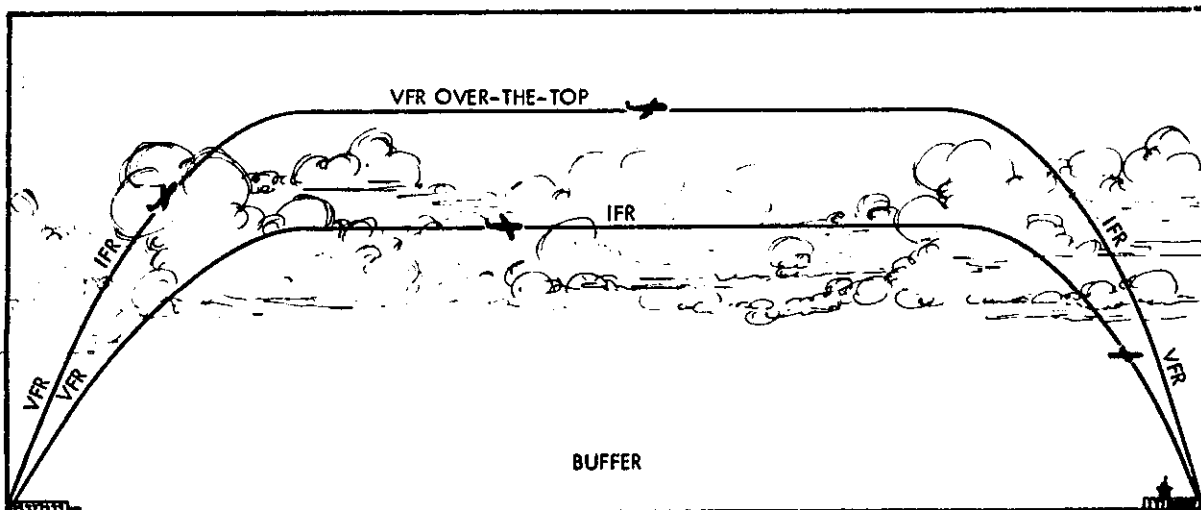


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17. PERFORMANCE REQUIREMENTS - AIRCRAFT OPERATED OVER-THE-TOP OR IN IFR OPERATIONS. (FAR 135.145)

- a. Multiengine airplanes which meet the single-engine performance of FAR 135.145(a)(2) may be used for IFR or over-the-top operations without regard to buffer zone. However, for other than limited IFR operation, a second-in-command pilot is required to be used unless authorization has been granted for use of an autopilot in lieu of a second pilot, and the autopilot is used.
- b. A single-engine airplane or multiengine airplane which does not meet the climb requirements of FAR 135.145(a)(2) may be operated in IFR conditions or over-the-top if:
 - (1) Weather reports and forecasts indicate the weather along the planned route (including takeoff and landing) allows VFR flight under the ceiling (VFR weather "buffer") and is forecast to remain so at every point on the route at least one hour after estimated time of arrival at the point. (FAR 135.145(b)(1))
 - (2) During IFR operations a second-in-command pilot is used, or use of autopilot in lieu of second-in-command pilot is authorized, and the autopilot is used.
 - (3) VFR buffer includes both departure and destination airports.

FIGURE 9. VFR OR IFR OVER-THE-TOP - EN ROUTE (FAR 135.145(b)(1))



c. The pilot-in-command of a single-engine airplane or a multiengine airplane which does not meet the performance requirements of FAR 135.145(a)(2) may:

(1) Take off from the departure airport in IFR conditions and fly in IFR conditions to a point no more than 15 miles from departure airport.

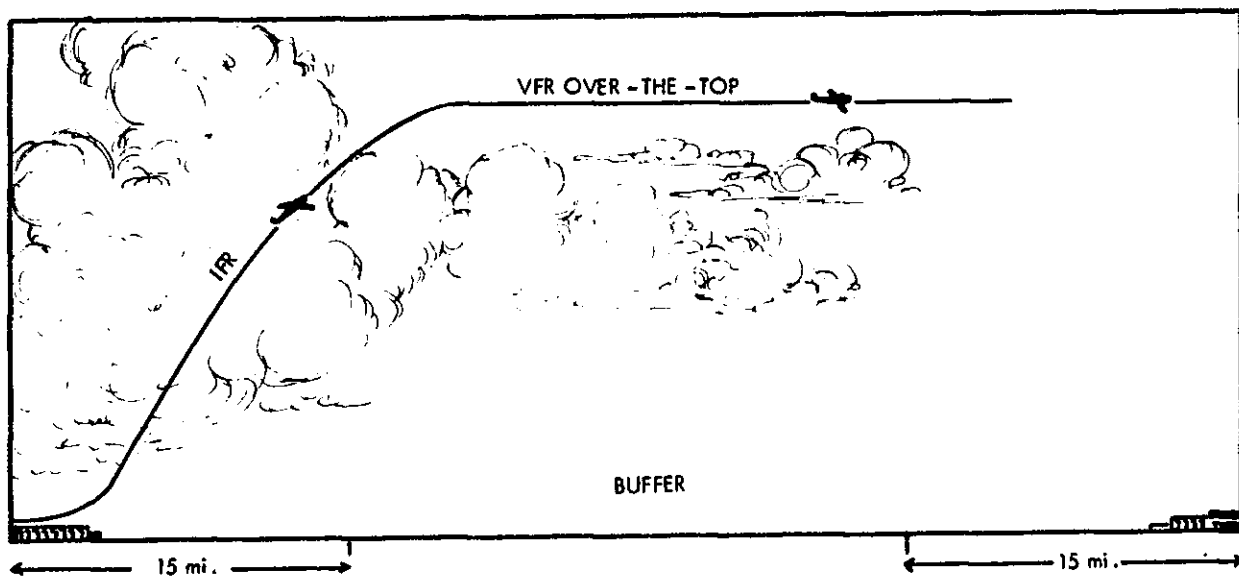
(2) Operate the airplane en route over-the-top if:

Buffer zone extends from a point no more than 15 miles from departure airport to a point within 15 miles from destination airport.

NOTE: Second-in-command pilot not required for limited IFR. (FAR 135.75)

This flight cannot go all the way in IFR conditions as departure is in IFR conditions.

FIGURE 10. IFR DEPARTURE AND OVER-THE-TOP - EN ROUTE (FAR 135.145(b)(2))

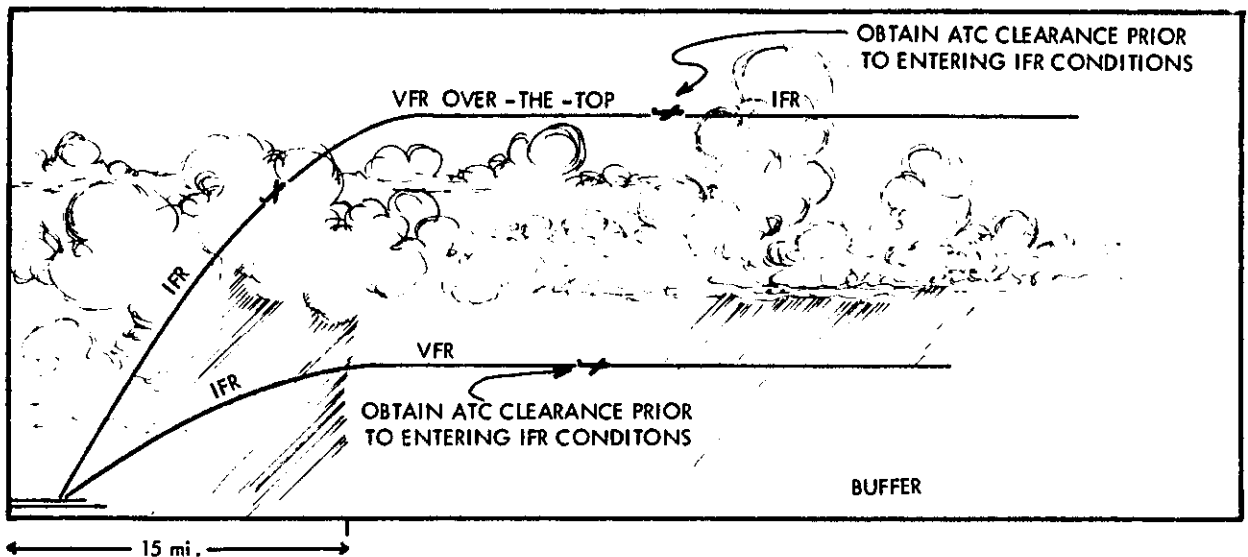


- (3) Operate in IFR conditions en route if: (FAR 135.145(b)(2)(iii))
- (a) Unforecast marginal VFR weather conditions are encountered while en route on a flight which was started and intended to be conducted under VFR or VFR over-the-top requirements of the part (except for limited IFR operations permitted by FAR 135.75(b)(1) and (2).)
 - (b) Weather reports and forecasts indicate that the flight can return to VFR or VFR over-the-top conditions before reaching a point 15 miles from destination.

NOTE: Second-in-command pilot is not required. (FAR 135.75)

IFR all the way cannot be conducted as buffer zone does not include both departure and destination airport.

FIGURE 11. UNFORECAST IFR ENCOUNTERED EN ROUTE (FAR 135.145(b)(2)(iii))

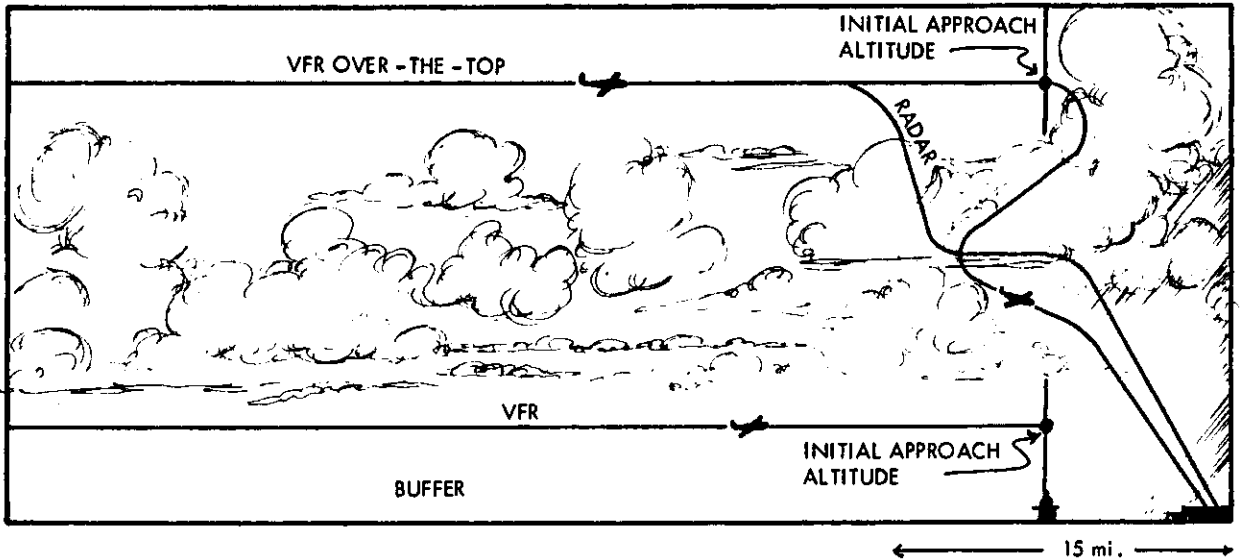


- (4) Make an IFR approach and land at the destination airport in IFR conditions if: (FAR 135.145(b)(2)(iv))
- (a) The flight is conducted clear of clouds from a point en route at least 15 miles from destination airport until reaching the prescribed initial approach altitude over the final facility, or
 - (b) Approach is made with use of radar (entering IFR conditions no more than 15 miles from destination airport). (FAR 135.75(b))

NOTE: Second-in-command is not required. (FAR 135.75)

Flight in IFR conditions all the way cannot be conducted as buffer zone does not extend over both departure and destination airports.

FIGURE 12. VFR OVER-THE-TOP EN ROUTE WITH IFR APPROACH (FAR 135.145(b)(2)(iv))

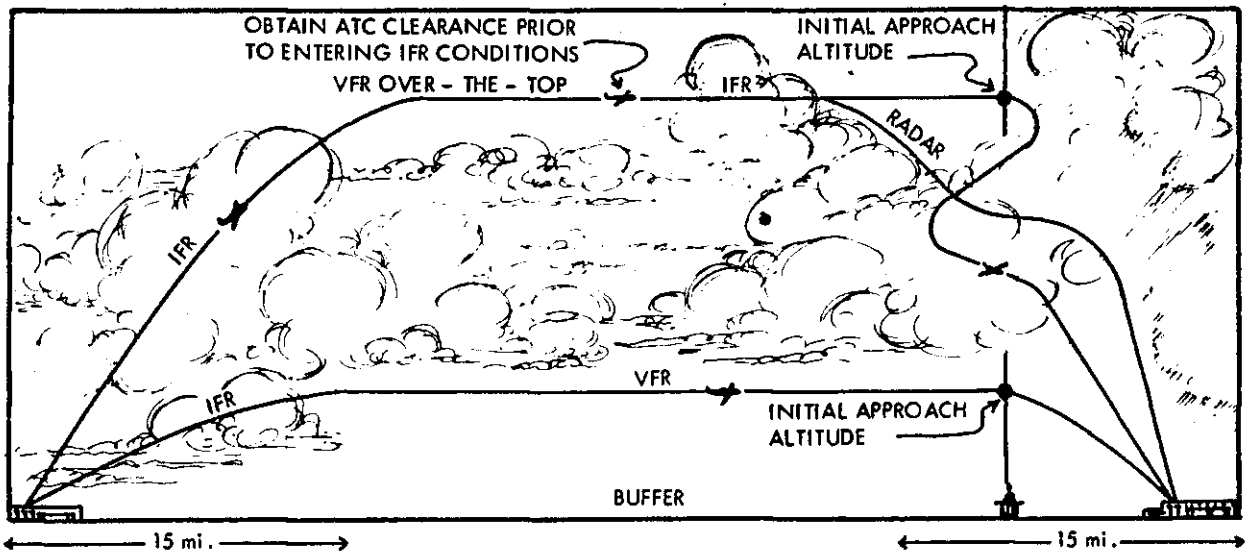


- d. The pilot-in-command of a single-engine airplane or a multiengine airplane which does not meet the performance requirements of FAR 135.145(a) (2) may depart IFR, operate in limited unforecast IFR conditions en route, and make an IFR approach on the same flight, provided he adheres to conditions and limitations of FAR 135.

NOTE: Second-in-command pilot not required per FAR 135.75.

Flight in IFR conditions over entire enroute portion not permitted as buffer zone does not extend over both takeoff and destination airports.

FIGURE 13. IFR DEPARTURE - UNFORECAST IFR EN ROUTE - IFR APPROACH



18. FIRE EXTINGUISHERS - PASSENGER CARRYING AIRCRAFT. (FAR 135.161)

- a. FAR 135.161 does not specify a minimum capacity nor require that the fire extinguisher used in aircraft during air-taxi operation be approved by the fire Underwriters' Laboratories. However, the operator may desire to equip his air-taxi aircraft with fire extinguishers which meet the standards required for such approval. The toxicity rating of the chemical contained in the fire extinguisher is an important consideration when selecting an extinguisher for use in confined space such as an airplane cockpit.

b. The toxicity ratings listed by the Underwriters' Laboratories for some of the commonly known fire extinguisher chemicals are as follows:

- (1) Bromochloromethane - Group 3
- (2) Bromotrifluoromethane - Group 6
- (3) Carbon Dioxide - Group 5
- (4) Carbon Tetrachloride - Group 3
- (5) Dibromodifluoromethane - Group 4
- (6) Menthyl Bromide - Group 2

NOTE: The higher group numbers denote lower toxicity.

c. Care should be taken to provide adequate ventilation when fire extinguishers are discharged within the crew or passenger compartments. Dry chemical extinguishers should not be used in crew compartments because of the possibility of interference with visibility during discharge.

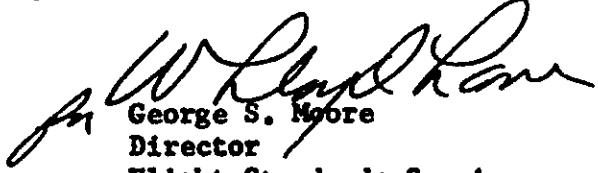
19. EMERGENCY EQUIPMENT. For international flights, the International Flight Information Manual lists emergency equipment required by foreign governments for flight in certain areas.
20. WEATHER REPORTS AND FORECASTS. (FAR 135.65) An accredited observer, referred to in FAR 135.65, means the holder of a Weather Bureau Certificate of Authority to Take Weather Observations. An operator who desires to obtain such authority should submit a request for a Supplemental Aviation Weather Reporting Station to the U.S. Weather Bureau Regional Office nearest his operation. The addresses of all U.S. Weather Bureau Regional Offices may be found in Attachment 2, page 1.
21. HOW TO GET THIS PUBLICATION.
 - a. Order copies of this publication from:

Federal Aviation Agency
Distribution Section, HQ-438
Washington, D. C. 20553

b. Identify the publication in your order as:

FAA Advisory Circular AC 120-14
Air-Taxi and Commercial Operators of Small Aircraft
Dated

c. There is no charge for this publication.



George S. Moore
Director
Flight Standards Service

ATTACHMENT 1. ONE-ENGINE INOPERATIVE CLIMB DATA

This attachment contains one-engine inoperative climb performance data for the most commonly used small multiengine airplanes for which such data are not provided in the manner referred to in paragraph 10 and subparagraphs a, b, and c of this advisory circular. Performance data for other airplanes will be provided by the FAA upon request.

The charts in this attachment do not include temperature accountability; however, this factor must be taken into consideration when operations are conducted at temperatures which are above standard.

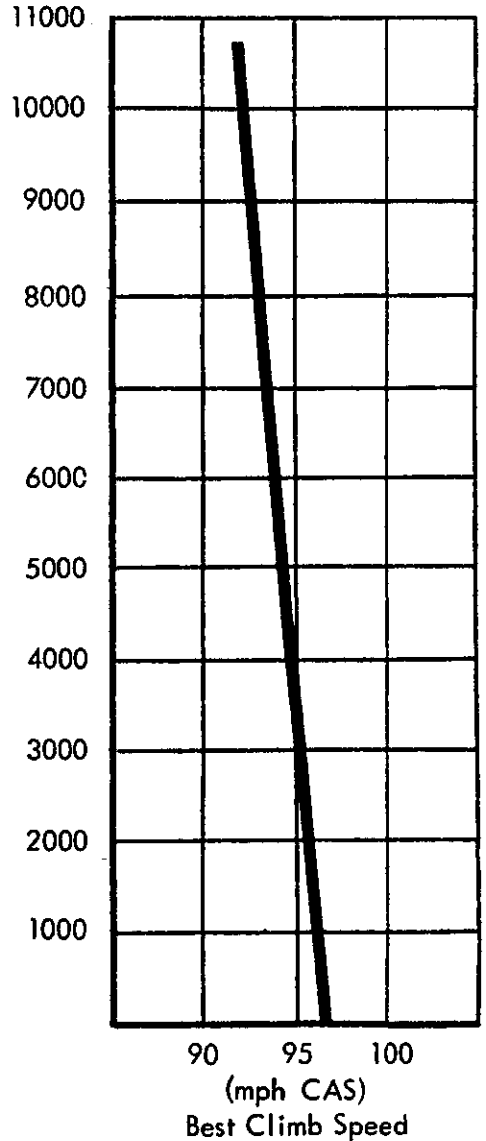
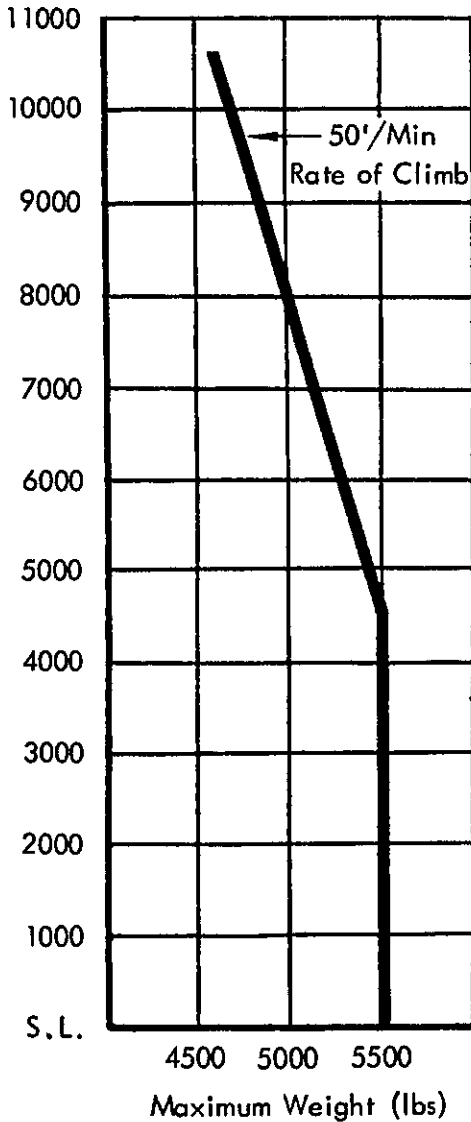
As an example of the effect of temperature, at 5,000 feet above MSL with a temperature of 77 degrees (36 degrees above standard temperature for that altitude) density altitude would be 7,200 feet. Since the density of the air has a direct bearing on engine power output, the density altitude must be considered in determining the one-engine inoperative climb capability of the airplane. This is equally true when using data provided in the manner referred to in subparagraphs a, b, and c of paragraph 10, of this advisory circular if temperature accountability is not included.

AERO COMMANDER MODEL 520
ONE ENGINE INOPERATIVE CLIMB PERFORMANCE
CRITICAL ENGINE INOPERATIVE

BEST CLIMB SPEED
(Propeller Windmilling,
Flaps and Gear Retracted)

Standard
Altitude
(feet)

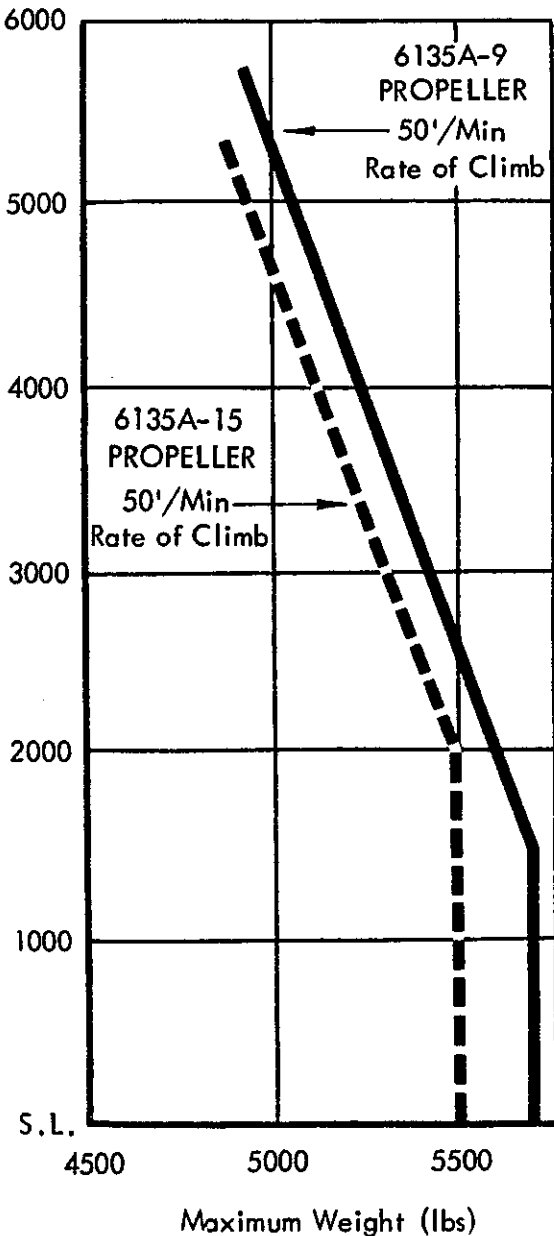
Standard
Altitude
(feet)



CESSNA MODEL T-50 ONE ENGINE INOPERATIVE CLIMB PERFORMANCE CRITICAL ENGINE INOPERATIVE

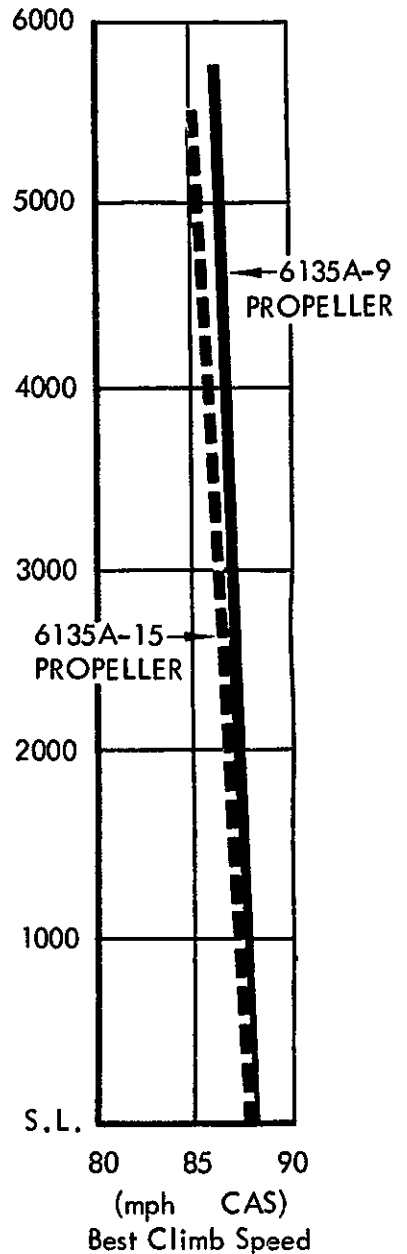
Lycoming R-680-E3
Engines

Standard
Altitude
(feet)



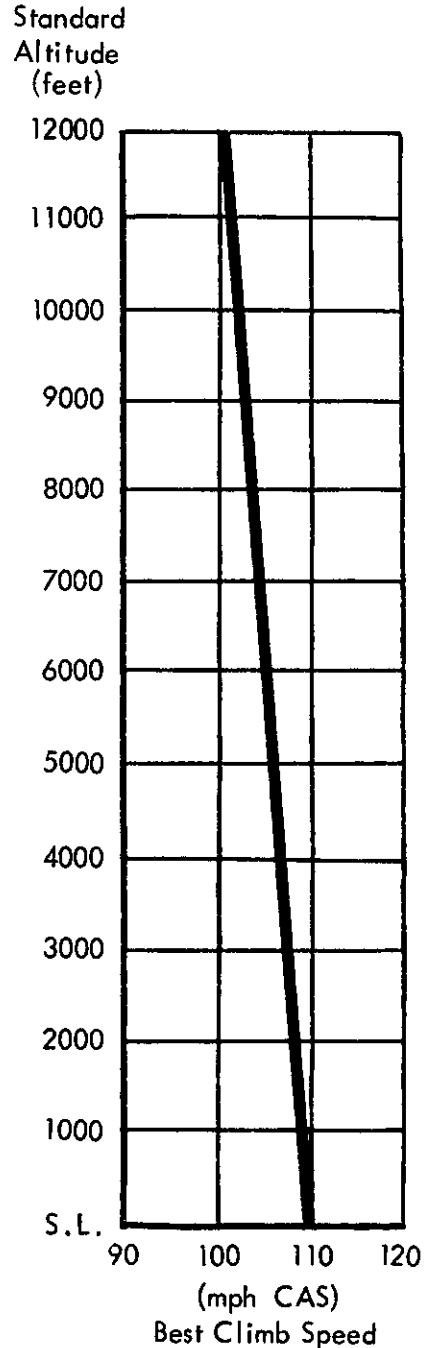
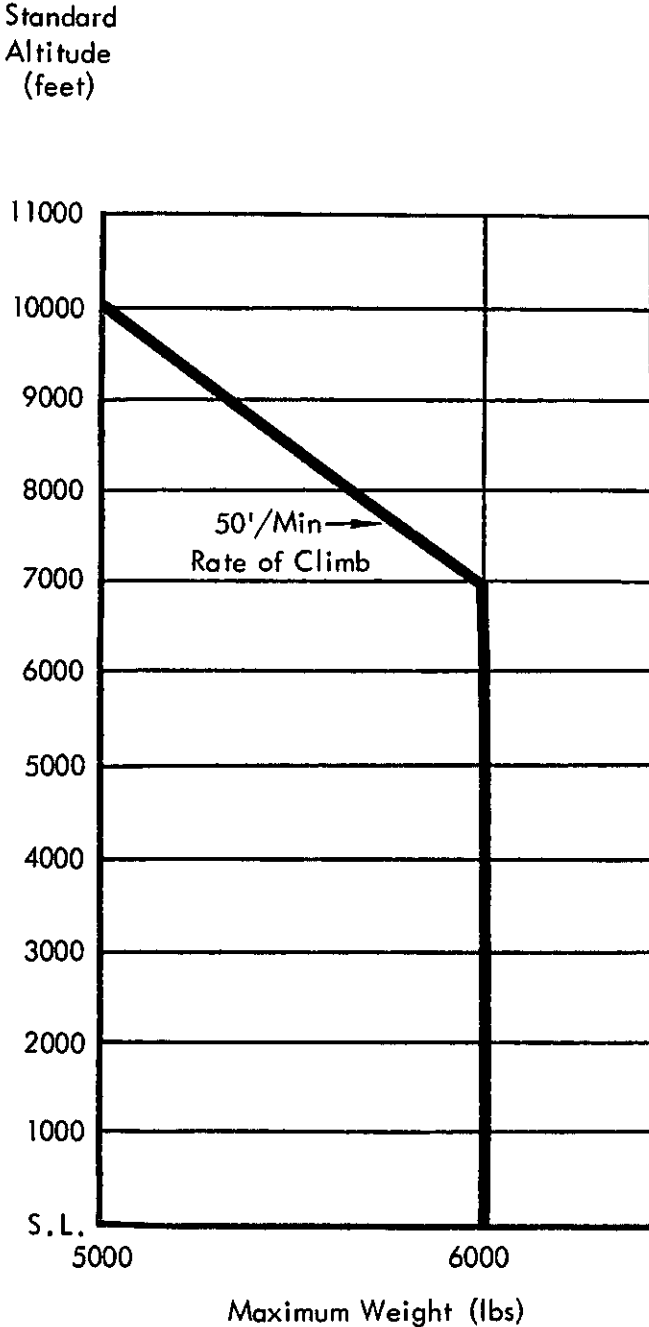
BEST CLIMB SPEED
Critical Engine Inoperative
(Propeller Windmilling,
Flaps and Gear Retracted)

Standard
Altitude
(feet)



AERO COMMANDER 500
ONE ENGINE INOPERATIVE CLIMB PERFORMANCE
CRITICAL ENGINE INOPERATIVE

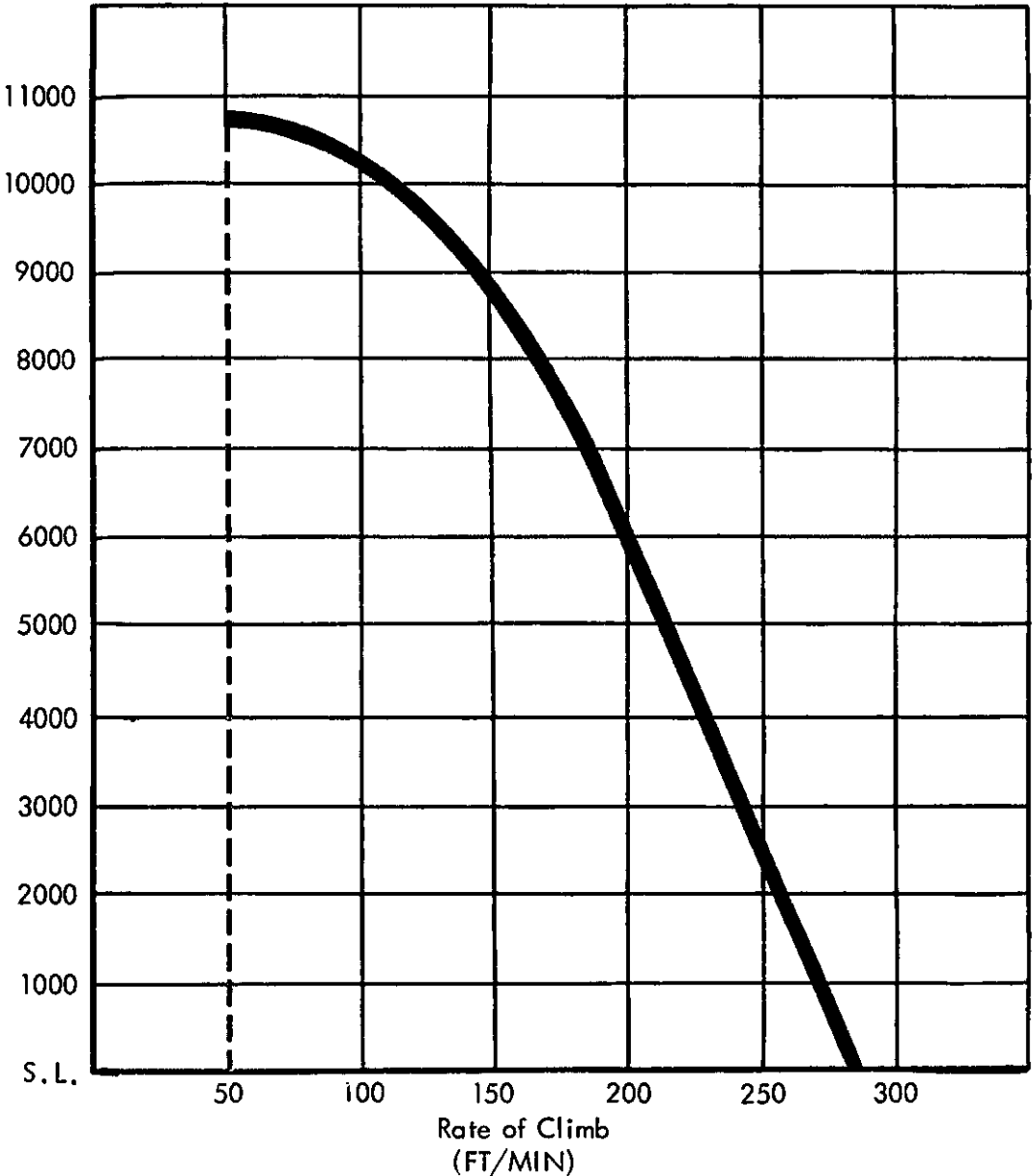
BEST CLIMB SPEED
(Propeller Feathered,
Flaps and Gear Retracted)



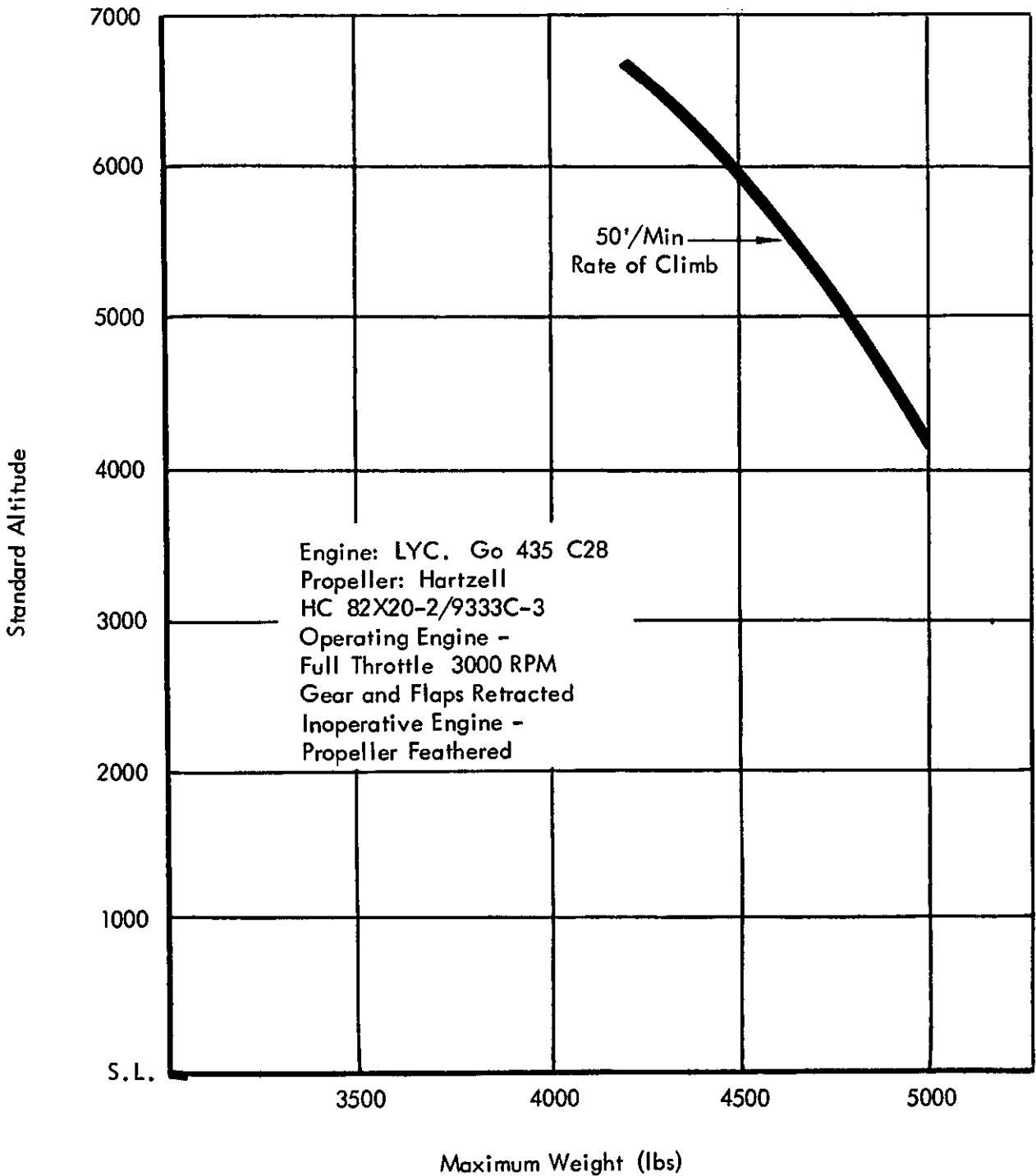
PIAGGIO P.136 L2
ONE ENGINE INOPERATIVE CLIMB PERFORMANCE
CRITICAL ENGINE INOPERATIVE

MAX. WT. - 6614 POUNDS
Propeller Feathered
Wing Flaps Retracted
Landing Gear Retracted
Best Climb Speed:
81 AT SL
87.5 AT Ceiling

Standard
Altitude
(feet)

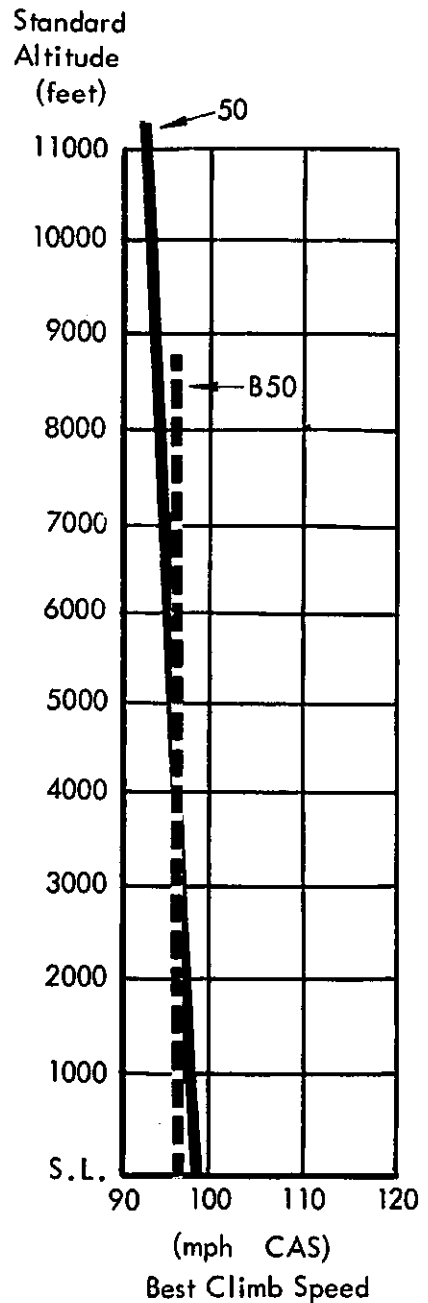
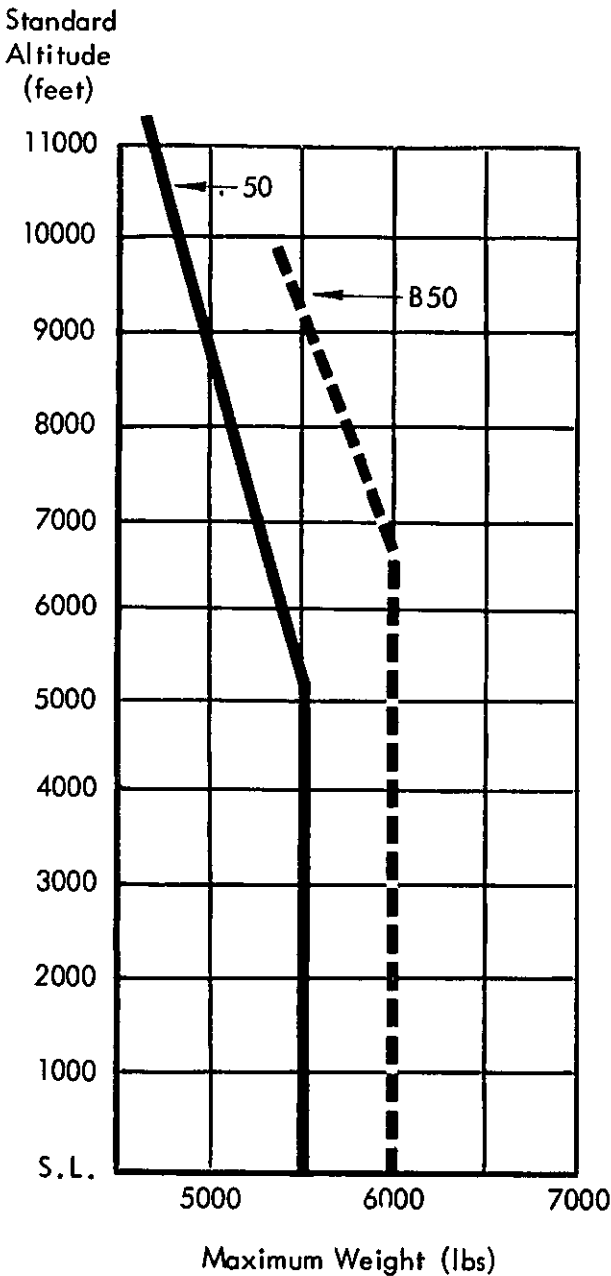


MODIFIED GRUMMAN WIDGEON G-44A
ONE ENGINE INOPERATIVE CLIMB PERFORMANCE
CRITICAL ENGINE INOPERATIVE



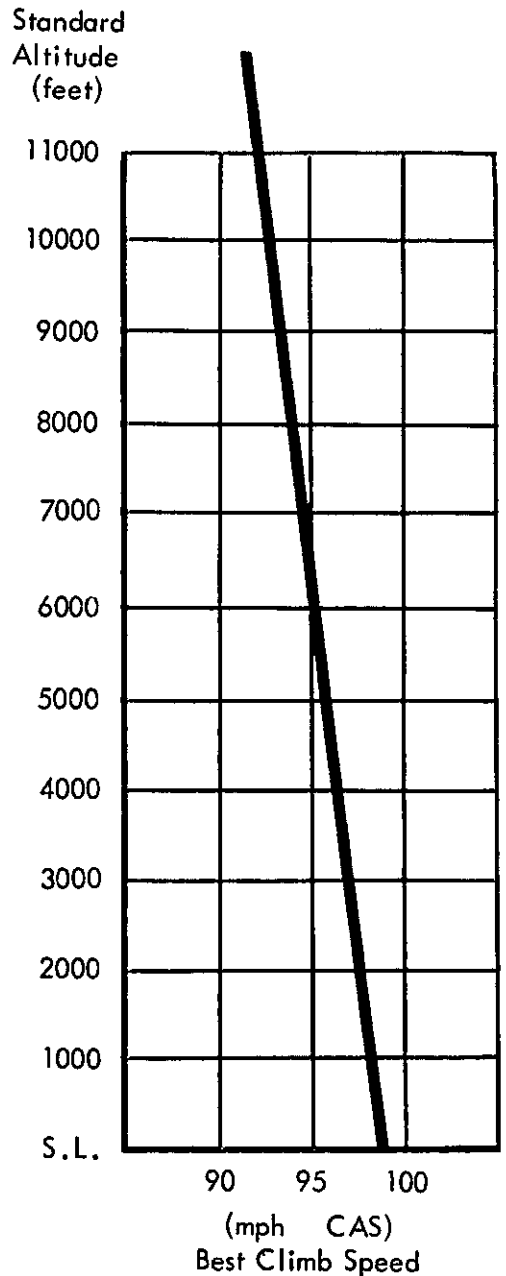
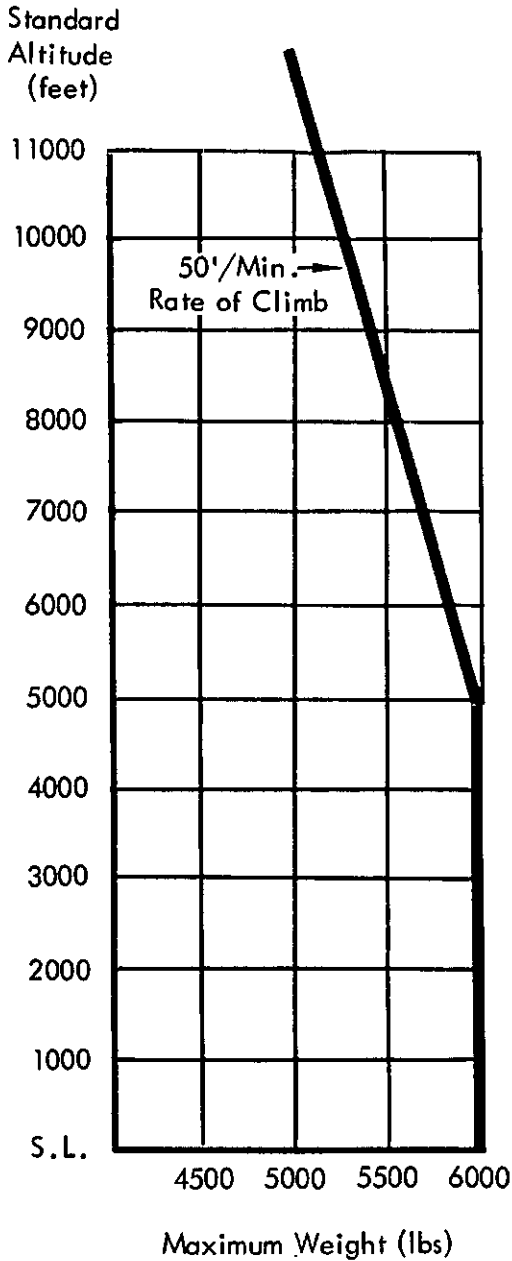
BEECH MODEL 50, B50
ONE ENGINE INOPERATIVE CLIMB PERFORMANCE
CRITICAL ENGINE INOPERATIVE

BEST CLIMB SPEED
Critical Engine Inoperative
(Propeller Feathered,
Flaps and Gear Retracted)
(Model 50 Propeller Windmilling)



PIAGGIO MODEL P.136 L1
ONE ENGINE INOPERATIVE CLIMB PERFORMANCE
CRITICAL ENGINE INOPERATIVE

BEST CLIMB SPEED
Critical Engine Inoperative
(Propeller Feathered,
Flaps and Gear Retracted)



ATTACHMENT 2. ADDRESS LIST OF U.S. WEATHER BUREAU REGIONAL OFFICES

**Regional Director
Weather Bureau Regional Office
Federal Building
J. F. Kennedy International Airport
Jamaica, Long Island, New York 11430**

**Regional Director
Weather Bureau Regional Office
Fort Worth 2, Texas**

**Regional Director
Weather Bureau Regional Office
16th Floor, Federal Office Building
Kansas City 6, Missouri**

**Regional Director
Weather Bureau Regional Office
222 South West Temple Street
Salt Lake City, Utah**

**Regional Director
Weather Bureau Regional Office
P. O. Box 80
Anchorage, Alaska**

**Regional Director
Weather Bureau Regional Office
P. O. Box 3650
Honolulu 11, Hawaii**