

2.21 FUEL LIMITATIONS

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|--|--------------|
| (a) Total Capacity | 32 U.S. GAL. |
| (b) Unusable fuel | 2 U.S. GAL . |
| The unusable fuel for this airplane has been determined as 1.0 gallon in each wing in critical flight attitudes. | |
| (c) Usable Fuel | 30 U.S. GAL. |
| The usable fuel in this airplane has been determined as 15.0 gallons in each wing. | |
| (d) Fuel remaining when a quantity indicator reads zero cannot be used safely in flight. | |

2.23 NOISE LEVEL

The noise level of this aircraft is 67.8d B(A).

No determination has been made by the Federal Aviation Administration that the noise levels of this airplane are or should be acceptable or unacceptable for operation at, into, or out of any airport.

The above statement notwithstanding, the noise level stated above has been verified by and approved by the Federal Aviation Administration in noise level test flights conducted in accordance with FAR 36, Noise Standards - Aircraft Type and Airworthiness Certification. This aircraft model is in compliance with all FAR 36 noise standards applicable to this type.

Insufficient runway remaining:

Airspeedmaintain above stall
Throttleclose
MixtureIDLE CUT-OFF
Fuel selectorOFF
Master switchOFF
MagnetosOFF
Flaps.....as situation requires
Directional control.....maintain - make only
shallow turns to avoid obstacles.

If sufficient altitude has been gained to attempt a restart:

Airspeedmaintain above stall
Fuel selectorswitch to other tank
containing fuel
Electric fuel pumpON
MixtureRICH
Carburetor heat.....ON
If power is not regained proceed with power off landing.

ENGINE POWER LOSS IN FLIGHT

Fuel selectorswitch to other tank
containing fuel
Electric fuel pumpON
MixtureRICH
Carburetor heat.....ON
Engine gaugescheck for indication
of cause of power loss
Primer.....locked
If no fuel pressure is indicated, check that fuel selector is on a tank
containing fuel.

If power has not been restored:

Ignition switchL then R. then back to BOTH
Throttle and mixturetry different settings

When power is restored:

Carburetor heatOFF
Electric fuel pumpOFF

If power cannot be restored:

Trim for best glide angle (70 KIAS) and prepare for power off landing.

POWER OFF LANDING

Trim for best glide angle (70 KIAS).

Locate most suitable landing area.

Establish spiral pattern.

1000 feet above field at downwind position for normal landing approach.

When field can be easily reached, slow to 62 KIAS* or 67 KIAS** for shortest landing with a full stall touchdown. Touchdowns should normally be made at lowest possible airspeed with full flaps.

When committed to landing:

IgnitionOFF

Master switchOFF

Fuel selectorOFF

MixtureIDLE CUT-OFF

Seat belts and harnesstight

FIRE

ENGINE FIRE DURING START

Startercrank engine

MixtureIDLE CUT-OFF

Throttleopen

Electric fuel pumpOFF

Fuel selectorOFF

Abandon airplane if fire continues.

FIRE IN FLIGHT

Source of firecheck

Engine fire:

Fuel selectorOFF

Throttleclosed

MixtureIDLE CUT-OFF

Electric fuel pumpOFF

Cabin heat.....OFF

Defroster.....OFF

Prepare for power off landing.

*Outboard Flow Strips Installed

**Outboard and Inboard Flow Strips Installed

3.5 AMPLIFIED EMERGENCY PROCEDURES (GENERAL)

The following paragraphs are presented to supply additional information for the purpose of providing the pilot with a more complete understanding of the recommended course of action and probable cause of an emergency situation.

3.7 ENGINE INOPERATIVE PROCEDURES

ENGINE POWER LOSS DURING TAKEOFF (NOT AIRBORNE)

If engine failure occurs before the airplane has lifted off, and if there is sufficient runway left for a safe stop, simply maintain directional control, close the throttle, and brake to a stop.

If there is not sufficient runway remaining for a safe stop, close the throttle, apply maximum braking, pull the mixture control to IDLE CUT-OFF, and turn OFF the fuel selector, the master switch and the magnetos. Maintain directional control, slow the airplane as much as possible, and maneuver to avoid obstacles.

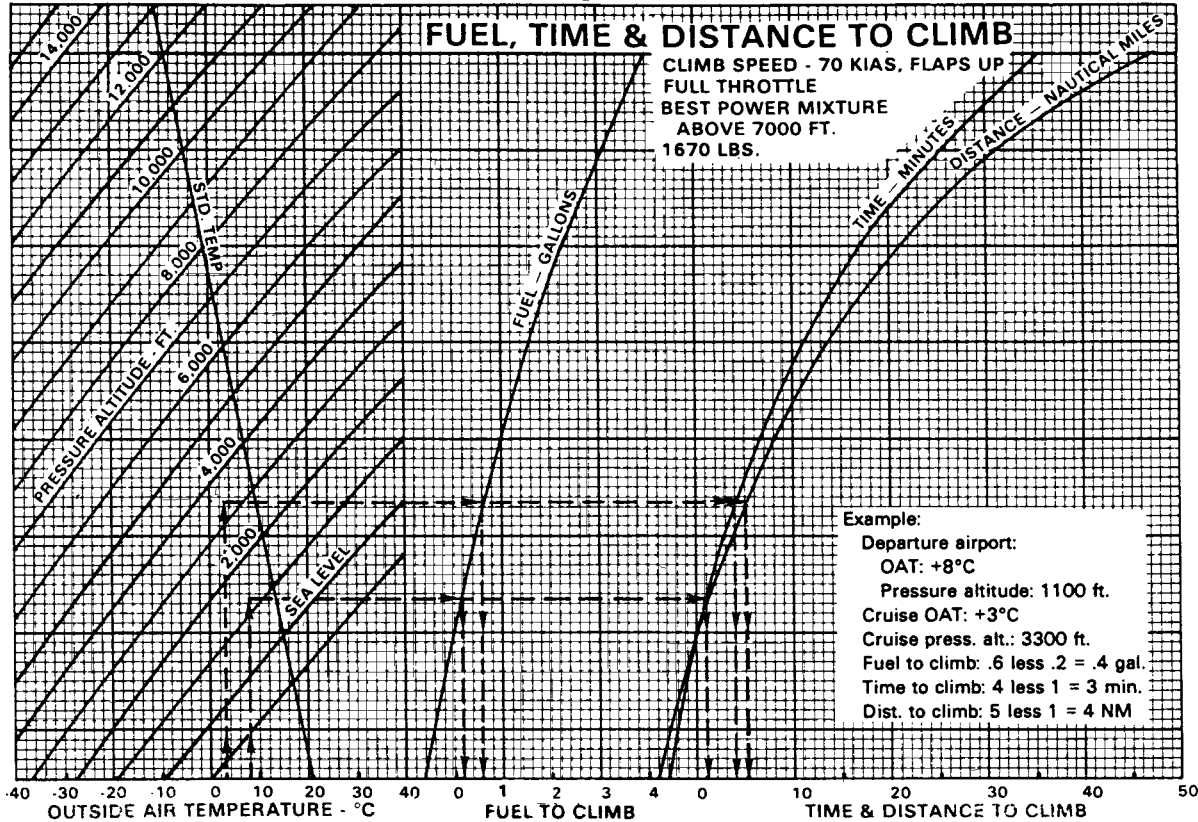
ENGINE POWER LOSS DURING TAKEOFF (IF AIRBORNE)

If engine failure occurs after the airplane has lifted off, and if sufficient landing area remains for a touchdown and stop, lower the nose and maintain airspeed to avoid a stall. Maintain directional control and land and stop straight ahead.

If liftoff has occurred and there is not sufficient landing area remaining for a safe landing and stop, maintain a safe airspeed to avoid a stall. Close the throttle, pull the mixture control to IDLE CUT-OFF, and turn OFF the fuel selector, the master switch, and the magnetos. Use of flaps depends upon the circumstances; however, normally full flaps allow the slowest and softest touchdown.

At low altitudes with a failed engine, turns should not be attempted, except for slight and gentle deviations to avoid obstacles. A controlled crash landing straight ahead is preferable to risking a stall which could result in an uncontrolled roll and crash out of a turn.

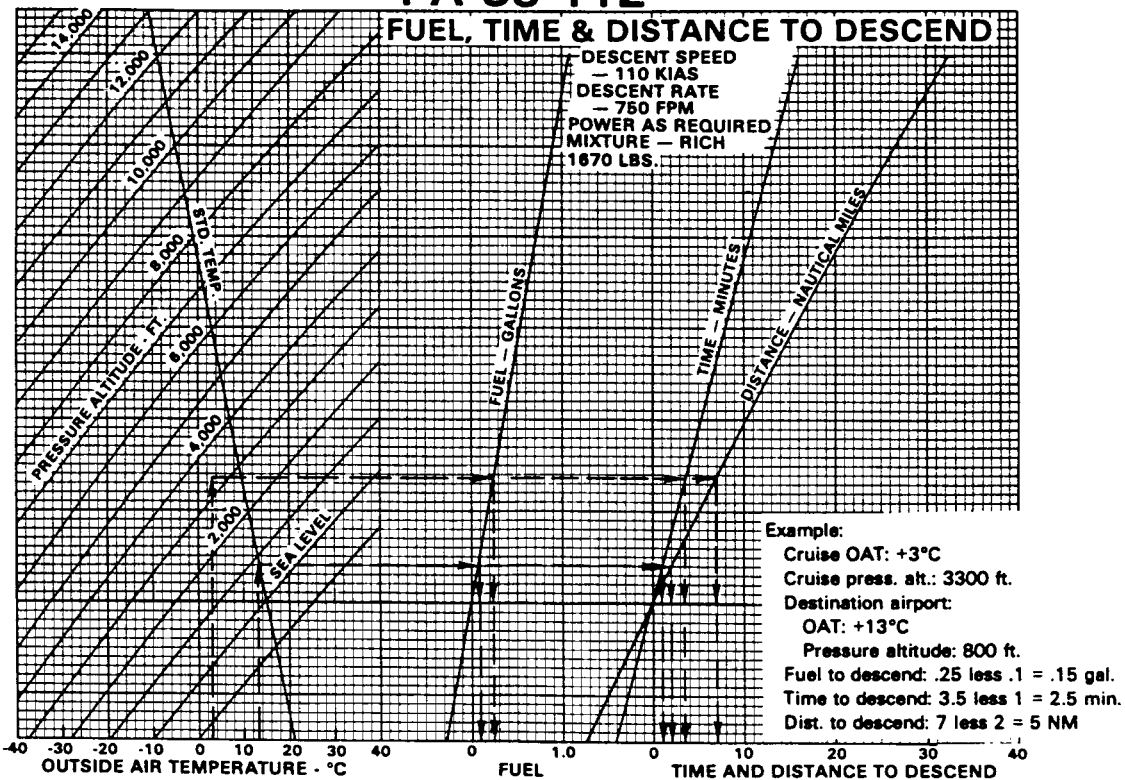
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FUEL, TIME AND DISTANCE TO CLIMB

Figure 5-15

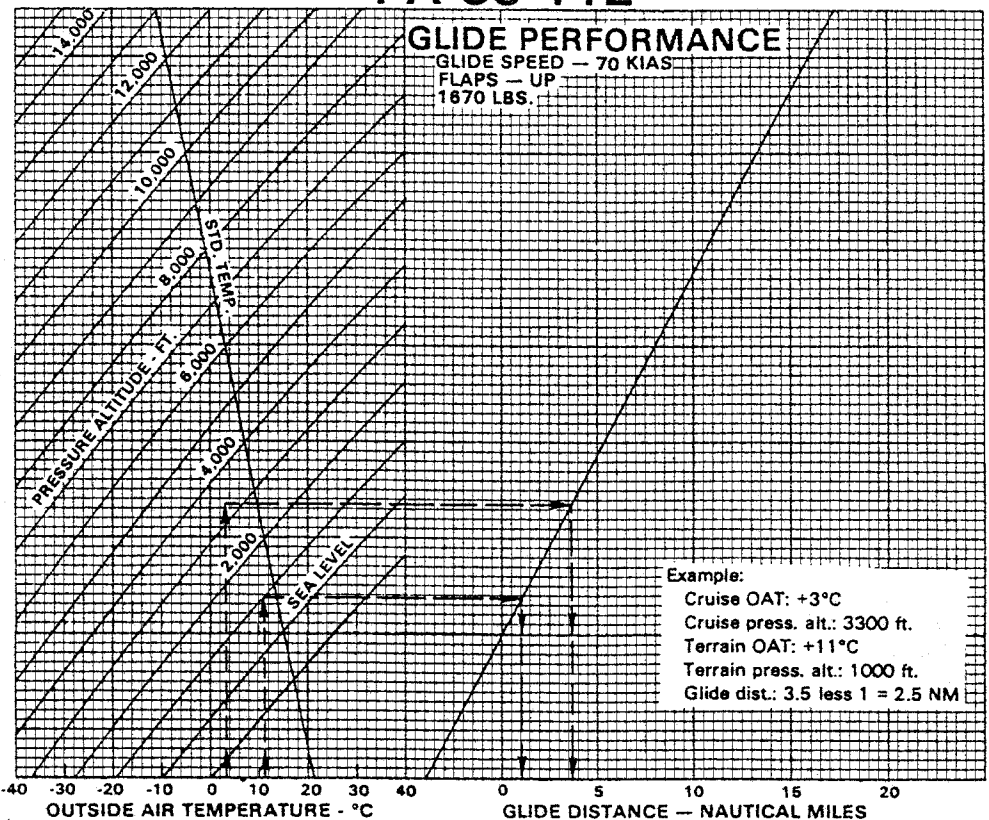
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FUEL, TIME AND DISTANCE TO DESCEND

Figure 5-31

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GLIDE PERFORMANCE

Figure 5-33