

Soft Field, Obstacle Clearance:

Lower flaps to 25° (second notch), accelerate aircraft, pull nose gear off as soon as possible and lift off at lowest possible airspeed. Accelerate just above the ground to best angle of climb speed, 85 MPH, select gear “up”* and climb past obstacle clearance height. Continue climb while accelerating to best rate of climb speed, 100 MPH, and slowly retract the flaps.

Soft Field, No Obstacle:

Proceed as above after gear retraction, continue climb at best rate of climb speed, 100 MPH, and slowly retract the flaps.

*If desired on the aircraft equipped with the backup gear extender, the override up position can be selected and latched before take-off, and the gear will then retract as soon as the gear selector switch is placed in the up position. In this case care should be taken not to retract the gear prematurely, or the aircraft could settle back onto the runway. If the override lock is used for takeoff, it should be disengaged as soon as sufficient terrain clearance is obtained, to return the gear system to normal operation.

CLIMB

The best rate of climb at gross weight will be obtained at 95 MPH with gear down and 100 MPH with gear up. The best angle of climb may be obtained at 85 MPH with gear down and 96 MPH with gear up. For climbing en route a speed of 110 MPH is recommended. This will produce better forward speed and increase visibility over the nose during the climb, with little sacrifice in rate of climb. Air conditioner may be turned on after all obstacles have been cleared.

STALLS

Angle of Bank	Flaps 40°	Flaps Retracted
0°	64 MPH	71 MPH
20°	66 MPH	73 MPH
40°	73 MPH	81 MPH
60°	90 MPH	100 MPH

Power Off - Gear Up or Down - Gross Weight 2650 Lbs.

CRUISING

The cruising speed of the Cherokee Arrow II is determined by many factors, including power setting, altitude, temperature, loading, and equipment installed on the airplane. The normal cruising power is 75% of the rated horsepower of the engine. True airspeed which may be obtained at various altitudes and power settings can be determined from the charts in Section XIII of this manual.

When selecting RPM below 2400, limiting manifold pressure for continuous operation, as specified by the Lycoming Operator’s Manual, should be observed.

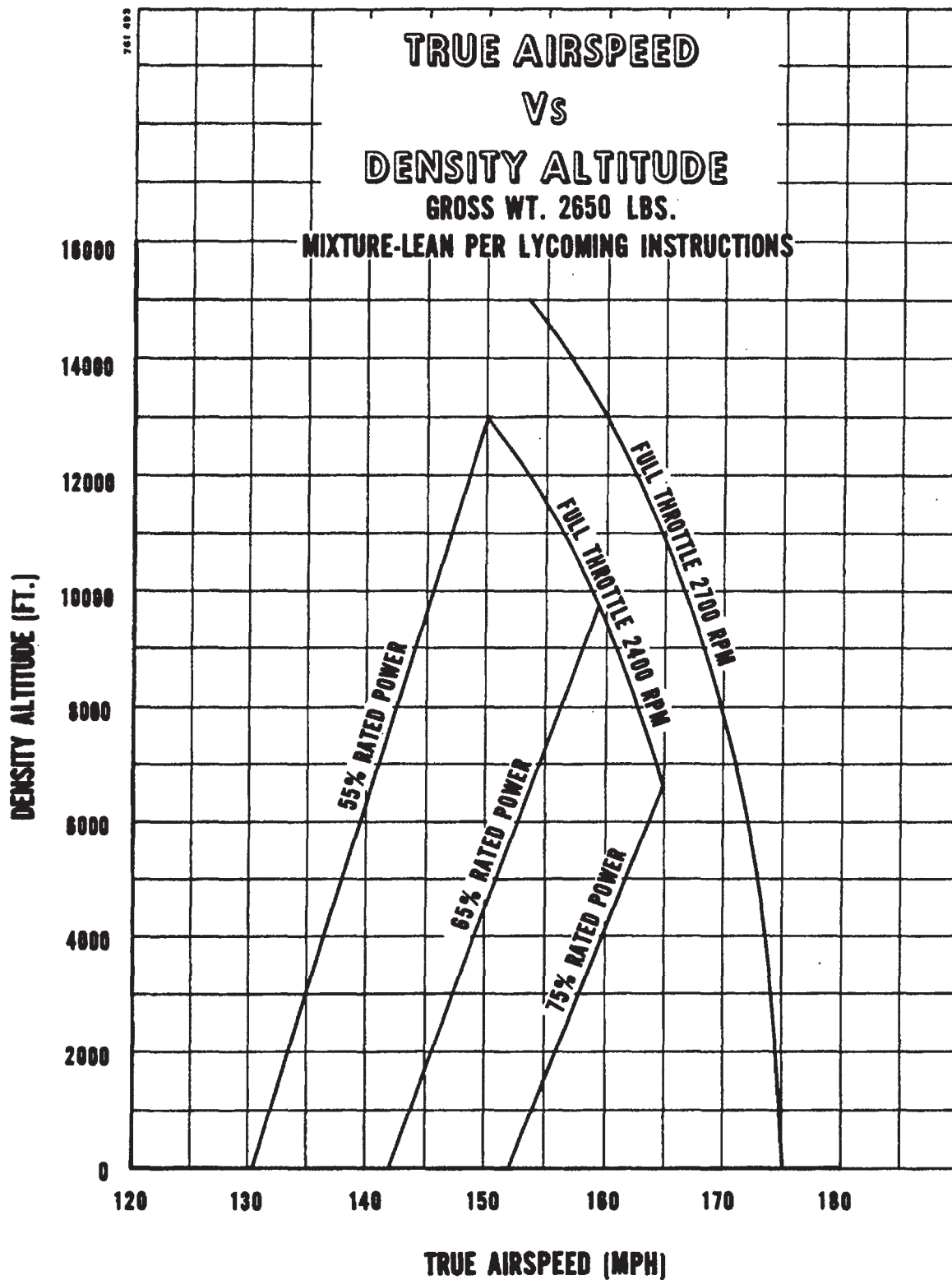
To INCREASE power, first increase RPM (propeller control); then increase manifold pressure (throttle control).

To DECREASE power, first decrease manifold pressure (throttle); then decrease RPM (propeller control).

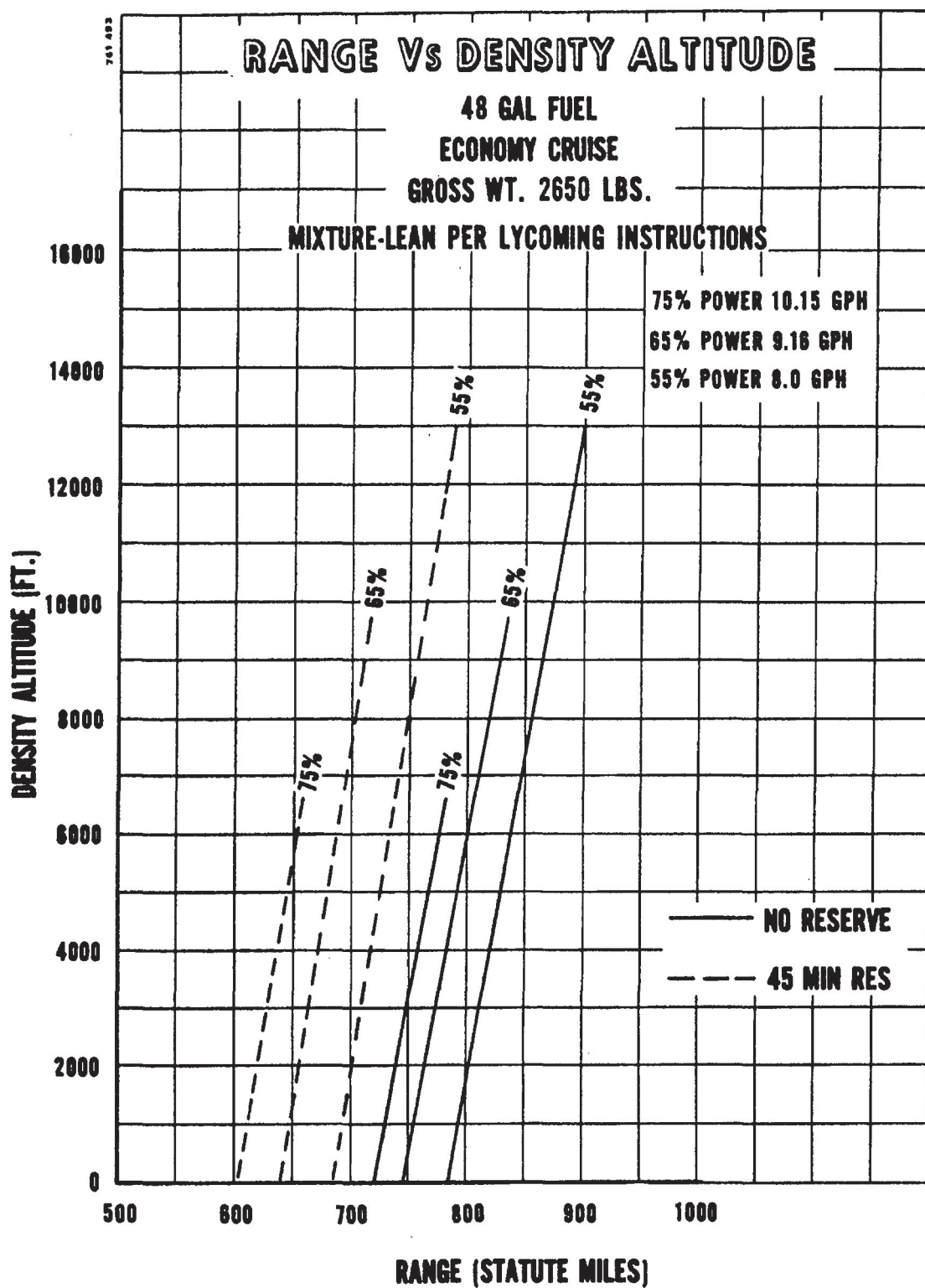
OPERATING INSTRUCTIONS

ISSUED: November 15, 1971

REVISED: November 27, 2012



NOTE: SEE SECTION 6 FOR EFFECTS OF AIR CONDITIONING
INSTALLATION ON TRUE AIRSPEED.



NOTE: SEE SECTION 6 FOR EFFECTS OF AIR CONDITIONING
INSTALLATION ON RANGE.

Power Setting Table - Lycoming Model IO-360-C Series, 200 HP Engine

Press. Alt Feet	Std. Alt Temp ° F	110 HP - 55% Rated RPM AND MAN. PRESS.		130 HP - 65% Rated RPM AND MAN. PRESS.		150 HP - 75% Rated RPM AND MAN. PRESS.		Press. Alt Feet
		2100	2400	2100	2400	2100	2400	
SL	59	22.9	20.4	25.9	22.9	25.5	24.4	SL
1,000	55	22.7	20.2	25.6	22.7	25.2	24.4	1,000
2,000	52	22.4	20.0	25.4	22.5	25.0	24.4	2,000
3,000	48	22.2	19.8	25.1	22.2	24.7	24.4	3,000
4,000	45	21.9	19.5	24.8	22.0	24.4	24.4	4,000
5,000	41	21.7	19.3	FT	21.7	FT	24.4	5,000
6,000	38	21.4	19.1	—	21.5	—	—	6,000
7,000	34	21.2	18.9	—	21.3	—	—	7,000
8,000	31	21.0	18.7	—	21.0	—	—	8,000
9,000	27	FT	18.5	—	FT	—	—	9,000
10,000	23	—	18.3	—	—	—	—	10,000
11,000	19	—	18.1	—	—	—	—	11,000
12,000	16	—	17.8	—	—	—	—	12,000
13,000	12	—	17.6	—	—	—	—	13,000
14,000	9	—	FT	—	—	—	—	14,000

To maintain constant power, correct manifold pressure approximately 0.16" Hg for each 10°F variation in inlet air temperature from standard altitude temperature. Add manifold pressure for air temperatures above standard; subtract for temperatures below standard.