1.9 OIL

(a) Oil Capacity (U.S. quarts) 8

(b) Oil Specifications Refer to latest issue of Lycoming Service Instruction 1014.

(c) Oil Viscosity per Average Ambient Temp. for Starting

Average Ambient Temperature	MIL-L-6082B SAE Grade	MIL-L-22851 Ashless Dispersant SAE Grades
All Temperatures	—	15W-50 or 20W-50
Above 80°F	60	60
Above 60°F	50	40 or 50
30°F to 90°F	40	40
0°F to 70°F	30	30, 40 or 20W40
Below 10°F	20	30 or 20W-30

When operating temperatures overlap indicated ranges, use the lighter grade oil.

1.11 MAXIMUM WEIGHTS

(a) Maximum Takeoff Weight (lbs) [redacted]

(b) Maximum Landing Weight (lbs) 2750

(c) Maximum Weight in Baggage Compartment 200

1.13 STANDARD AIRPLANE WEIGHTS*

(a) Standard Empty Weight (lbs): Weight of a standard airplane including unusable fuel, full operating fluids and full oil. 1622

(b) Maximum Useful Load (lbs): The difference between the Maximum Takeoff Weight and the Standard Empty Weight. 1128

1.15 BAGGAGE SPACE

(a) Compartment Volume (cubic feet) 24

(b) Entry Width (inches) 22

(c) Entry Height (inches) 20

1.17 SPECIFIC LOADINGS

(a) Wing Loading (lbs per sq ft) 16.18

(b) Power Loading (lbs per hp) 13.75

*These values are approximate and vary from one aircraft to another. Refer to Figure 6-5 for the Standard Empty Weight value and the Useful Load value to be used for C.G. calculations for the aircraft specified.

BEFORE TAKEOFF

Master switch ..... ON
Flight instruments ..... check
Fuel selector ..... proper tank
Electric fuel pump ..... ON
Engine gauges ..... check
Alternate air ..... CLOSED
Seat backs ..... erect
Mixture ..... set
Prop ..... set
Belts/harness ..... .fastened
Empty seats ..... seat belts snugly fastened
Flaps ..... set
Trim tab ..... set
Emergency Gear Extension Lever .....UP POSITION

NOTE

For aircraft equipped with the backup gear extender, the Emergency Gear Extension Lever should be in the normal/ disengaged position.

Controls ..... free
Doors ..... latched
Air conditioner ..... OFF
Parking brake ..... released

TAKEOFF

NORMAL

Flaps ..... set
Tab ..... set
Accelerate to 65 to 75 KIAS
Control wheel.. ..... back pressure to rotate to climb attitude

SHORT FIELD. OBSTACLE CLEARANCE

Flaps ..... 25º (second notch)
Accelerate to 50 to 60 KIAS depending on aircraft weight
Control wheel ..... back pressure to rotate to climb attitude
After breaking ground, accelerate to 55 to 65 KIAS depending on aircraft weight

SHORT FIELD. OBSTACLE CLEARANCE (cont.)

Gear (OVERRIDE ENGAGED on aircraft equipped I with the backup gear extender) ..... UP
Accelerate to best flaps up angle of climb speed - 78 KIAS. slowly retract the flaps and climb past the obstacle.
Accelerate to best flaps up rate of climb speed - 90 KIAS

SOFT FIELD

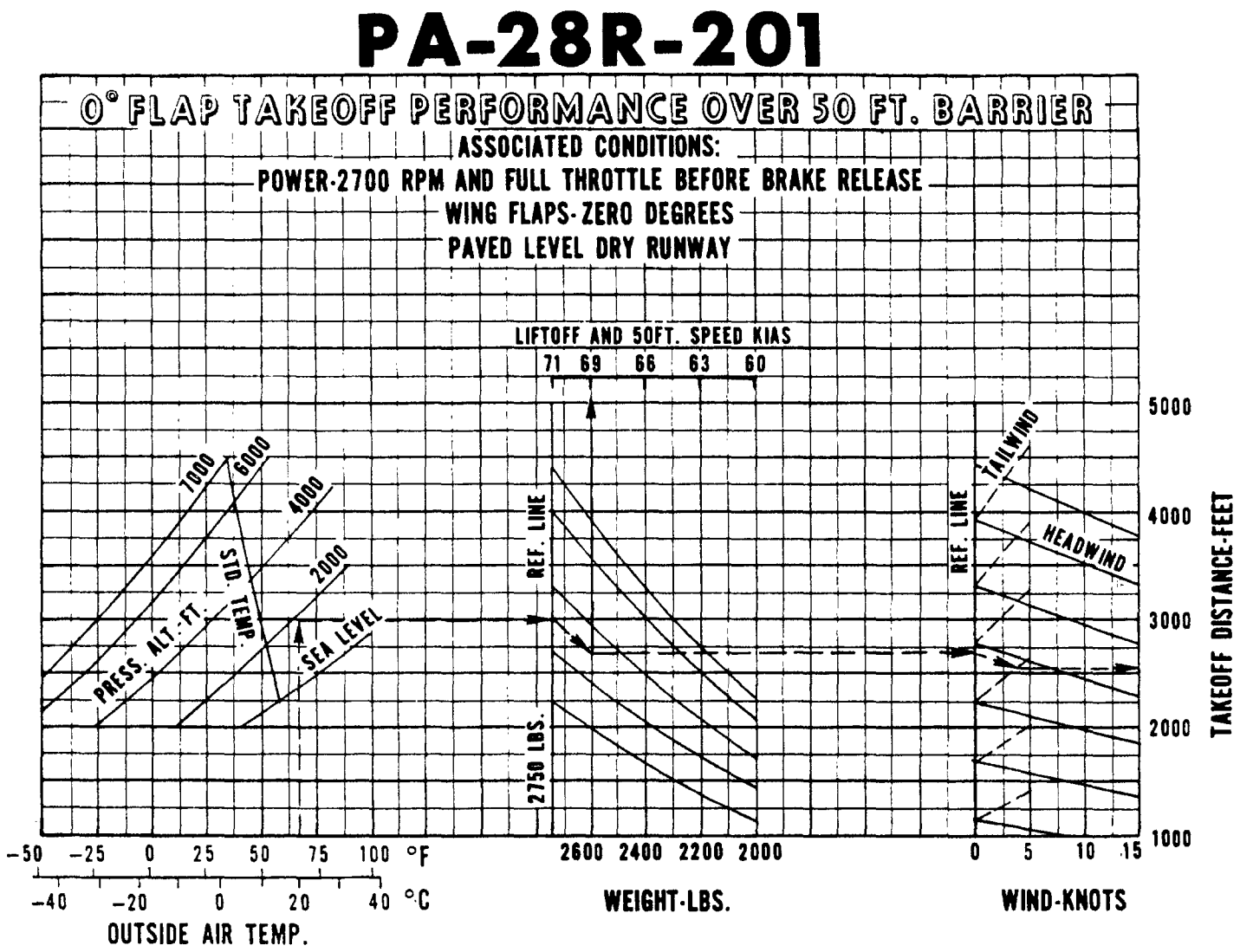
Flaps .....25º (second notch)
Accelerate to 50 to 60 KIAS depending on aircraft weight.
Control Wheel ..... hack pressure to rotate to climb attitude
After breaking ground, accelerate to 55 to 65 KIAS depending on aircraft weight.
Gear (OVERRIDE ENGAGED on aircraft equipped with the backup gear extender) ..... UP
Accelerate to best flaps up rate of climb speed - 90 KIAS.
Flaps .....retract slowly

CLIMB

Best rate (2750 lb) (gear up)
(flaps up) ..... 90 KIAS
Best rate (2750 lb) (gear down)
(flaps up) ..... 78 KIAS
Best angle (2750 lb) (gear up)
(flaps up) ..... 78 KIAS
Best angle (2750 lb) (gear down)
(flaps up) ..... 72 KIAS
En route ..... 104 KIAS
Electric fuel pump ..... OFF at desired altitude

CRUISING

Reference performance charts, Avco-Lycoming Operator's Manual and power setting table.
Normal max power 759c
Power ..... set per power table
Mixture ..... adjust



Example:

Pressure altitude: 1900 ft.
Outside air temperature: 20°C
Weight: 2600 lbs.
Surface wind: 4 kts. (headwind)
Liftoff speed: 69 KIAS
Speed at 50 ft.: 69 KIAS
Takeoff distance: 2550 ft.

0°FLAP TAKEOFF DISTANCE OVER 50 FOOT BARRIER

Figure 5-9

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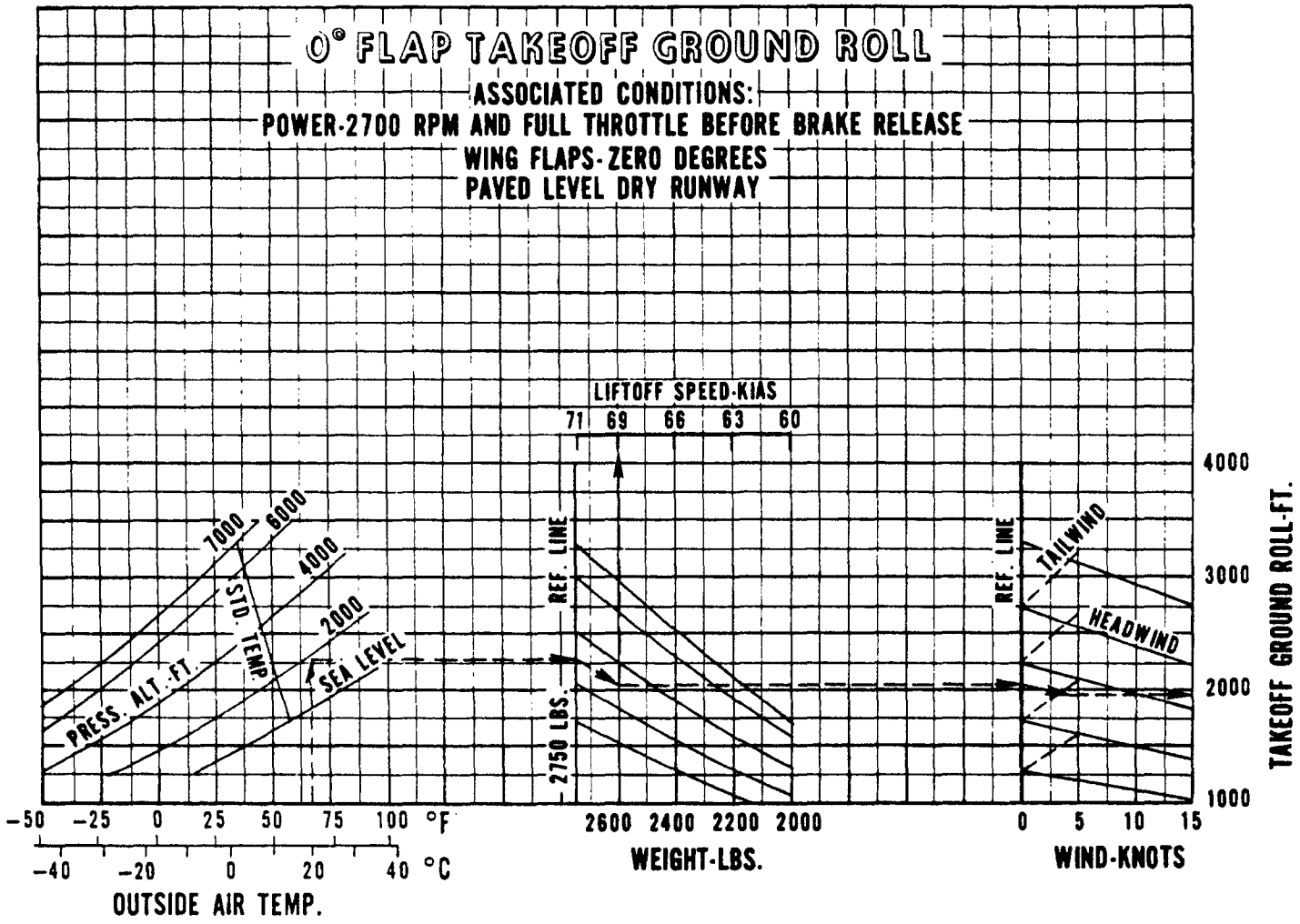

Example:

Pressure altitude: 1900 ft.
Outside air temperature: 20°C
Weight: 2600 lbs.
Surface wind: 4 kts. (headwind)
Liftoff speed: 66 KIAS
Takeoff ground roll: 1950 ft.

0°FLAP TAKEOFF GROUND ROLL

Figure 5-11