

N721EA

1980 King Air 200

Performance



MSN: BB-679

Prepared by the worldwide aviation specialists at RidgeAir, Inc.

SECTION V

PERFORMANCE

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INTRODUCTION TO PERFORMANCE AND FLIGHT PLANNING

The graphs and tables in this Section present performance information for takeoff, climb, landing, and flight planning at various parameters of weight, power, altitude, and temperature. All FAA-approved performance information is included within this Section. Examples have been presented on all performance graphs.

The following example presents calculations for flight time, block speed, and fuel required for a proposed flight from Denver to Reno using the conditions listed below:

CONDITIONS

At Denver:

Outside Air Temperature 28°C (82°F)
Field Elevation 5330 feet
Altimeter Setting 29.82 in. Hg
Wind 330° at 10 knots
Runway 35 Length 11,500 feet

Route of Trip:

DEN - J56 - SLC - J154 - BAM - J32 - RNO

Cruise Altitude:

26,000 feet

Weather Conditions at Cruise Altitude:

IFR

ROUTE SEGMENT	MAGNETIC HEADING	DISTANCE NM	WIND AT FL 260 DIR/KNOTS	OAT AT FL 260 °C	OAT AT **16,000 FT °C	ALTIMETER SETTING IN. HG
DEN - EKR	263°	*155	350°/40	-10	-6	29.82
EKR - SLC	270°	192	350°/40	-10	-6	29.82
SLC - BVL	249°	81	340°/35	-20	0	29.75
BVL - BAM	250°	145	340°/35	-20	0	29.75
BAM - RNO	227°	***145	290°/45	-20	-4	29.60

*Includes climb to Denver VORTAC

**MEA on *Enroute Low Altitude Chart L-8*

***Includes Distance from RNO VORTAC to Reno International

REFERENCE: *Enroute High Altitude Chart H-1 and Standard Instrument Departures for Western United States.*

At Reno:

Outside Air Temperature 32°C (90°F)
Field Elevation 4411 feet
Altimeter Setting 29.60 in. Hg
Wind 270° at 5 knots
Runway 25L Length 6105 feet

To determine the pressure altitude at origin and destination airports, add 1000 feet to field elevation for each 1.00 in. Hg that the reported altimeter setting value is below 29.92 in. Hg, and subtract 1000 feet for each 1.00 in. Hg above 29.92 in. Hg. First, find the difference between 29.92 in. Hg and the reported altimeter setting. Then multiply the answer by 1000 to find the difference in feet between field elevation and pressure altitude.

Pressure Altitude at DEN:

$$29.92 \text{ in. Hg} - 29.82 \text{ in. Hg} = 0.10$$

$$0.10 \times 1000 \text{ feet} = 100 \text{ feet}$$

The pressure altitude at DEN is 100 feet above field elevation.

$$\text{Pressure Altitude at DEN} = 5330 + 100 = 5430 \text{ feet.}$$

Pressure Altitude at RNO:

$$29.92 \text{ in. Hg} - 29.60 \text{ in. Hg} = 0.32$$

$$0.32 \times 1000 \text{ feet} = 320 \text{ feet}$$

The pressure altitude at RNO is 320 feet above field elevation.

$$\text{Pressure Altitude at RNO} = 4411 + 320 = 4731 \text{ feet.}$$

PERFORMANCE EXAMPLE

TAKE-OFF WEIGHT

A summary of graphs provided in this handbook to restrict take-off weight is presented below:

1. MAXIMUM TAKE-OFF WEIGHT PERMITTED BY ENROUTE CLIMB REQUIREMENT (No Restriction)
2. TAKE-OFF WEIGHT TO ACHIEVE POSITIVE ONE-ENGINE-INOPERATIVE CLIMB AT LIFT-OFF (separate graphs for Flaps 0% and Flaps 40%) (Optional)
3. MAXIMUM ENROUTE WEIGHT (FAR 135 OPERATIONS) (Required for FAR Part 135 Operations)
4. TAKE-OFF WEIGHT TO MEET FAR 25 TAKE-OFF CLIMB REQUIREMENTS (separate graphs for Flaps 0% and Flaps 40%) (Optional)

Take-off weight must not exceed 12,500 pounds.

ENROUTE CLIMB REQUIREMENT

There is no weight restriction to meet enroute climb requirement.

Maximum allowable take-off weight = 12,500 pounds.

TAKE-OFF WEIGHT TO ACHIEVE POSITIVE ONE-ENGINE-INOPERATIVE CLIMB AT LIFT-OFF

12,500 pounds @ Flaps 0%

12,450 pounds @ Flaps 40%

MAXIMUM ENROUTE WEIGHT (FAR 135 OPERATIONS)

To determine the maximum take-off weight, the weight of the fuel used to reach the MEA is added to the maximum enroute weight.

From the TIME, FUEL, AND DISTANCE TO CLIMB Graph, the time, fuel, and distance required to climb from 5430 feet (28°C) to 16,000 feet (-6°C) are:

Time..... 6 minutes
Fuel..... 85 pounds
Distance..... 19 nautical miles

Enter the MAXIMUM ENROUTE WEIGHT (FAR 135 OPERATIONS) Graph at -6°C, 16,000 feet altitude, and 29.82 in. Hg altimeter setting:

Maximum Enroute Weight = 12,500 pounds

Take-off Weight must not exceed 12,500 pounds

TAKE-OFF WEIGHT TO MEET FAR 25 TAKE-OFF AND CLIMB CRITERIA

The following information has been presented to provide the option of limiting weight to obtain the performance specifications of FAR 25 during the critical take-off and initial climb flight segments. Their use is not mandatory and full compliance with other regulations applicable to FAR 25 is not implied.

The criteria for limiting weight involves the selection from the Take-off Weight graphs of the most adverse conditions of:

1. One-engine-inoperative climb
2. Field length to accelerate-stop
3. Field length to accelerate-go
4. The take-off flight path required to clear known obstacles beyond the runway.

The performance graphs associated with the above conditions are:

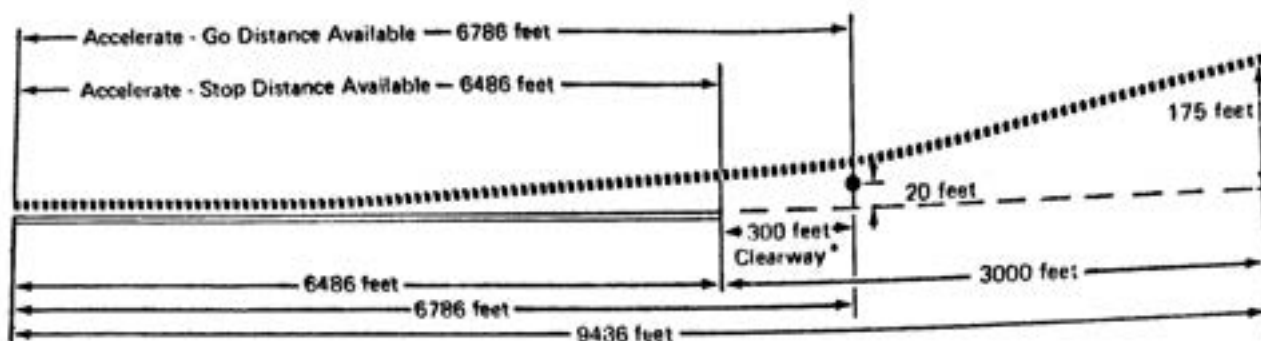
TAKE-OFF WEIGHT - TO MEET FAR 25 TAKE-OFF CLIMB REQUIREMENTS Graphs
ACCELERATE-STOP Graphs
ACCELERATE-GO Graphs
NET GRADIENT OF CLIMB Graphs
TAKE-OFF FLIGHT PATH Graph
(Reference FAR 25.109, 25.111, 25.115, and 25.121)

The performance presented using this criteria is predicated on the autofeather system being armed and operable. The Ground Minimum Control Speed (V_{MCG}) has been determined to be 84 knots. At this speed, control within 25 feet of the runway center line is possible.

The following example illustrates the procedures required to obtain a take-off weight value using the CONDITIONS outlined below, and illustrated by the TAKE-OFF FLIGHT PATH Diagram.

CONDITIONS (These conditions do not pertain to any particular airport location.):

Outside Air Temperature..... 28°C
Field Elevation..... 5330 feet
Altimeter Setting..... 29.82 in. Hg
Surface Wind..... 140° at 11 knots
Runway 17 Length..... 6486 feet
Pressure Altitude (29.92 - 29.82 = 0.10 in. Hg) 5330 + 100..... 5430 feet
Headwind Component (From WIND COMPONENTS Graph)..... 9.5 knots
Obstacles (Height above runway):
..... 20-foot-high wires 300 feet beyond end of runway
..... 175-foot-high ridge 3000 feet beyond end of runway



*The maximum allowable clearway for this runway is 1621 feet (25% of 6486 feet).

TAKE-OFF FLIGHT PATH

- From the TAKE-OFF WEIGHT - TO MEET FAR 25 TAKE-OFF CLIMB REQUIREMENTS Graphs, determine that the maximum take-off weights to meet FAR 25 climb requirements are 12,500 pounds with flaps at 0%, and 12,300 pounds with flaps at 40%.
- From the ACCELERATE-STOP Graphs, using 12,500 pounds with flaps at 0%, and 12,300 pounds with flaps at 40%, determine that the resulting distances are less than the runway length. Therefore, accelerate-stop is not a limiting factor.
- From the ACCELERATE-GO Graphs, using 12,500 pounds with flaps at 0%, and 12,300 pounds with flaps at 40%, determine that the resulting distances are greater than the available accelerate-go distance of 6786 feet. (Refer to the TAKE-OFF FLIGHT PATH Diagram.)
- Using the ACCELERATE-GO Graphs, enter in reverse using the 6786 feet value and determine the weight for which this accelerate-go distance is possible.
 - Take-off weight of 10,650 pounds with flaps at 0%
 - Take-off weight of 11,700 pounds with flaps at 40%
- Enter the TAKE-OFF FLIGHT PATH Graph to determine the minimum gradient of climb which will result in a flight path clear of the 175-foot-high ridge 3000 feet beyond the end of the runway. (Refer to the TAKE-OFF FLIGHT PATH Diagram above.)
 - Ridge = 175 feet AGL
 - From Reference Zero (9486 - 6786) = 2700 feet
 - Minimum Gradient of Climb = 5.2%
- Enter the NET GRADIENT OF CLIMB - FLAPS 0% Graph at 10,650 pounds, and the NET GRADIENT OF CLIMB - FLAPS 40% Graph at 11,700 pounds.

- Both resulting gradients are less than 5.2%.
- Enter in reverse the NET GRADIENT OF CLIMB Graphs using the 5.2% net gradient of climb value to determine the weights for which a climb at this value is possible.
 - Flaps 0% = 9900 pounds
 - Flaps 40% = 9250 pounds
- Using the weight of 9900 pounds with the flaps at 0%, and 9250 pounds with the flaps at 40%, the accelerate-go distance will be shortened. This in turn will decrease the minimum gradient of climb value required to clear the ridge. The allowable take-off weights to meet these requirements are between 10,650 pounds and 9900 pounds with the flaps at 0%, or between 11,700 pounds and 9250 pounds with the flaps at 40%. Exact weight can be determined by an iterative process of assuming new weight halfway between these weights and using the procedures outlined in Steps 3, 5, 6, 7, and 8. Determine new weights for first iteration as follows:

- a. Flaps 0%:
 $10,650 - 9900 = 750 + 2 = 475 + 9900 = 10,275$ pounds
 - b. Flaps 40%:
 $11,700 - 250 = 450 + 2 = 1225 + 9250 = 10,475$ pounds
9. (Step 3 procedures): From the ACCELERATE-GO Graphs, using 10,275 pounds for flaps at 0%, and 10,475 pounds for flaps at 40%, the resulting distances are within the available accelerate-go distance of 6786 feet.
- a. 6100 feet with flaps at 0%
 - b. 5050 feet with flaps at 40%
10. (Step 5 procedure): Enter the TAKE-OFF FLIGHT PATH Graph and adjust the horizontal distance from Reference Zero and determine minimum gradient of climb.
- a. Flaps 0% - From Reference Zero (9486 - 6100) = 3386 feet
Minimum Gradient of Climb = 4.1%
 - b. Flaps 40% - From Reference Zero (9486 - 5050) = 4436 feet
Minimum Gradient of Climb = 3.2%
11. (Step 6 procedures): Enter the NET GRADIENT OF CLIMB - FLAPS 0% Graph at 10,275 pounds for a 4.7% net gradient of climb. Enter the NET GRADIENT OF CLIMB - FLAPS 40% Graph at 10,475 pounds for a 3.5% net gradient of climb.
- a. Since these results are greater than the minimum value, the take-off weights of 10,275 pounds with flaps at 0% or 10,475 pounds with flaps at 40% may be used.
 - b. If an exact value is required, complete the next step and repeat Steps 3, 5, 6, 7, and 8.
12. (Step 7 procedures): Enter in reverse the NET GRADIENT OF CLIMB - FLAPS 0% Graph using minimum gradient of climb of 4.1% for a take-off weight of 10,825 pounds, and the NET GRADIENT OF CLIMB - FLAPS 40% Graph using minimum gradient of climb of 3.2% for a take-off weight of 10,725 pounds.
13. (Step 8 procedures): Use the weights of Step 8 and Step 12 to obtain a new assumed weight.
- a. Flaps 0%:
 $10,825 - 10,275 = 550 + 2 = 275 + 10,275 = 10,550$ pounds
 - b. Flaps 40%:
 $10,725 - 10,475 = 250 + 2 = 125 + 10,475 = 10,600$ pounds

Use these assumed weights for second iteration.

14. After several additional iterations, the exact weights which will satisfy all the given conditions are:
- a. Flaps 0% = 10,470 pounds with a 4.5% Net Gradient of Climb.
 - b. Flaps 40% = 10,625 pounds with a 3.3% Net Gradient of Climb

The fuel quantity required for start and taxi can be added to these weights.

TAKE-OFF DISTANCE

Enter the TAKE-OFF DISTANCE Graphs at 28°C, 5430 feet pressure altitude, 12,500 pounds, and 9.5 knots headwind component and obtain the following results:

	FLAPS 0%	FLAPS 40%
Ground Roll.....	2870 feet	2700 feet
Total Distance Over 50-foot Obstacle	4900 feet	3750 feet
Take-off Speed:		
At Rotation.....	95 knots	94 knots
At 50 Feet.....	121 knots	106 knots

FLIGHT PLANNING

The following calculations provide information for flight planning at various parameters of weight, power, altitude, and temperature. Graphs and tables are included for: TIME, FUEL, AND DISTANCE TO CLIMB; TIME, FUEL, AND DISTANCE TO DESCEND; RECOMMENDED CRUISE POWER AT 1700 RPM; RECOMMENDED CRUISE POWER AT 1800 RPM; MAXIMUM CRUISE POWER AT 1900 RPM; MAXIMUM RANGE POWER AT 1700 RPM; and HOLDING TIME.

Calculations for flight time, block speed, and fuel requirements for a proposed flight are detailed below.

Enter the ISA CONVERSION Graph at the conditions indicated:

DEN	Pressure Altitude.....	5430 feet
	OAT.....	28°C
	ISA Condition.....	ISA + 23°C
DEN - SLC	Pressure Altitude.....	26,000 feet
	OAT.....	-10°C
	ISA Condition.....	ISA + 27°C
SLC - RNO	Pressure Altitude.....	26,000 feet
	OAT.....	-20°C
	ISA Condition.....	ISA + 17°C
RNO	Pressure Altitude.....	4730 feet
	OAT.....	32°C
	ISA Condition.....	ISA + 27°C

Enter the TIME, FUEL, AND DISTANCE TO CLIMB Graph at 28°C, to 5430 feet, and to 12,500 pounds and enter at -10°C, to 26,000 feet and to 12,500 pounds, and read:

Time to Climb.....	25 - 3 = 22 minutes
Fuel Used to Climb.....	275 - 45 = 230 pounds
Distance Traveled.....	80 - 11 = 69 nautical miles

Enter the TIME, FUEL, AND DISTANCE TO DESCEND Graph at 26,000 feet, and enter again at 4730 feet and read:

Time to Descend.....	17 - 3 = 14 minutes
Fuel Used to Descend.....	168 - 36 = 132 pounds
Descent Distance.....	81 - 14 = 67 nautical miles

The estimated average cruise weight is approximately 11,600 pounds.

Enter the tables for RECOMMENDED CRUISE POWER @ 1800 RPM for ISA + 10°C, ISA + 20°C, and ISA + 30°C, and read the cruise speeds for 26,000 feet at 12,000 pounds and 11,000 pounds.

CRUISE TRUE AIRSPEEDS AT FL 260

12,000 POUNDS			11,000 POUNDS		
ISA + 10°C	ISA + 20°C	ISA + 30°C	ISA + 10°C	ISA + 20°C	ISA + 30°C
264	261	253	268	266	260

Interpolate between these speeds for ISA + 27°C and ISA + 17°C at 11,600 pounds.

Cruise True Airspeed (ISA + 27°C) 258 knots

Cruise True Airspeed (ISA + 17°C) 264 knots

Enter the *RECOMMENDED CRUISE POWER @ 1800 RPM Graph at 26,000 feet, and read the recommended torque settings for ISA + 27°C (-3°C OAT) and ISA + 17°C (-13°C OAT):

ISA + 27°C (-3°C OAT) 1269 ft-lbs torque per engine

ISA + 17°C (-13°C OAT)..... 1350 ft-lbs torque per engine

Enter the *FUEL FLOW AT RECOMMENDED CRUISE POWER @ 1800 RPM Graph at 26,000 feet, and read the fuel flow for ISA + 27°C (-3°C OAT) and ISA + 17°C (-13°C OAT):

ISA + 27°C (-3°C OAT)	Fuel Flow Per Engine	247 lbs/hr
	Total Fuel Flow	494 lbs/hr

ISA + 17°C (− 13°C OAT)	Fuel Flow Per Engine	260 lbs/hr
	Total Fuel Flow	520 lbs/hr

*NOTE: For flight planning, enter these graphs at the forecasted ISA condition; for enroute power settings and fuel flow, enter the graphs at the actual QAT.

Time and Fuel Used were calculated at Recommended Cruise Power @ 1800 RPM as follows:

$$\begin{aligned} \text{Time} &= \frac{\text{Distance}}{\text{Ground Speed}} \\ \text{Fuel Used} &= (\text{Time}) (\text{Total Fuel Flow}) \end{aligned}$$

Results are as follows:

ROUTE	DISTANCE	ESTIMATED GROUND SPEED	TIME AT CRUISE ALTITUDE	FUEL USED FOR CRUISE
	NM	KNOTS	HRS : MIN	LBS
DEN - EKR	*86	243	0:21	173
EKR - SLC	192	239	0:48	395
SLC - BVL	81	252	0:19	165
BVL - BAM	145	251	0:34	295
BAM - RNO	*78	230	0:20	173

*Distance required to climb or descend has been subtracted from segment distance

TIME - FUEL - DISTANCE

ITEM	TIME HRS : MINS	FUEL POUNDS	DISTANCE NM
Start, Runup, Taxi, and Take-off acceleration	00 : 00	90	0
Climb	00 : 22	230	69
Cruise	2 : 22	1201	582
Descent	00 : 14	132	67
Total	2 : 58	1653	718

Total Flight Time: 2 hours, 58 minutes

Block Speed: 718 NM ÷ 2 hours, 58 minutes = 242 knots

Reserve Fuel (45 minutes at Maximum Range Power): Assume weight at end of cruise to be 11,000 pounds. Enter the tables for MAXIMUM RANGE POWER @ 1700 RPM for ISA + 20°C, and read the fuel flow for 26,000 feet at 11,000 pounds:

ISA + 10°C.....408 lbs/hr Total Fuel Flow

ISA + 20°C.....418 lbs/hr Total Fuel Flow

Interpolate to find fuel flow at ISA + 17°C:

Total fuel flow for reserve = 408 + 7 = 415 lbs/hr

Reserve Fuel = 45 minutes X 415 lbs/hr = 311 lbs

Total Fuel: 1653 + 311 = 1964 pounds (293 gallons Aviation Kerosene)

Check for Zero Fuel Weight Requirement:

NOTE: Zero Fuel Weight cannot exceed 10,400 pounds.

Ramp Weight - Total Fuel Weight = 12,590 - 1964 = 10,626 pounds (Zero Fuel Weight)

The requirement is not satisfied. Two options exist:

1. Add 226 pounds additional fuel (the difference between 10,626 pounds and 10,400 pounds); or
2. Load to a Ramp Weight of 12,364 pounds (10,400 pounds plus 1964 pounds).

LANDING INFORMATION

The estimated Landing Weight is determined by subtracting the fuel required for the trip from the Ramp Weight.

Ramp Weight.....12,590 pounds

Fuel Required for Total Trip.....1,653 pounds

Landing Weight (12,590 - 1653).....10,937 pounds

Enter the LANDING DISTANCE WITHOUT PROPELLER REVERSING - FLAPS 100% Graph at 32°C, 4731 feet, 10,937 pounds, and 4.7 knots headwind component:

Ground Roll.....1850 feet
Total Over 50-foot Obstacle.....3000 feet
Approach Speed.....99 knots

Enter the CLIMB - BALKED LANDING Graph at 32°C, 4731 feet, 10,937 pounds, and 4.7 knots headwind component:

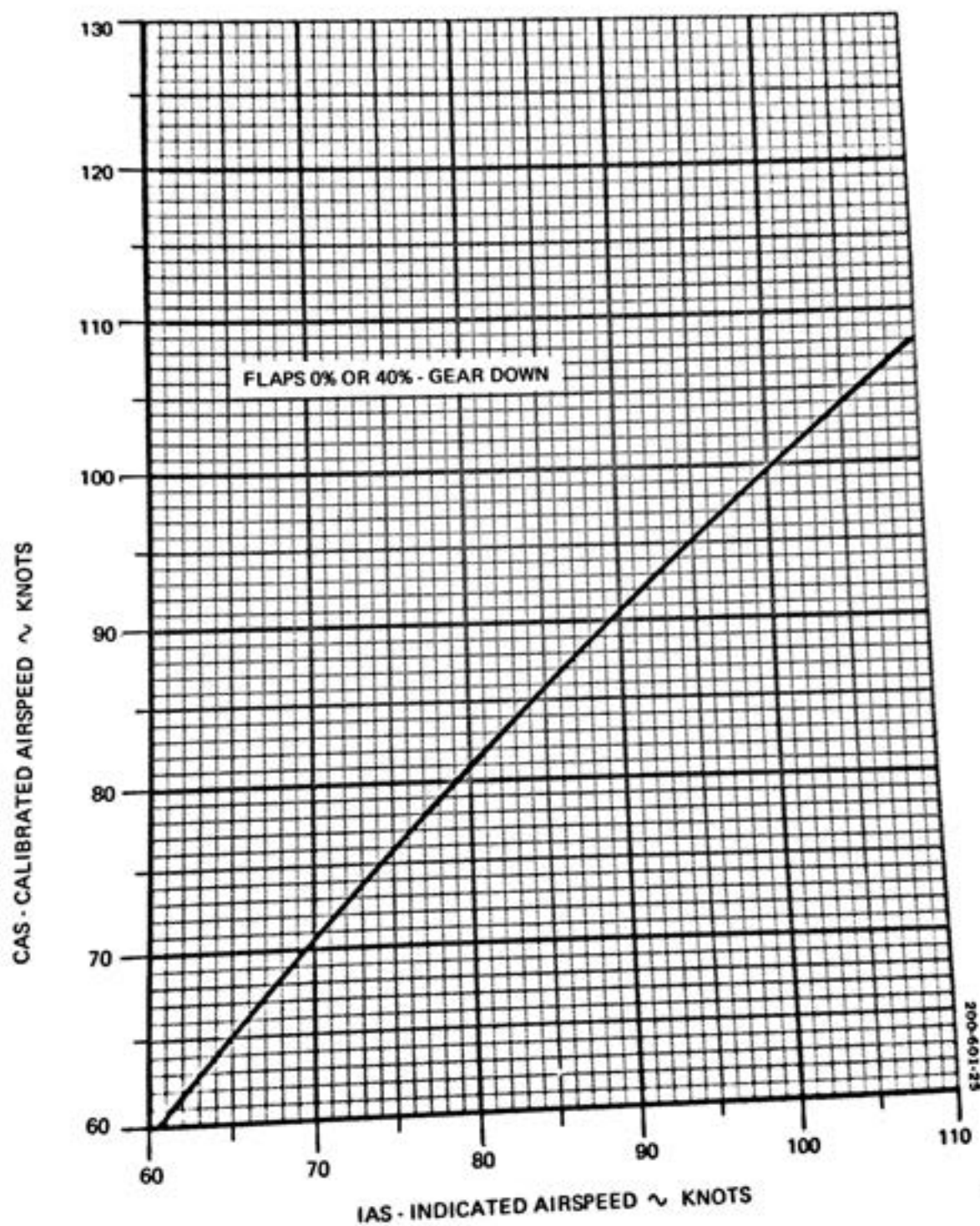
Rate of Climb.....1450 feet per minute
Climb Gradient.....12.8%

COMMENTS PERTINENT TO THE USE OF PERFORMANCE GRAPHS

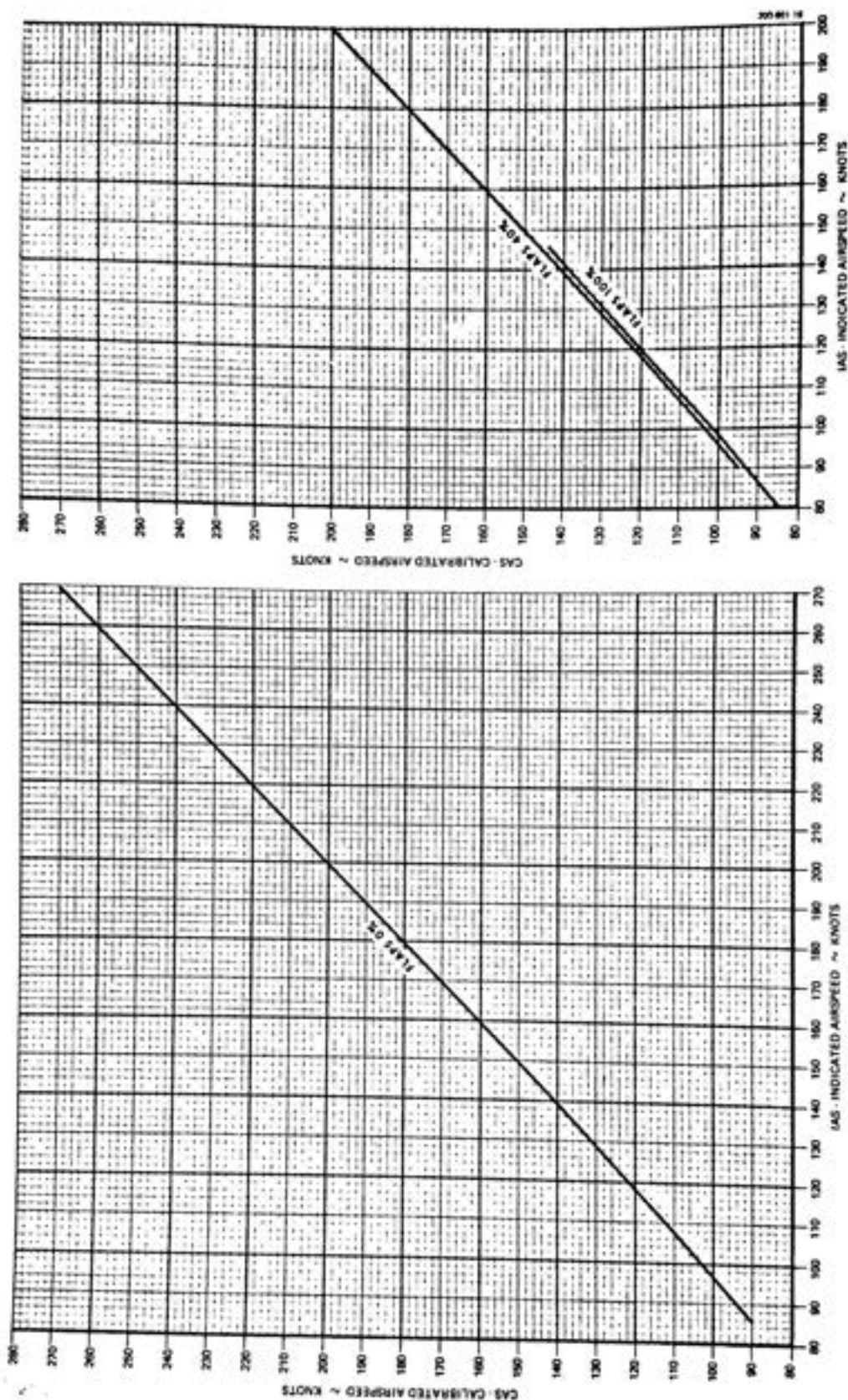
1. In addition to presenting the answer for a particular set of conditions, the example on the graph also presents the order in which the various scales on the graph should be used. For instance, if the first item in the example is OAT, then enter the graph at the known OAT.
2. The reference lines indicate where to begin following guide lines. Always project to the reference line first, then follow the guide lines to the next known item.
3. The associated conditions define the specific conditions from which performance parameters have been determined. They are not intended to be used as instructions; however, performance values determined from charts can only be achieved if the specified conditions exist.
4. The full amount of usable fuel is available for all approved flight conditions.
5. Notes have been provided on various graphs and tables to approximate performance with ice vanes extended. The effect is estimated by either entering the graph at a temperature higher than the actual temperature, or adjusting the final results obtained from the graph by a fixed percentage. The effect is approximate and will vary, depending upon airspeed, temperature, altitude, and ambient conditions. At lower altitudes, where operation on the torque limit is possible, the effect of ice vane extension will be less, depending upon how much power can be recovered after the ice vanes have been extended.

AIRSPED CALIBRATION - NORMAL SYSTEM

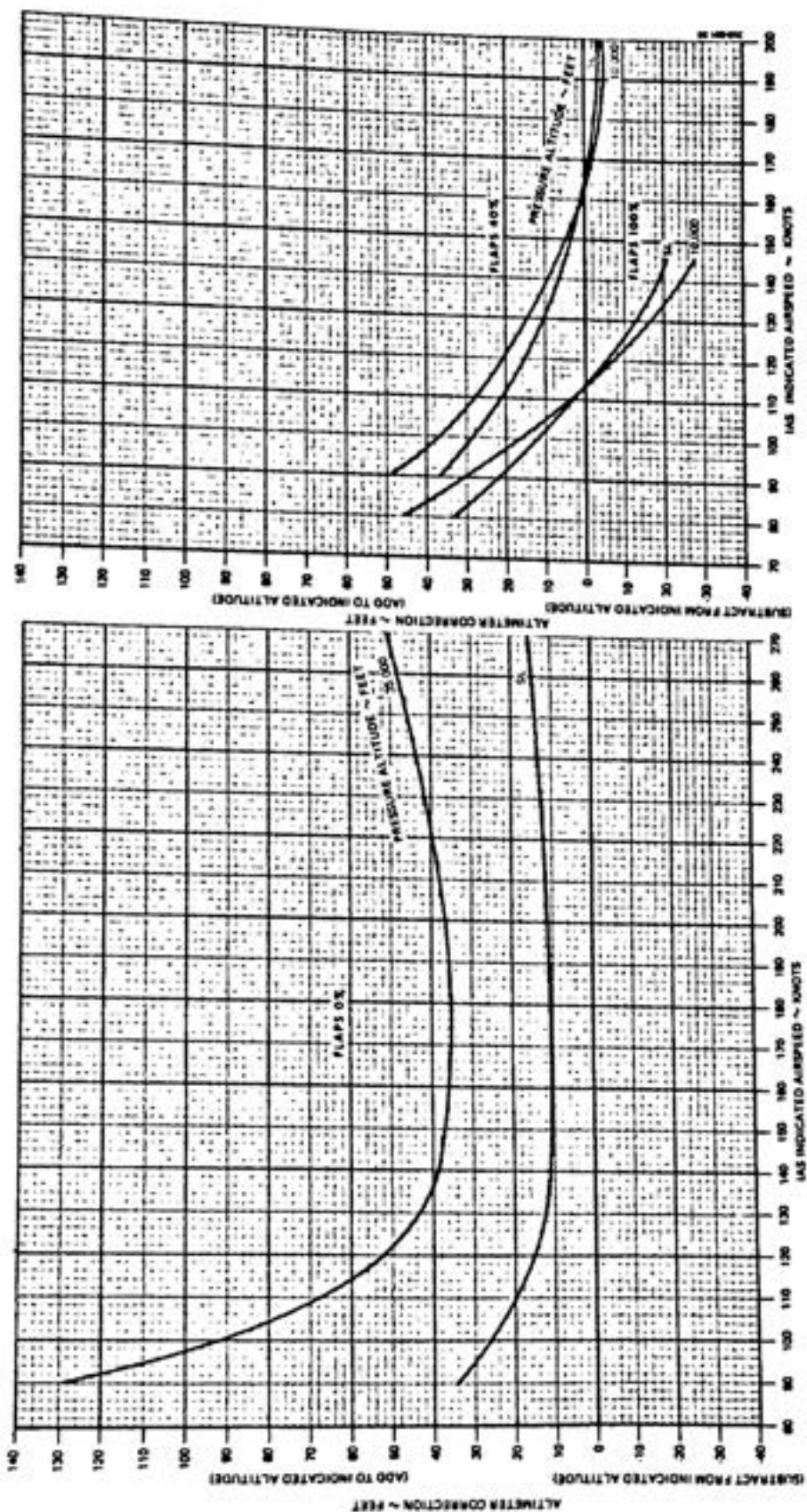
TAKE-OFF GROUND ROLL



AIRSPED CALIBRATION - NORMAL SYSTEM

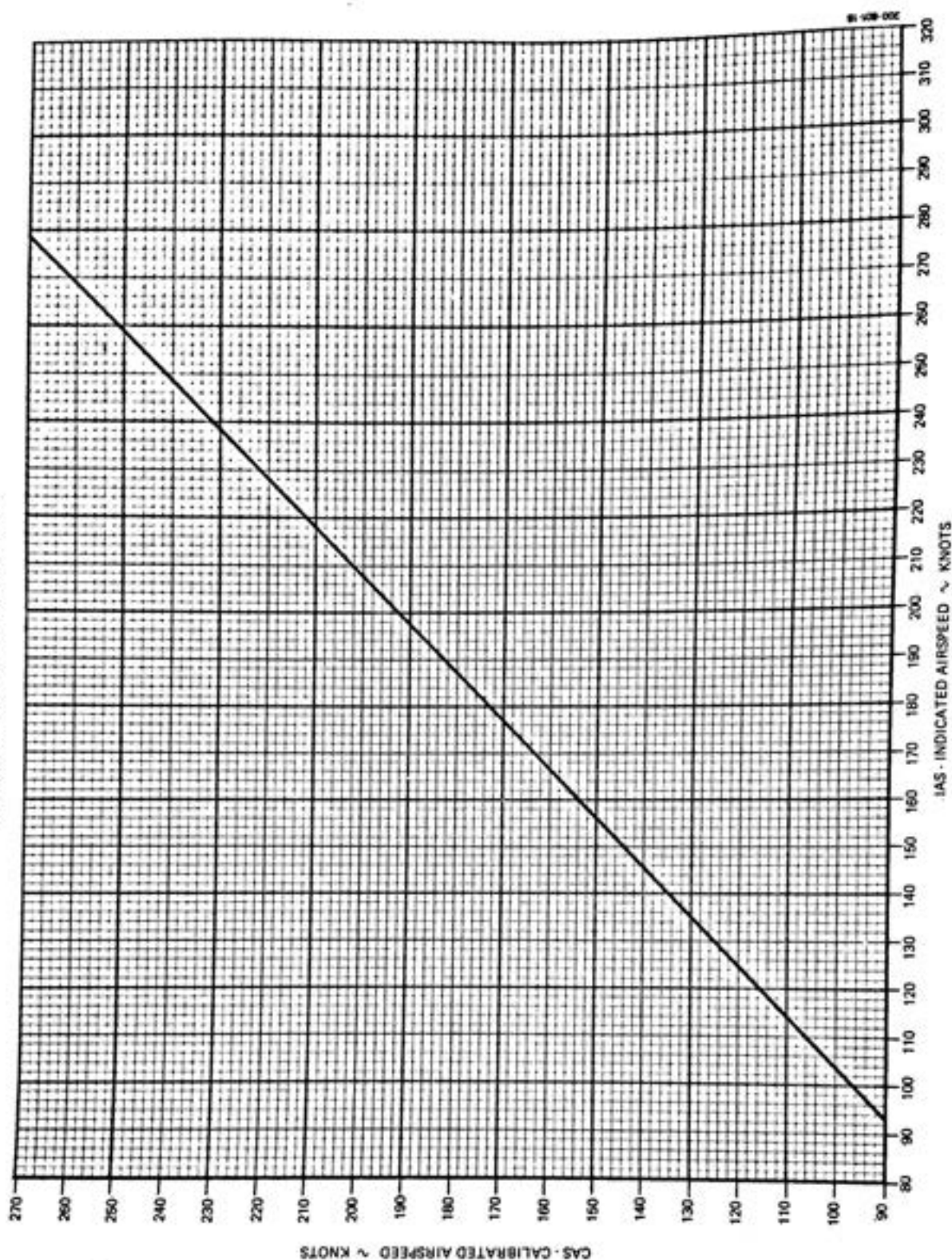


ALTIMETER CORRECTION - NORMAL SYSTEM



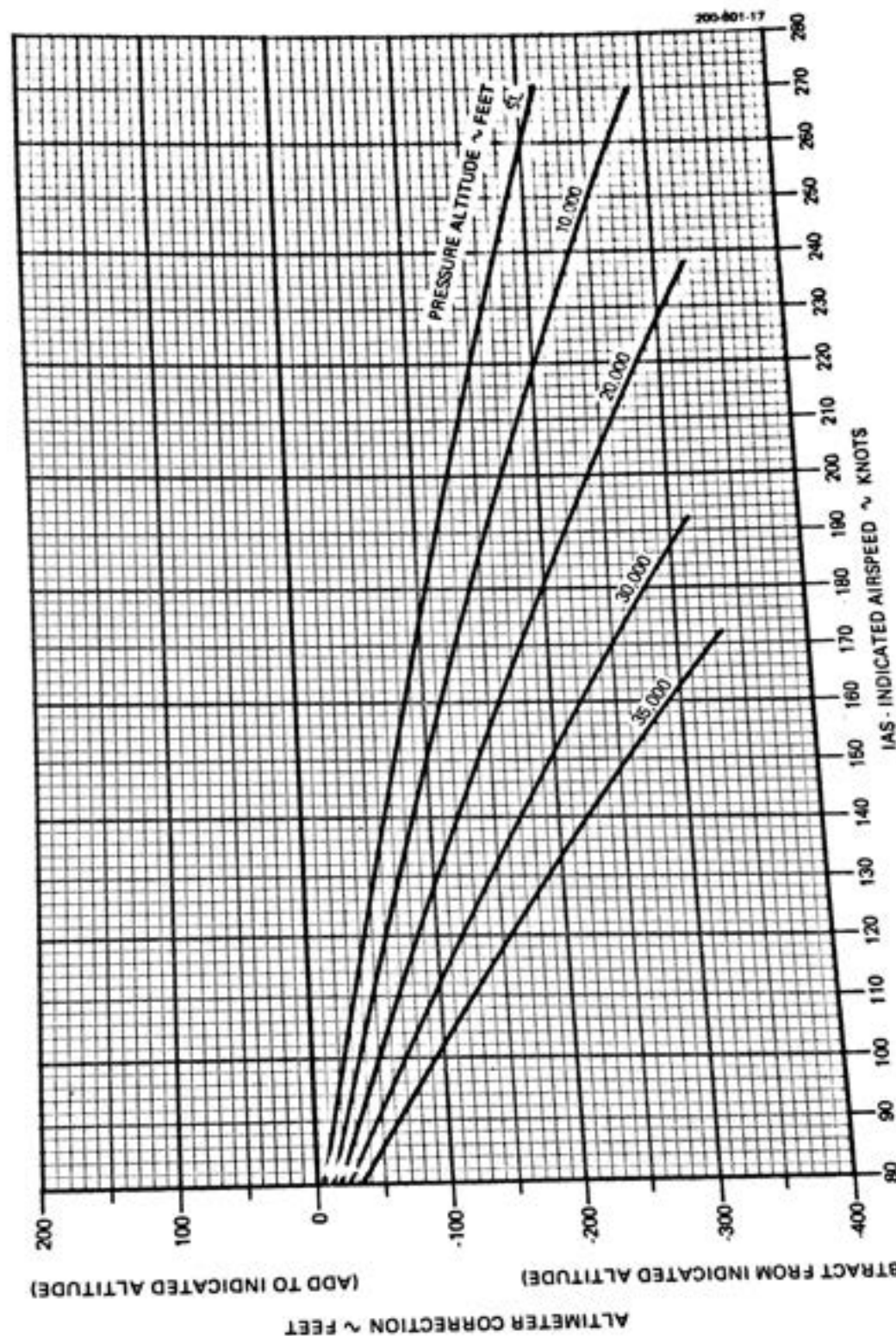
AIRSPEED CALIBRATION — ALTERNATE SYSTEM

APPLICABLE FOR ALL FLAP POSITIONS



ALTIMETER CORRECTION — ALTERNATE SYSTEM

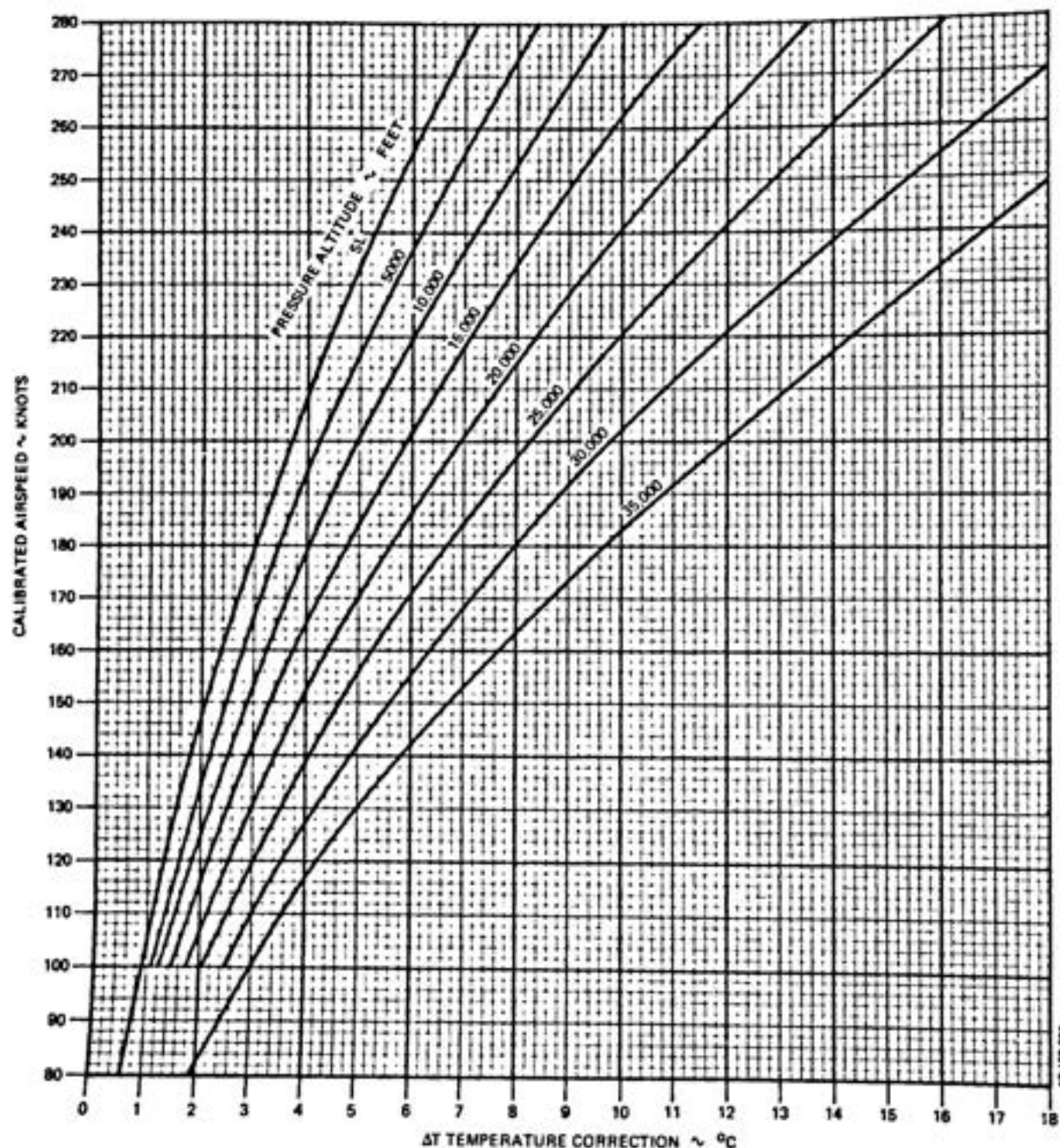
APPLICABLE FOR ALL FLAP POSITIONS



INDICATED OUTSIDE AIR TEMPERATURE CORRECTION

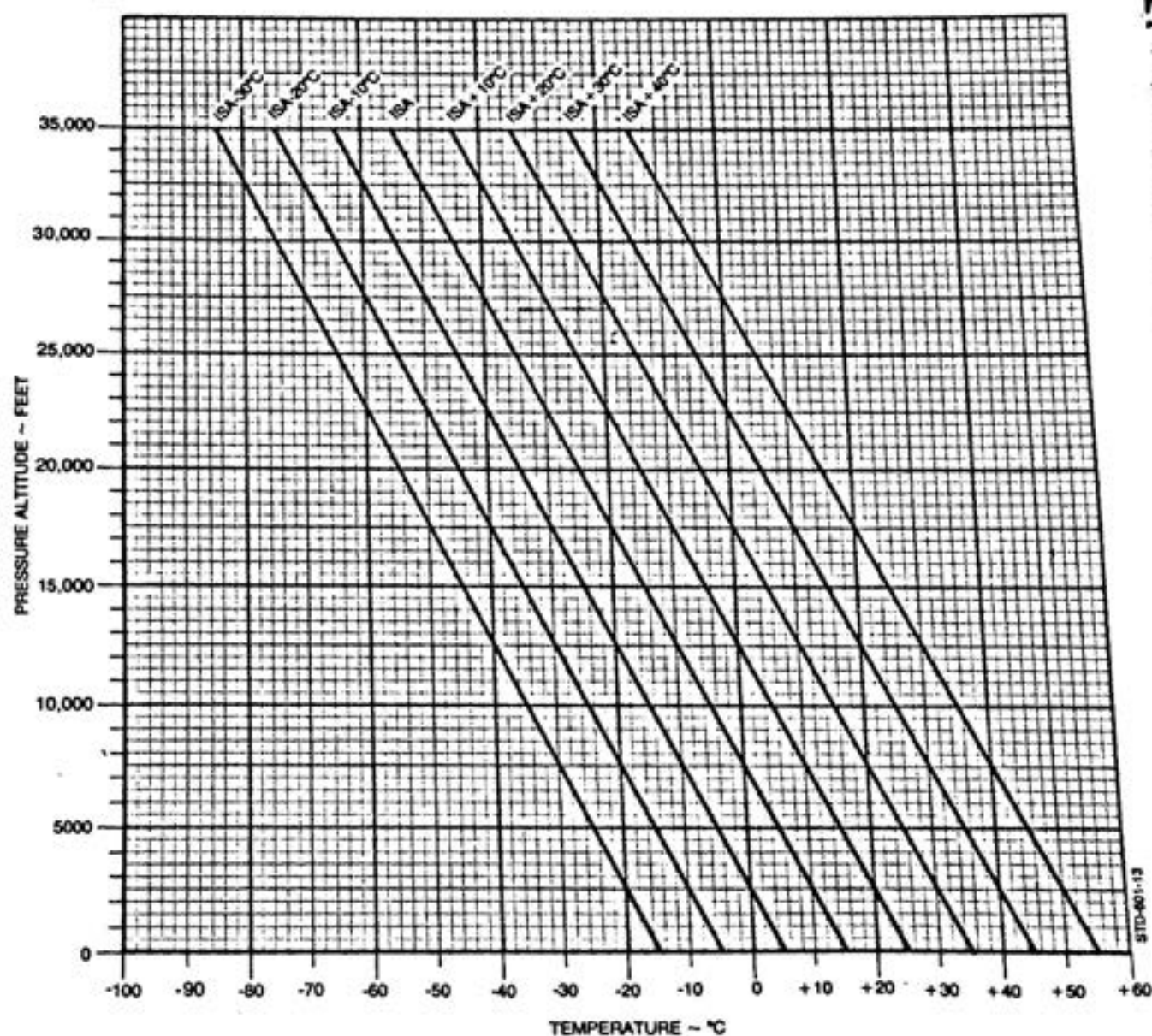
STANDARD DAY (ISA)

NOTE: SUBTRACT ΔT FROM INDICATED (GAGE) OAT TO OBTAIN TRUE OAT. (ΔT ASSUMES A RECOVERY FACTOR OF 0.7)

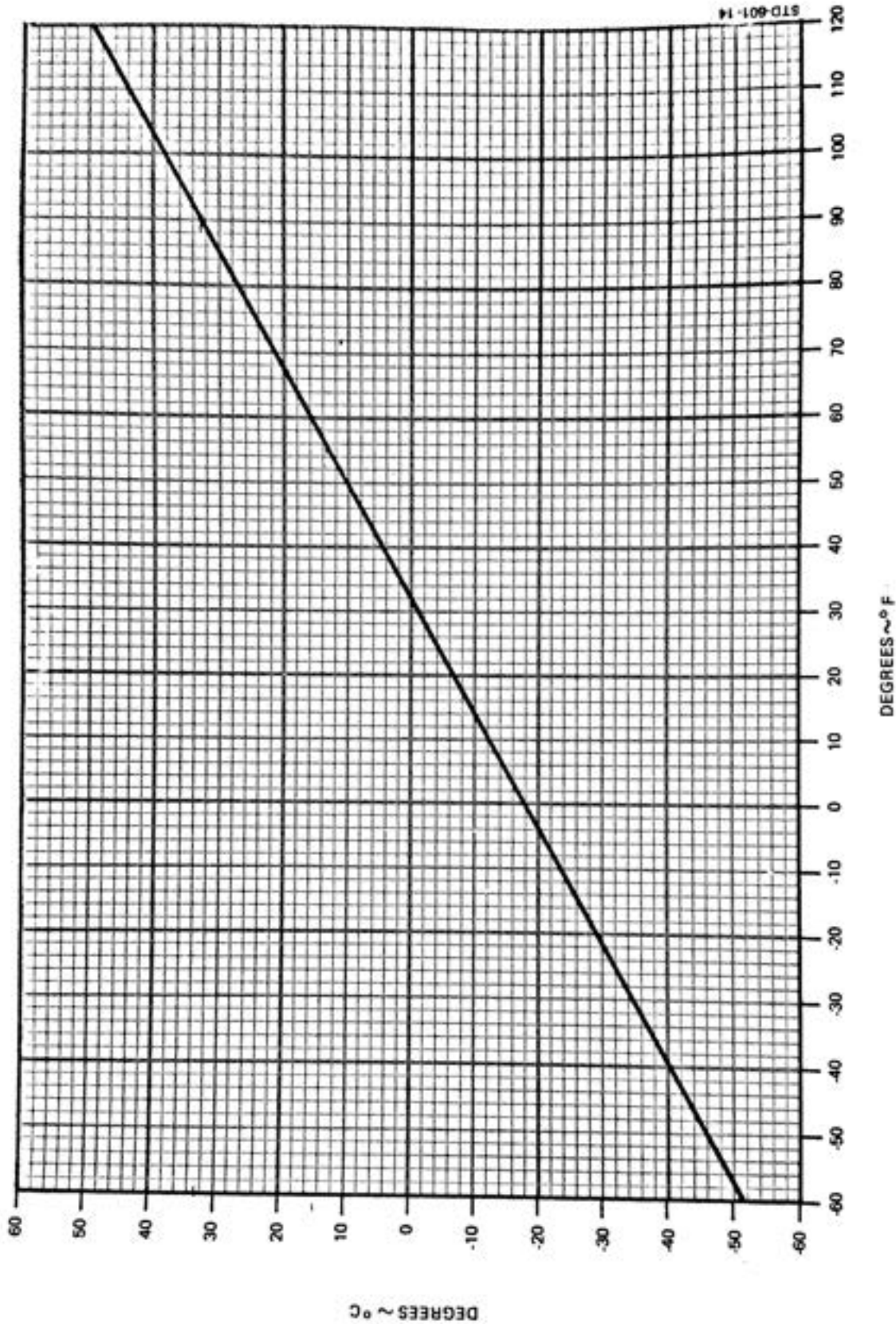


ISA CONVERSION

PRESSURE ALTITUDE vs OUTSIDE AIR TEMPERATURE



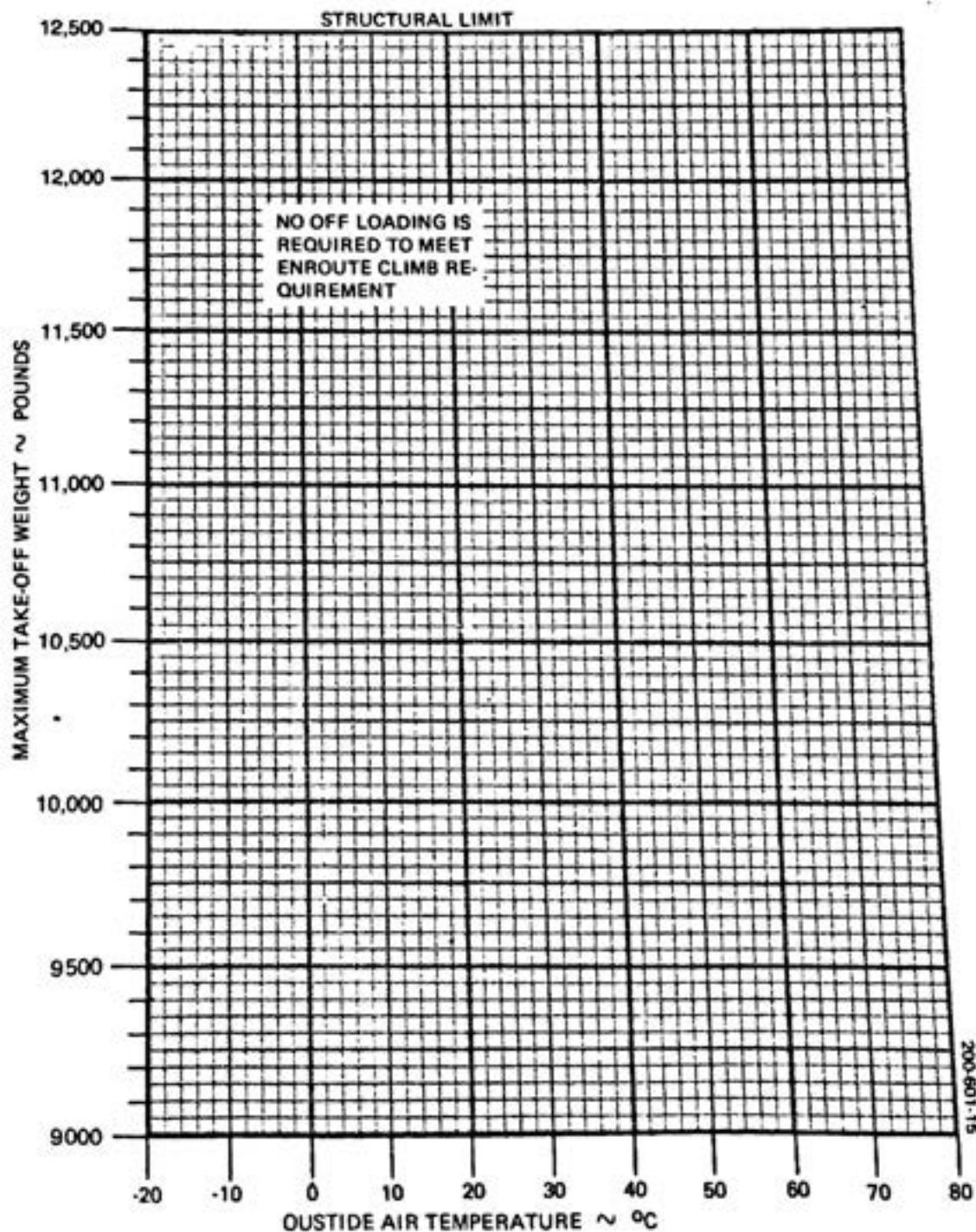
FAHRENHEIT TO CELSIUS TEMPERATURE CONVERSION



MAXIMUM TAKE-OFF WEIGHT

PERMITTED BY ENROUTE CLIMB REQUIREMENT

NOTE: FOR OPERATION WITH ICE VANES EXTENDED,
NO OFF LOADING IS REQUIRED.



TAKE-OFF WEIGHT—FLAPS 0%

TO ACHIEVE POSITIVE ONE-ENGINE-INOPERATIVE RATE-OF-CLIMB AT LIFT-OFF

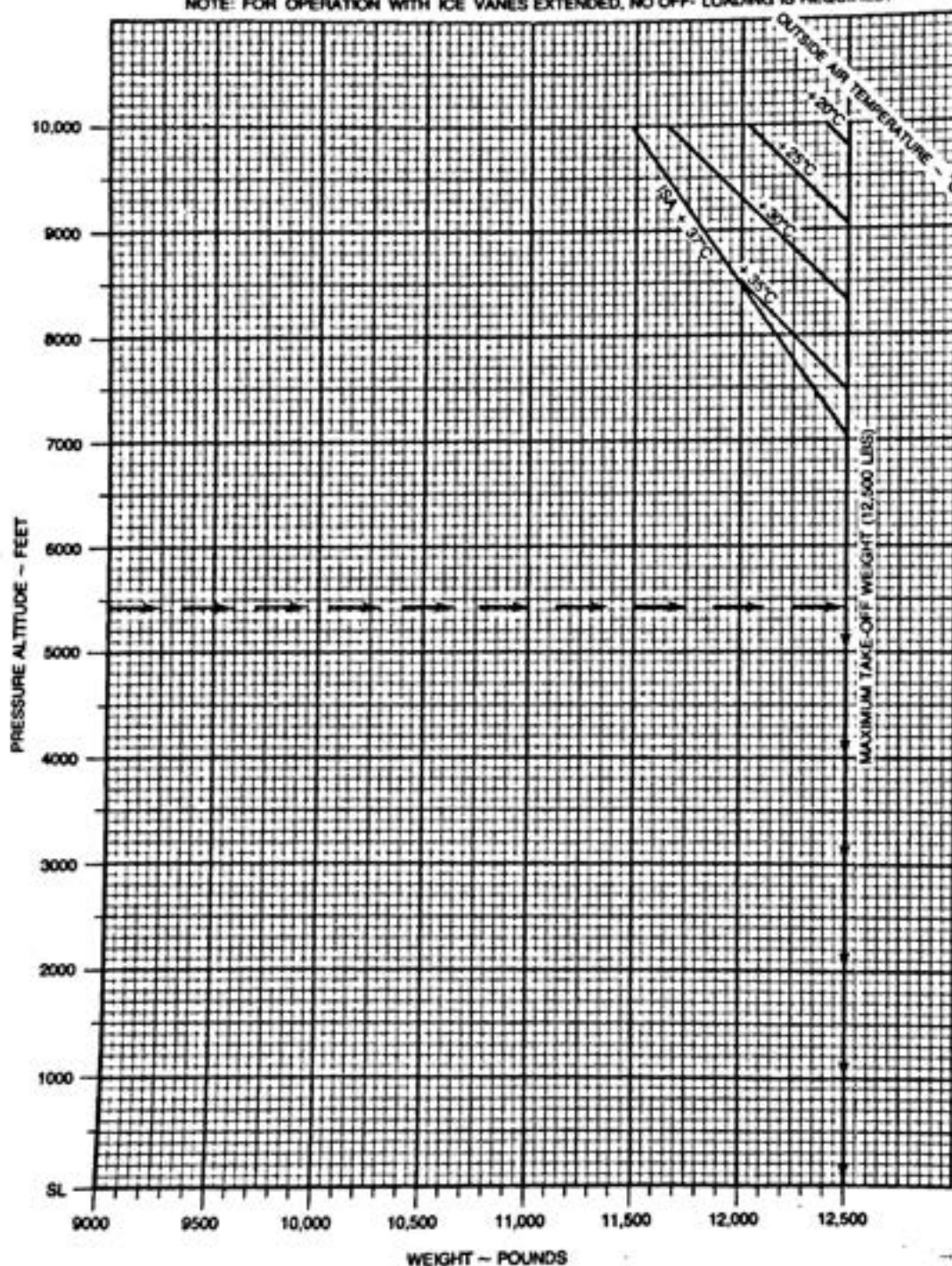
ASSOCIATED CONDITIONS:

POWER..... TAKE-OFF
FLAPS..... UP (0%)
LANDING GEAR..... DOWN
INOPERATIVE PROPELLER..... FEATHERED

EXAMPLE:

PRESSURE ALTITUDE..... 5430 FT
OAT 28°C
TAKE-OFF WEIGHT..... 12,500 LBS

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, NO OFF-LOADING IS REQUIRED.



TAKE-OFF WEIGHT — FLAPS 40%

TO ACHIEVE POSITIVE ONE-ENGINE-INOPERATIVE RATE OF CLIMB AT LIFT-OFF

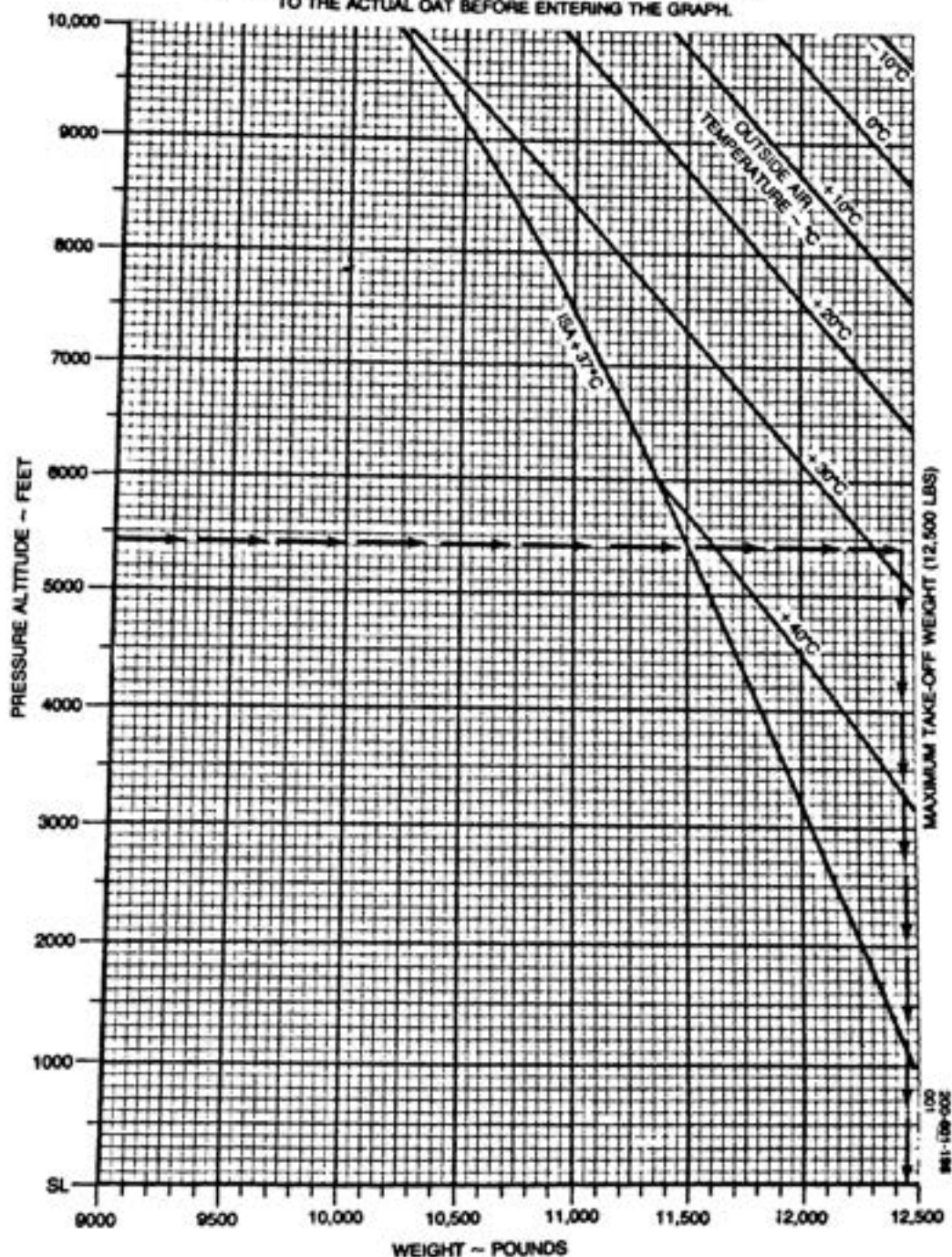
ASSOCIATED CONDITIONS:

POWER TAKE-OFF
FLAPS 40%
LANDING GEAR DOWN
INOPERATIVE PROPELLER ... FEATHERED

EXAMPLE:

PRESSURE ALTITUDE 5430 FT
OAT 28°C
TAKE-OFF WEIGHT 12,450 LBS

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, ADD 10°C
TO THE ACTUAL OAT BEFORE ENTERING THE GRAPH.



MAXIMUM ENROUTE WEIGHT (FAR PART 135 OPERATIONS)

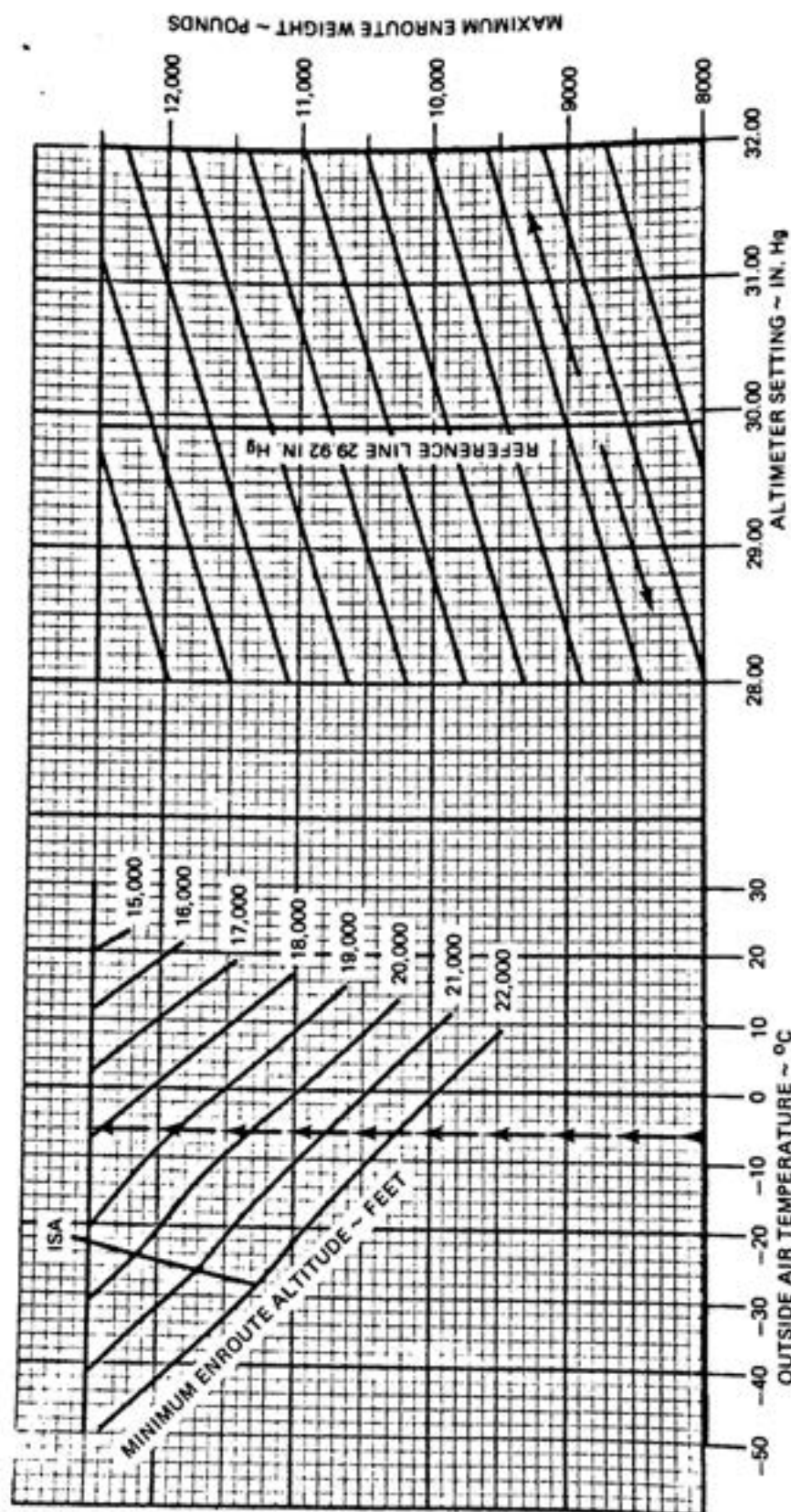
ASSOCIATED CONDITIONS:

POWER MAXIMUM CONTINUOUS
FLAPS 0°
LANDING GEAR UP
INOPERATIVE PROPELLER FEATHERED

EXAMPLE:

OAT -6°C
MINIMUM ENROUTE ALTITUDE 16,000 FEET
ALTIMETER SETTING 29.82 IN. Hg
MAXIMUM ALLOWABLE WEIGHT 12,500 LBS

NOTE: PER FAR 135.181, OPERATIONS OVER THE TOP OR IN IFR CONDITIONS REQUIRE THAT THE AIRPLANE BE CAPABLE OF CLIMBING 50 FT/MIN AT THE MEAs OF THE PROPOSED ROUTE OR 5000 FEET MSL, WHICHEVER IS HIGHER.



TAKE-OFF WEIGHT — FLAPS 0% TO MEET FAR 25 TAKE-OFF CLIMB REQUIREMENTS

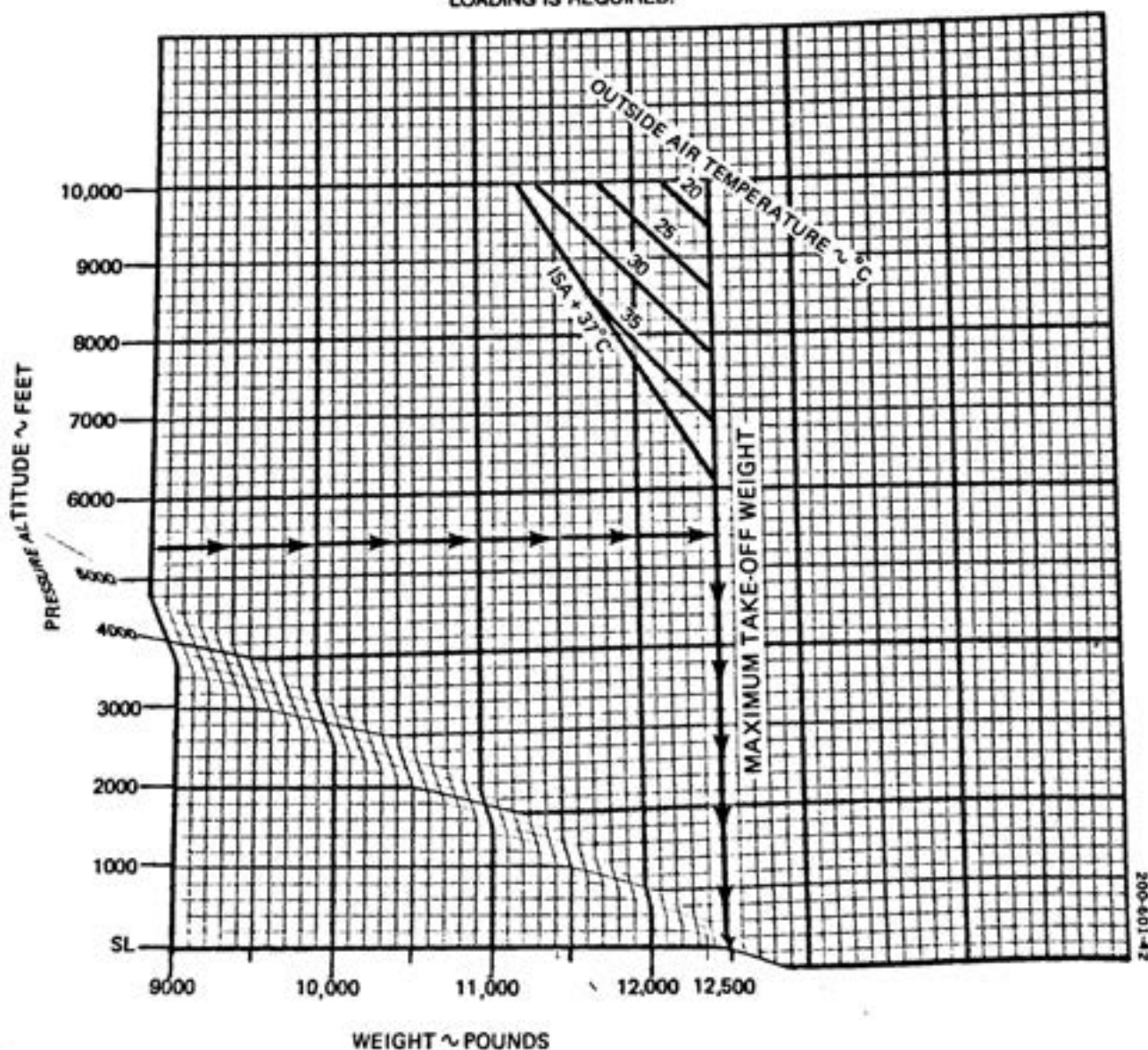
ASSOCIATED CONDITIONS:

AIRPLANE AIRBORNE
POWER TAKE-OFF
FLAPS UP
INOPERATIVE
PROPELLER ... FEATHERED

EXAMPLE:

PRESSURE ALTITUDE 5430 FT
OAT 28°C
TAKE-OFF WEIGHT 12,500 LBS

NOTE: FOR OPERATION WITH ICE
VANES EXTENDED, NO OFF
LOADING IS REQUIRED.



TAKE-OFF WEIGHT — FLAPS 40% TO MEET FAR 25 TAKE-OFF CLIMB REQUIREMENTS

ASSOCIATED CONDITIONS:

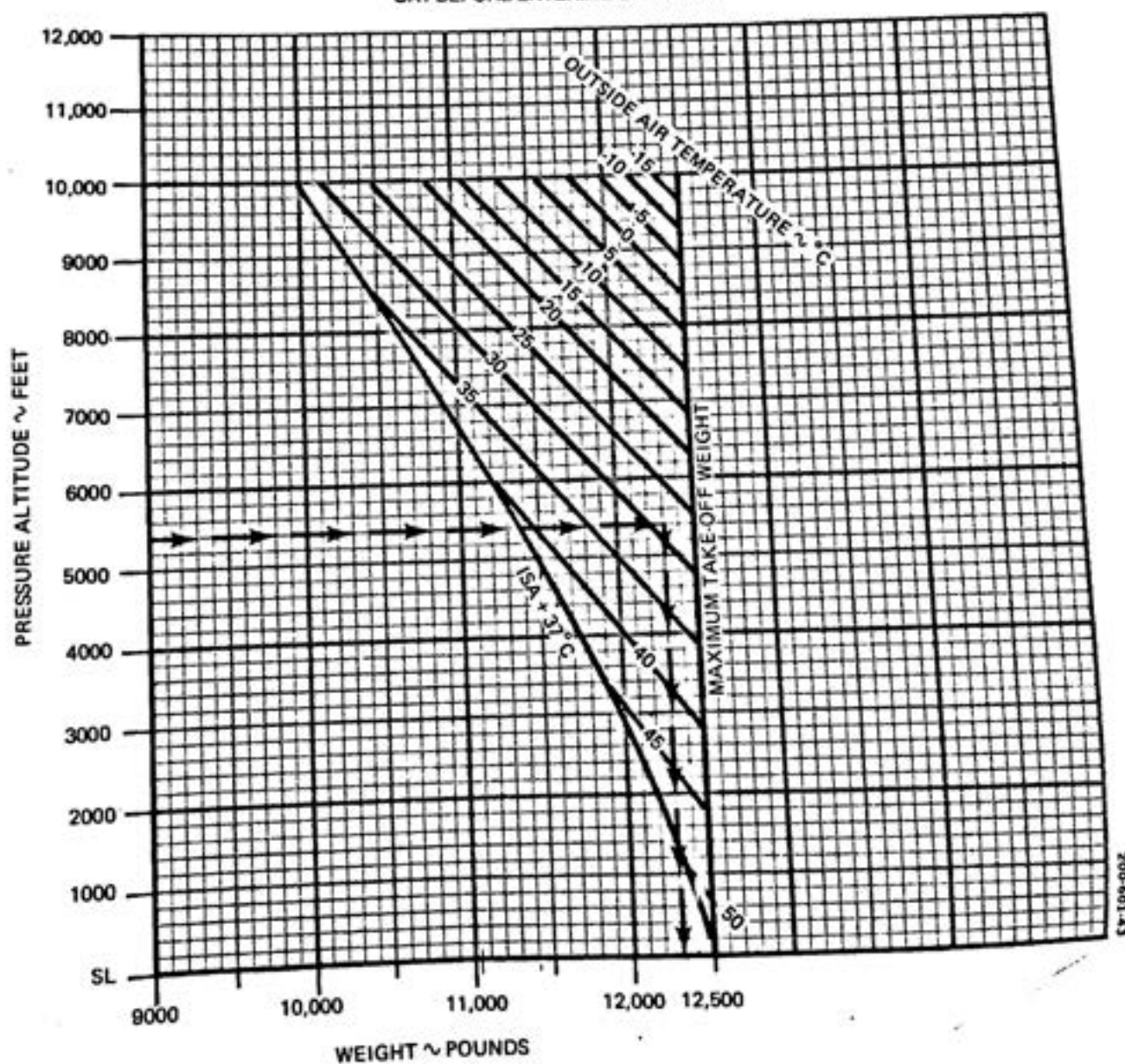
AIRPLANE..... AIRBORNE
POWER..... TAKE-OFF
FLAPS..... 40%
INOPERATIVE
PROPELLER... FEATHERED

EXAMPLE:

PRESSURE ALTITUDE..... 5430 FT
OAT..... 1..... 28° C

TAKE-OFF WEIGHT..... 12,300 LBS

NOTE: FOR OPERATION WITH ICE VANES
EXTENDED, ADD 10° C TO ACTUAL
OAT BEFORE ENTERING ON GRAPH.

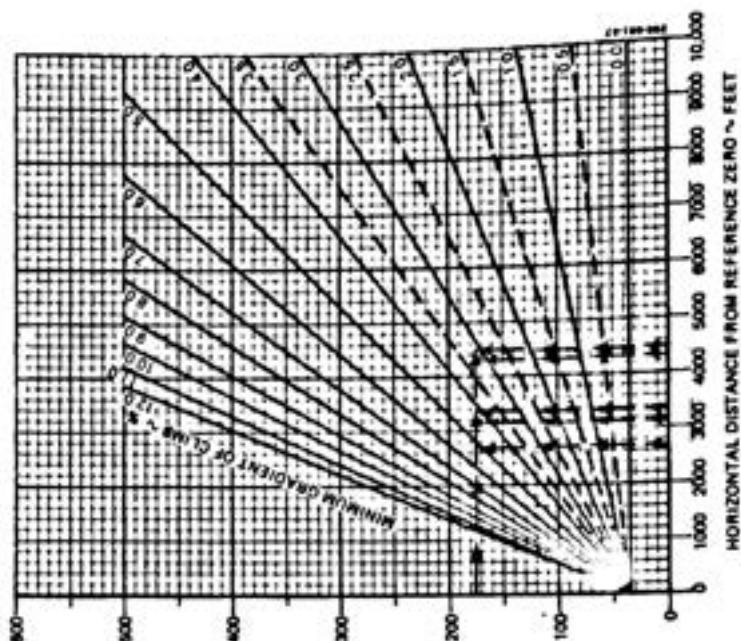
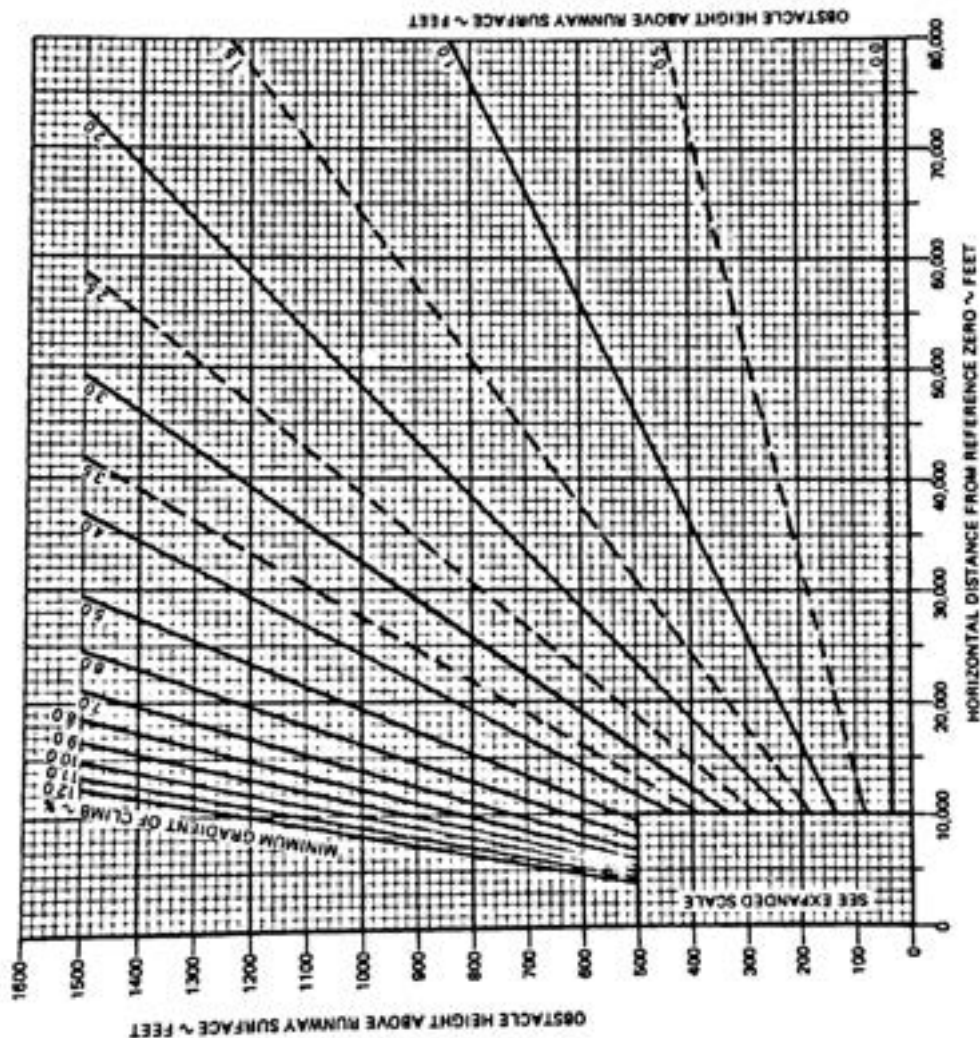


TAKE-OFF FLIGHT PATH

REFERENCE ZERO: THE POINT AT THE END OF THE TAKE-OFF RUN AT WHICH THE AIRPLANE IS 35 FEET ABOVE THE RUNWAY SURFACE.

EXAMPLE:
OBSTACLE HEIGHT 175 FEET

HORIZONTAL DISTANCE FROM REFERENCE ZERO ~ FEET	MINIMUM GRADIENT OF CLIMB ~ %
2700	5.2
3200	4.1
4436	3.2
3118	4.5
4338	3.3



STALL SPEEDS — POWER IDLE

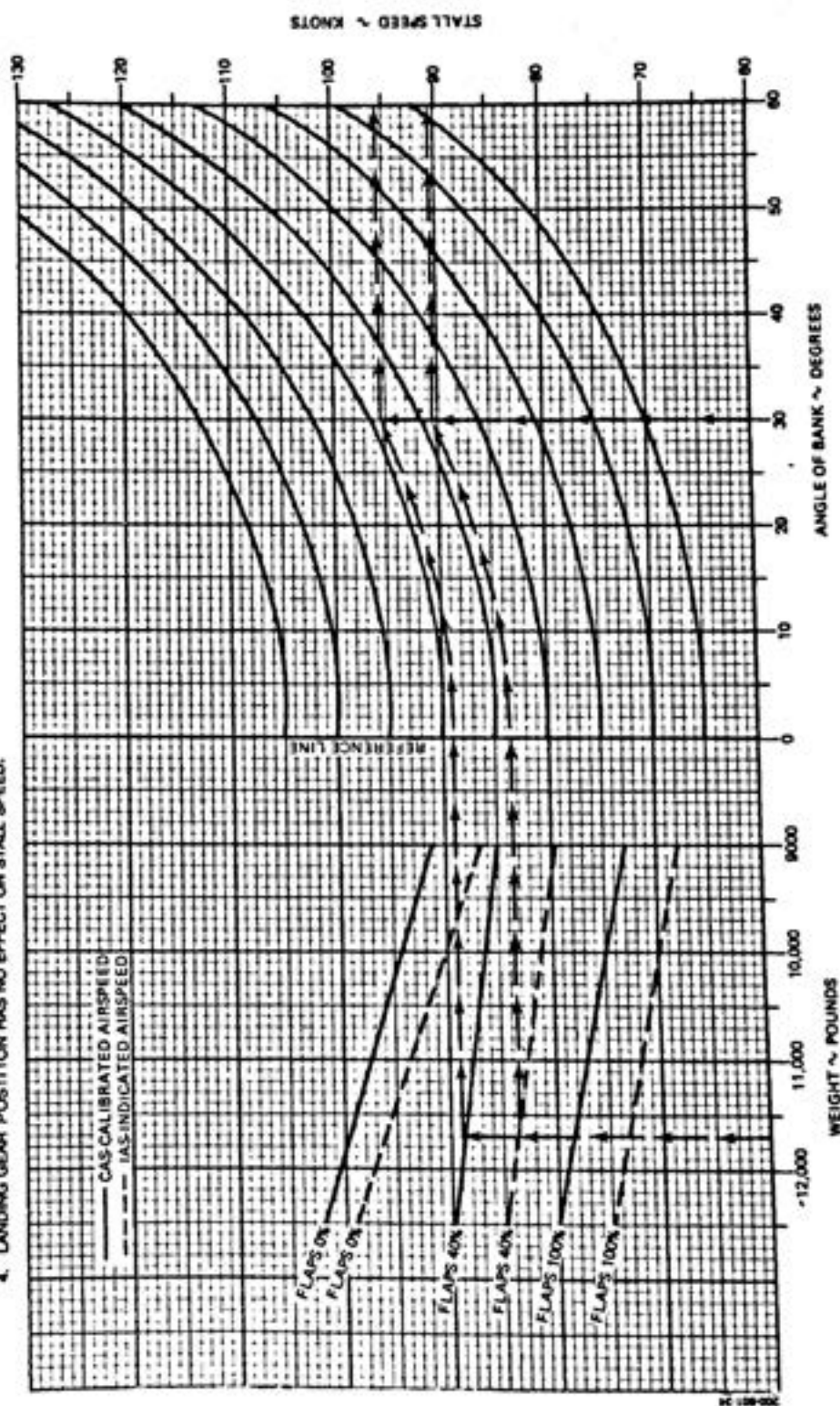
NOTES: 1. ALTITUDE LOSS EXPERIENCED WHILE CONDUCTING STALLS IN ACCORDANCE WITH FAR 23.201 WAS 500 FEET.

2. MAXIMUM NOSE DOWN PITCH ATTITUDE AND ALTITUDE LOSS DURING RECOVERY FROM ONE-ENGINE-INOPERATIVE STALLS PER FAR 23.205 ARE APPROXIMATELY 8° AND 300 FEET RESPECTIVELY.

3. A NORMAL STALL RECOVERY TECHNIQUE MAY BE USED. THE BEST PROCEDURE IS A BRISK FORWARD WHEEL MOVEMENT TO A NOSE DOWN ATTITUDE, LEVEL THE AIRPLANE AFTER AIRSPEED HAS INCREASED APPROXIMATELY 25 KNOTS ABOVE STALL.

4. LANDING GEAR POSITION HAS NO EFFECT ON STALL SPEED.

EXAMPLE:
WEIGHT 11,700 LBS
FLAPS 40%
ANGLE OF BANK 30 DEG
STALL SPEED 96 KTS CAS
90 KTS IAS



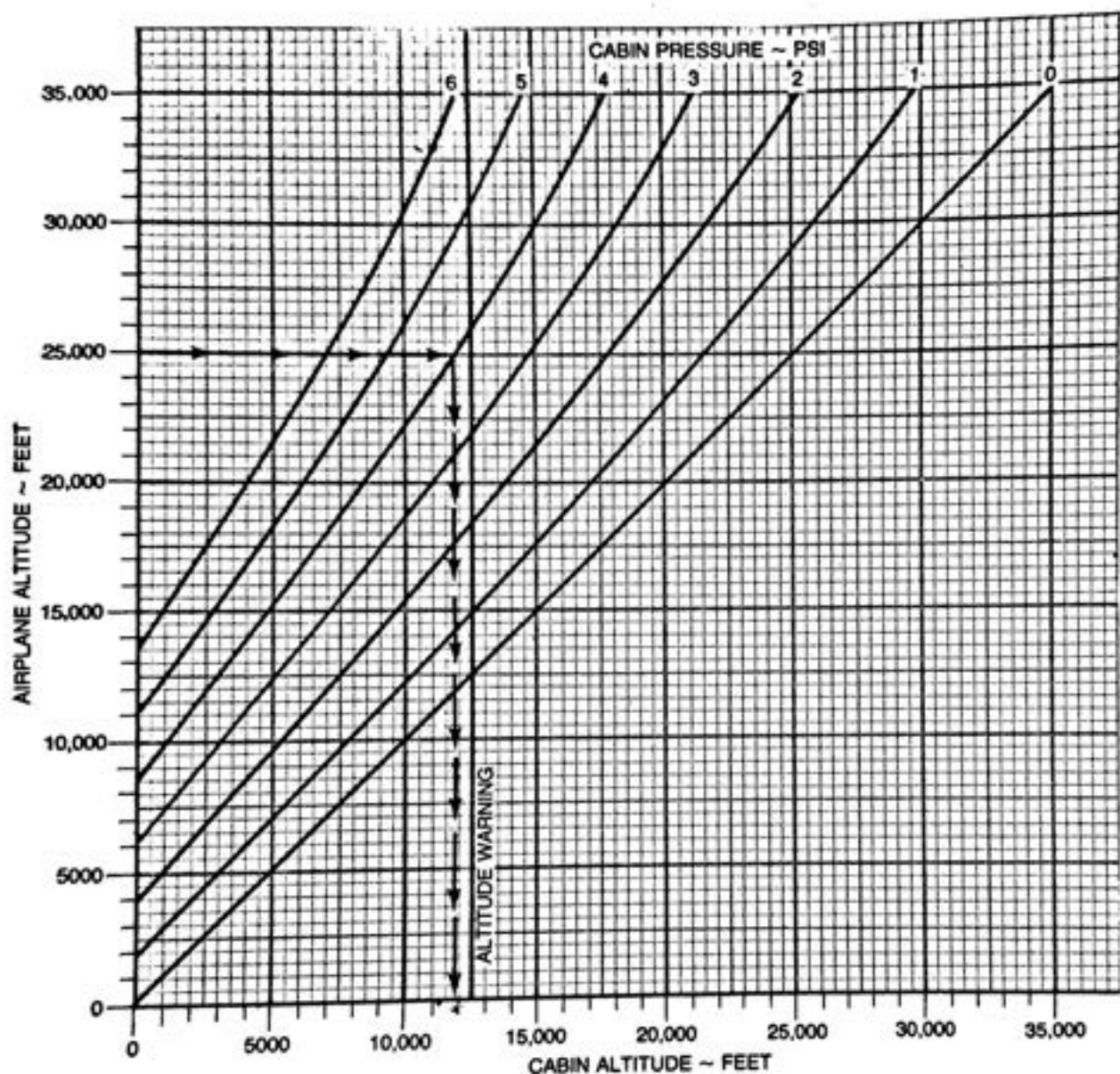
CABIN ALTITUDE FOR VARIOUS AIRPLANE ALTITUDES

EXAMPLE :

AIRPLANE ALTITUDE 25,000 FT

CABIN PRESSURE 4.0 PSI

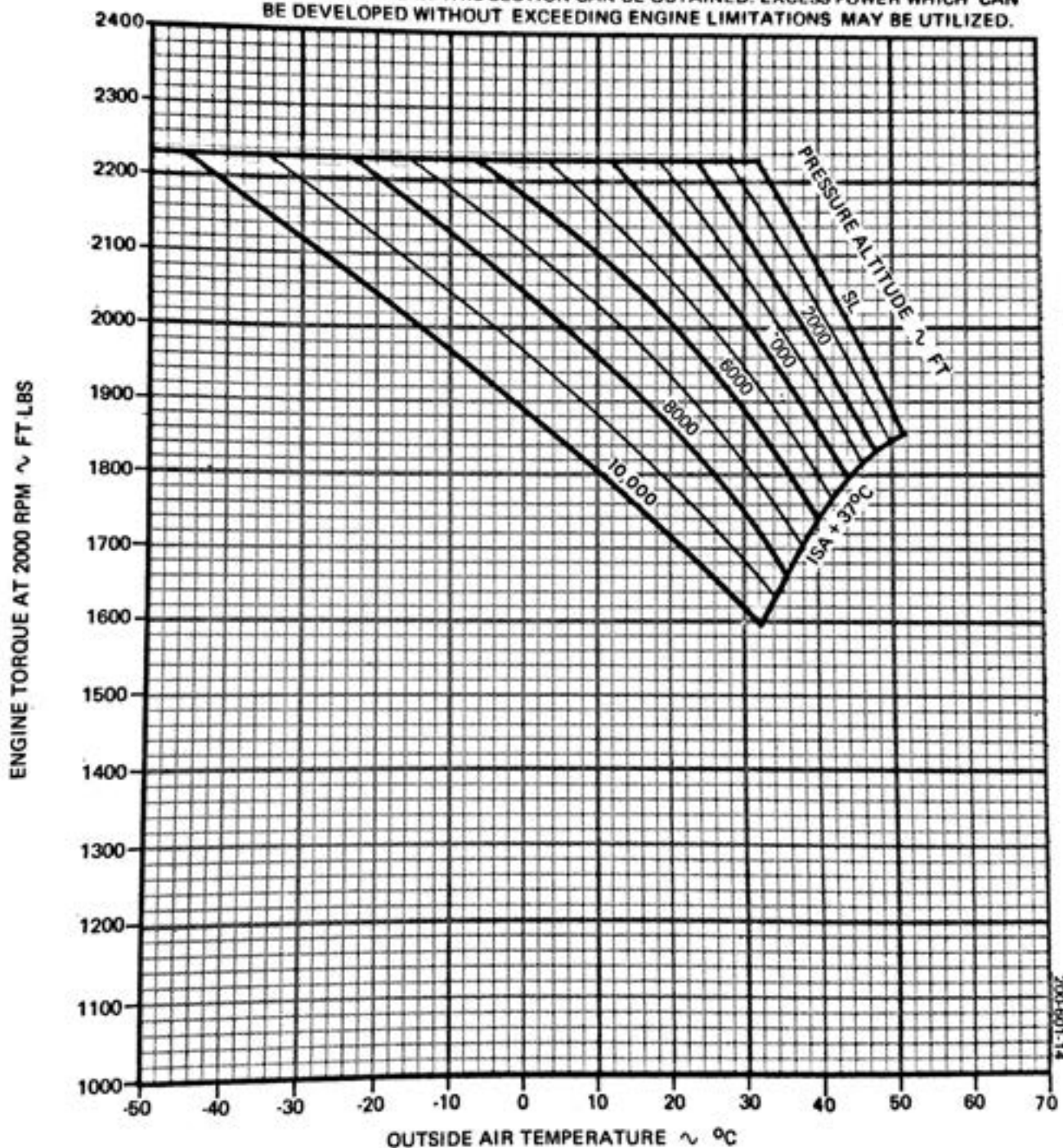
CABIN ALTITUDE 11,800 FT



200-601-182

MINIMUM TAKE-OFF POWER AT 2000 RPM WITH ICE VANES RETRACTED (65 KNOTS)

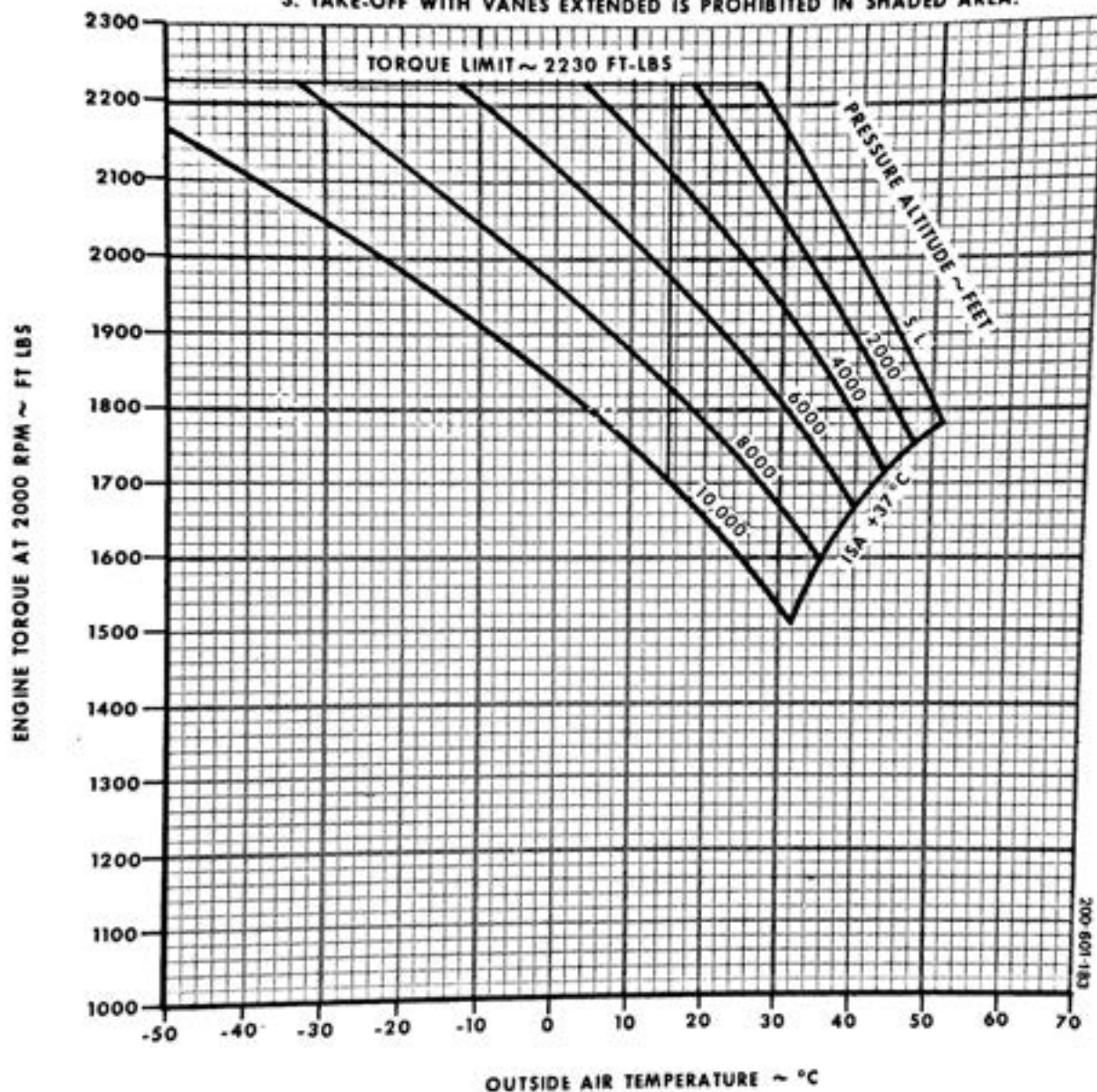
- NOTES: 1. TORQUE INCREASES APPROXIMATELY 20 FT-LBS FROM ZERO TO 65 KNOTS.
2. THE POWER (TORQUE) INDICATED IS THE MINIMUM VALUE FOR WHICH TAKE-OFF PERFORMANCE IN THIS SECTION CAN BE OBTAINED. EXCESS POWER WHICH CAN BE DEVELOPED WITHOUT EXCEEDING ENGINE LIMITATIONS MAY BE UTILIZED.



MINIMUM TAKE-OFF POWER WITH ICE VANES EXTENDED (65 KNOTS)

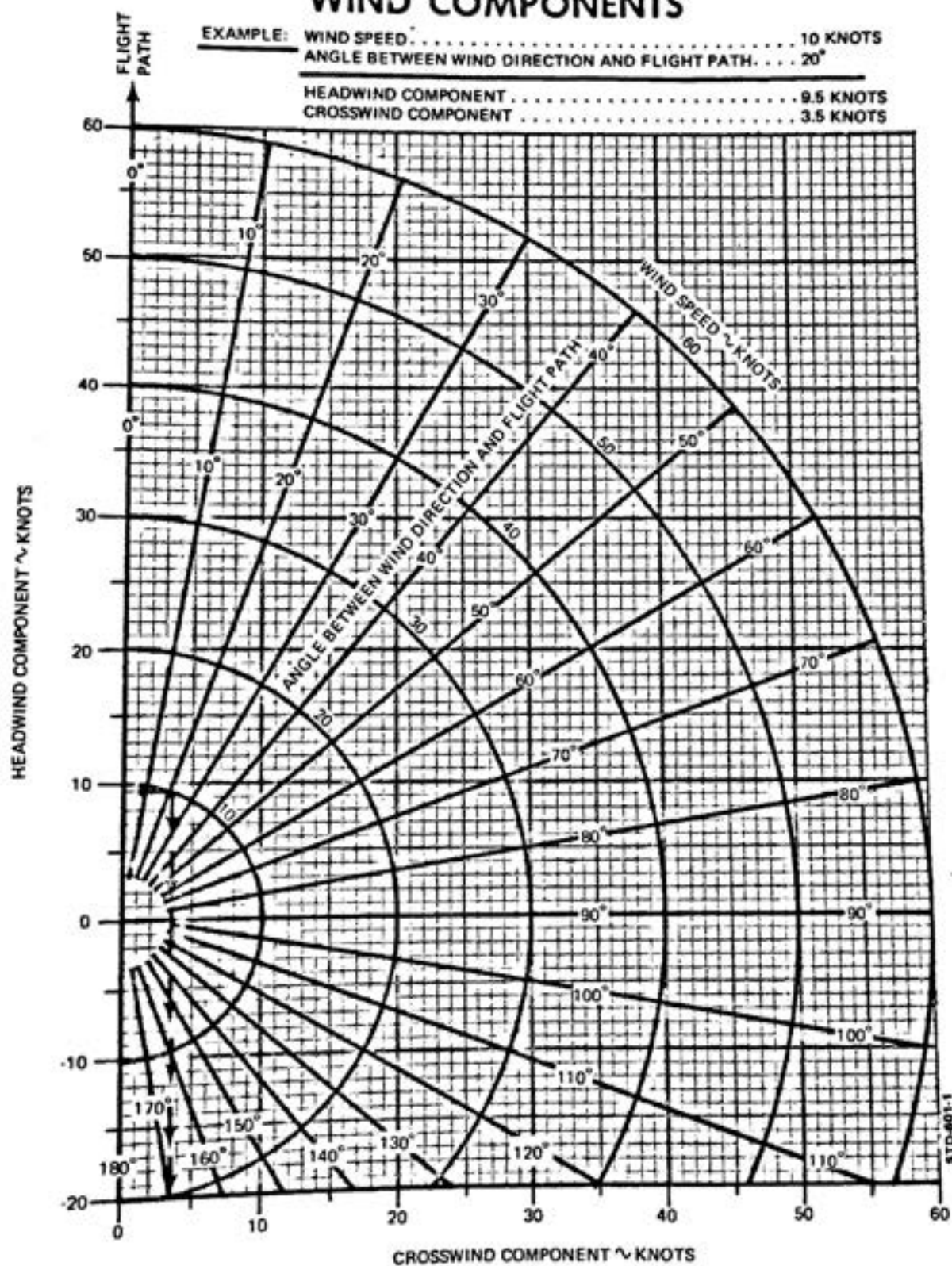
NOTES:

1. TORQUE INCREASES APPROXIMATELY 20 FT.-LBS FROM ZERO TO 65 KNOTS.
2. THE POWER (TORQUE) INDICATED IS THE MINIMUM VALUE FOR WHICH TAKE-OFF PERFORMANCE WITH EXTENDED ICE VANES CAN BE OBTAINED. EXCESS POWER WHICH CAN BE DEVELOPED WITHOUT EXCEEDING ENGINE LIMITATIONS MAY BE UTILIZED.
3. TAKE-OFF WITH VANES EXTENDED IS PROHIBITED IN SHADED AREA.



WIND COMPONENTS

EXAMPLE: WIND SPEED 10 KNOTS
ANGLE BETWEEN WIND DIRECTION AND FLIGHT PATH 20°
HEADWIND COMPONENT 9.5 KNOTS
CROSSWIND COMPONENT 3.5 KNOTS



TAKE-OFF DISTANCE - FLAPS 0%

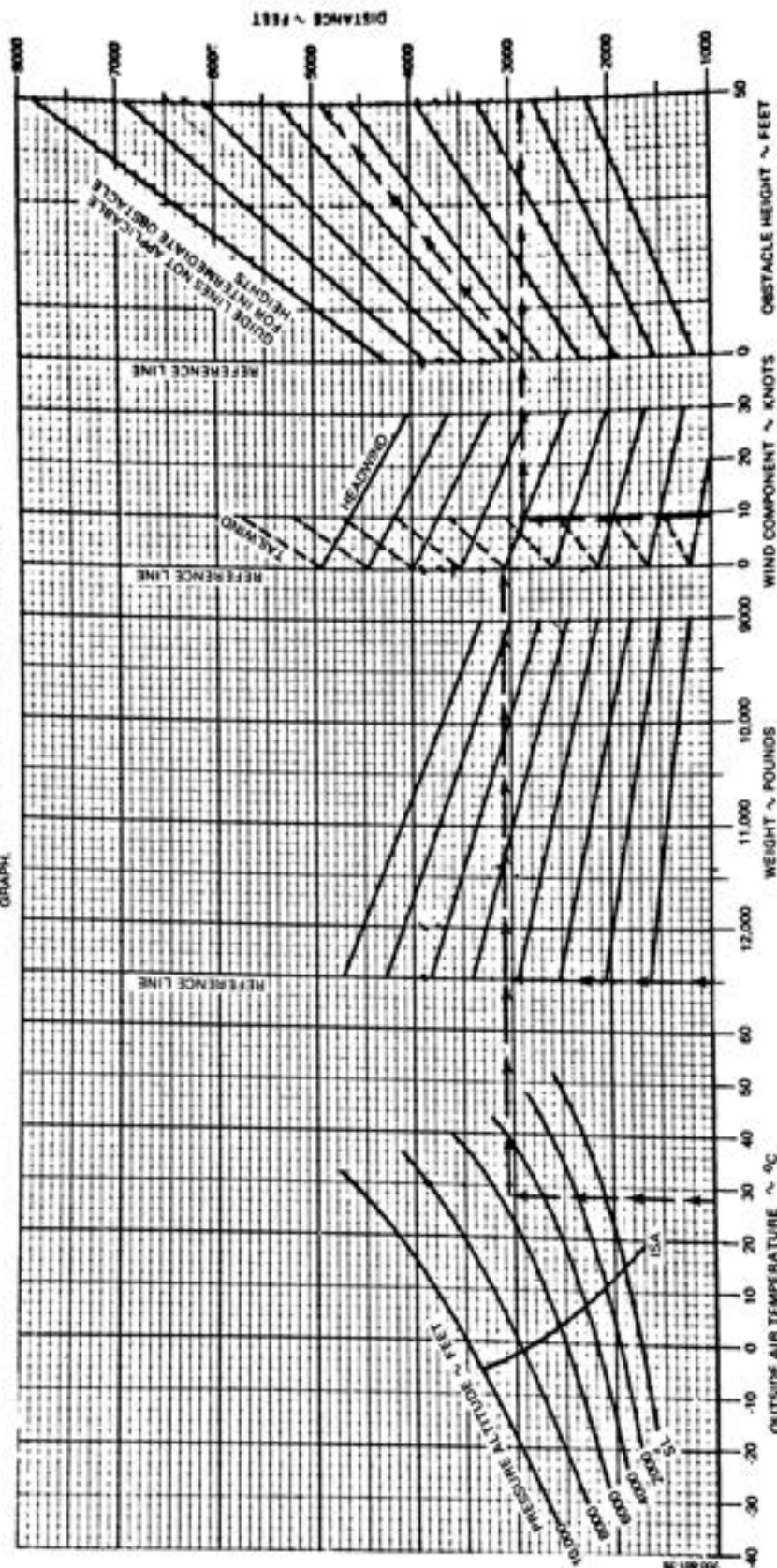
ASSOCIATED CONDITIONS:

POWER.....TAKE-OFF POWER SET
BEFORE BRAKE RELEASE
FLAPS.....0%
LANDING GEAR.....RETRACT AFTER LIFT-OFF
RUNWAY.....PAVED, LEVEL, DRY SURFACE

WEIGHT ~ POUNDS	TAKE OFF SPEED ~ KNOTS	
	ROTATION	50 FT
12,500	95	121
12,000	96	119
11,000	98	115
10,000	98	111
9,000	95	108

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, ADD
10° C TO THE ACTUAL OAT BEFORE ENTERING
GRAPH.

EXAMPLE:
OAT.....28°C
PRESSURE ALTITUDE.....5430 FT
TAKE OFF WEIGHT.....12,500 LBS
HEADWIND COMPONENT.....9.5 KTS
GROUND ROLL.....2870 FT
TOTAL DISTANCE OVER
50 FT OBSTACLE.....4900 FT
TAKE OFF SPEED AT ROTATION.....95 KTS
AT 50 FT.....121 KTS



ACCELERATE - STOP - STOP - FLAPS 0%

ASSOCIATED CONDITIONS:

1. TAKE-OFF POWER SET BEFORE BRAKE RELEASE
2. BOTH ENGINES IDLE AT V_1

FLAPS 0%

AUTOFEATHER ARMED

BRAKING MAXIMUM

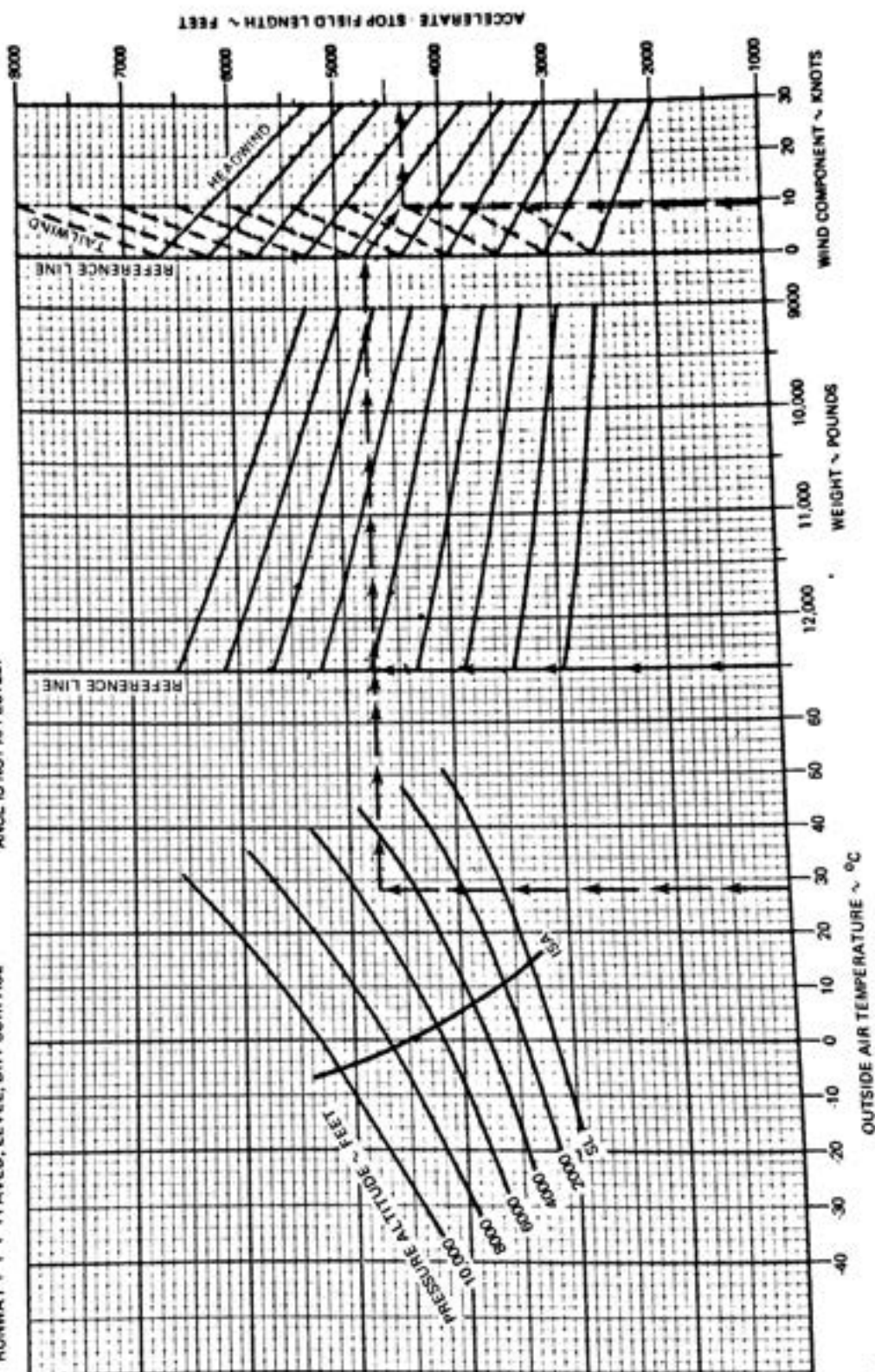
RUNWAY PAVED, LEVEL, DRY SURFACE

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, PERFORMANCE IS NOT AFFECTED.

WEIGHT ~ POUNDS	V_1 ~ KNOTS
12,500	95
12,000	95
11,000	95
10,000	95
9,000	95

EXAMPLE:

OAT 28°C
PRESSURE ALTITUDE 5,400 FT
WEIGHT 12,500 LBS
HEADWIND COMPONENT 9.5 KTS
FIELD LENGTH 3,375 FT
 V_1 96 KTS



ACCELERATE — GO — FLAPS 0%

ASSOCIATED CONDITION:

POWER . . . TAKE OFF POWER SET
BEFORE BRAKE RELEASE
FLAPS . . . 0%
AUTO FEATHER . . . ARMED
LANDING GEAR . . . RETRACT AFTER LIFT OFF
RUNWAY . . . PAVED, LEVEL, DRY SURFACE

WEIGHT ~ POUNDS	VR ~ KNOTS	V2 ~ KNOTS
12,500	95	121
12,000	95	119
11,000	95	115
10,000	95	111
9,000	95	108

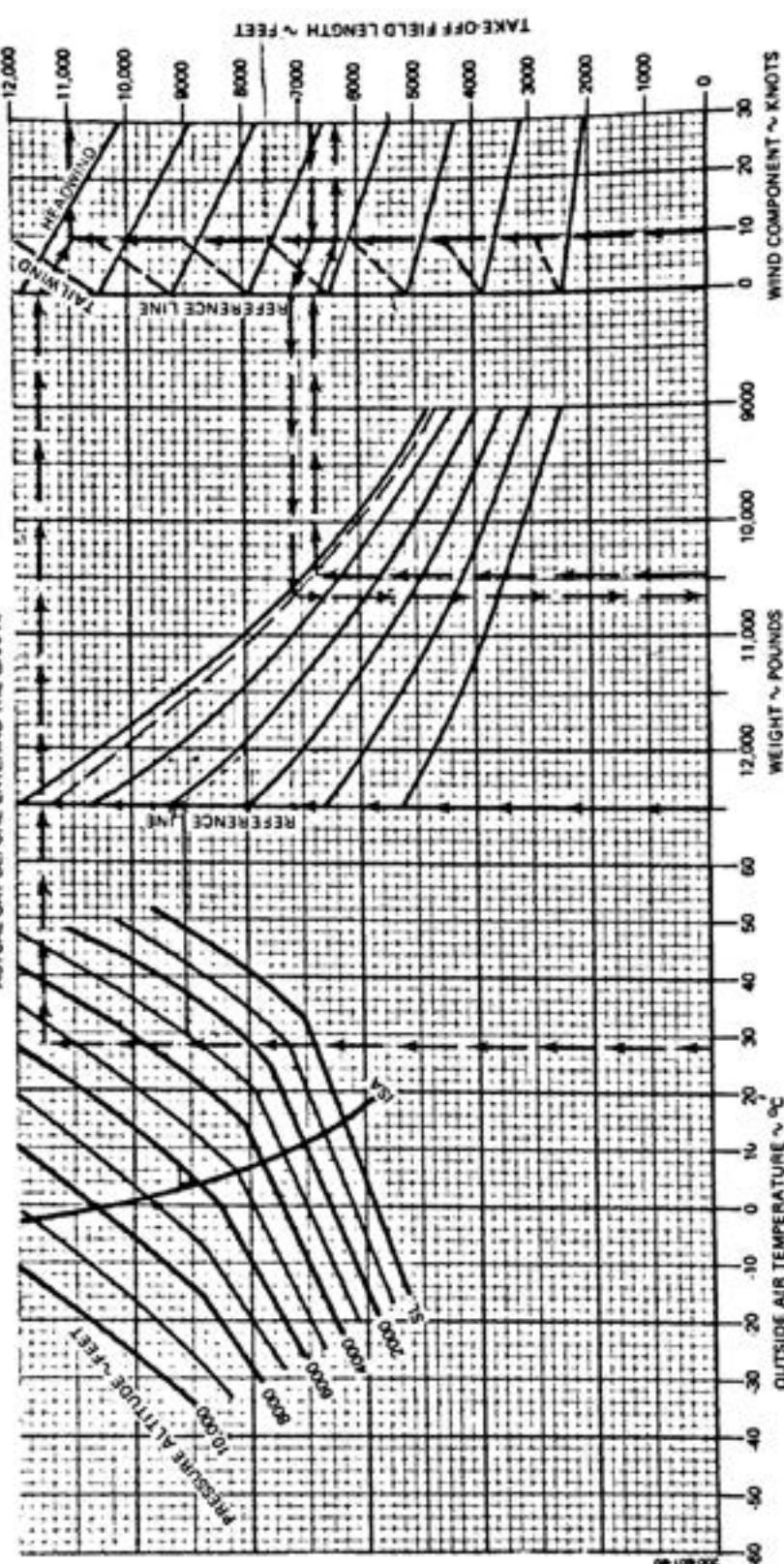
EXAMPLE:

OAT 28°C
PRESSURE ALTITUDE 5430 FT
HEADWIND COMPONENT 9.5 KTS

TAKE OFF WEIGHT ~ POUNDS	TAKE OFF FIELD LENGTH ~ FEET
12,500	10,950
10,650	8798
10,470	8370

SPEEDS (10,470 POUNDS) VR . . . 95 KTS
V2 . . . 113 KTS

- NOTE:
1. AIR DISTANCE IS 50% OF TAKE-OFF FIELD LENGTH
 2. V1 (ENGINE FAILURE SPEED) EQUALS VR (ROTATION SPEED)
 3. USABLE CLEAR WAY CANNOT EXCEED 25% OF THE RUNWAY LENGTH
 4. FOR OPERATION WITH ICE VANES EXTENDED, ADD 8% TO THE ACTUAL OAT BEFORE ENTERING THE GRAPH.



NET GRADIENT OF CLIMB — FLAPS 0%

ASSOCIATED CONDITIONS:

POWER.....TAKE-OFF
FLAPS.....0%
LANDING GEAR.....UP
INOPERATIVE
PROPELLER.....FEATHERED

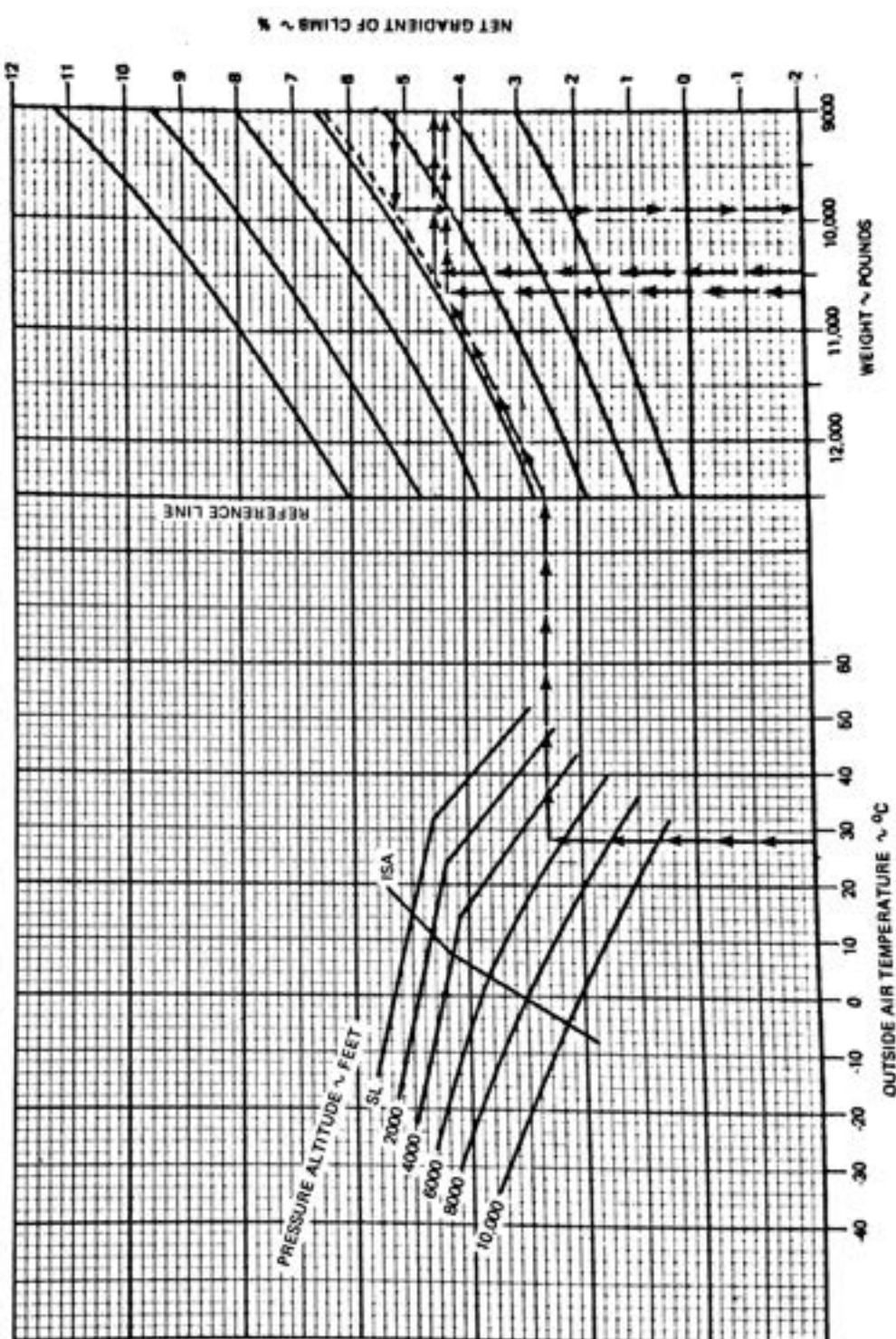
WEIGHT ~ POUNDS	CLIMB SPEED ~ KNOTS
12,500	121
12,000	119
11,000	115
10,000	111
9,000	108

EXAMPLE:

OAT.....28°C	
PRESSURE ALTITUDE.....5430 FT	
WEIGHT.....10,850 POUNDS	NET GRADIENT OF CLIMB ~ %
9900	4.3
10,470	5.2
	4.5

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, ADD 10° C TO THE ACTUAL OAT BEFORE ENTERING GRAPH.

CLIMB SPEED
● 10,470 LBS.....113 KTS



Section V
Performance

BEECHCRAFT
Super King Air 200

TAKE-OFF DISTANCE — FLAPS 40%

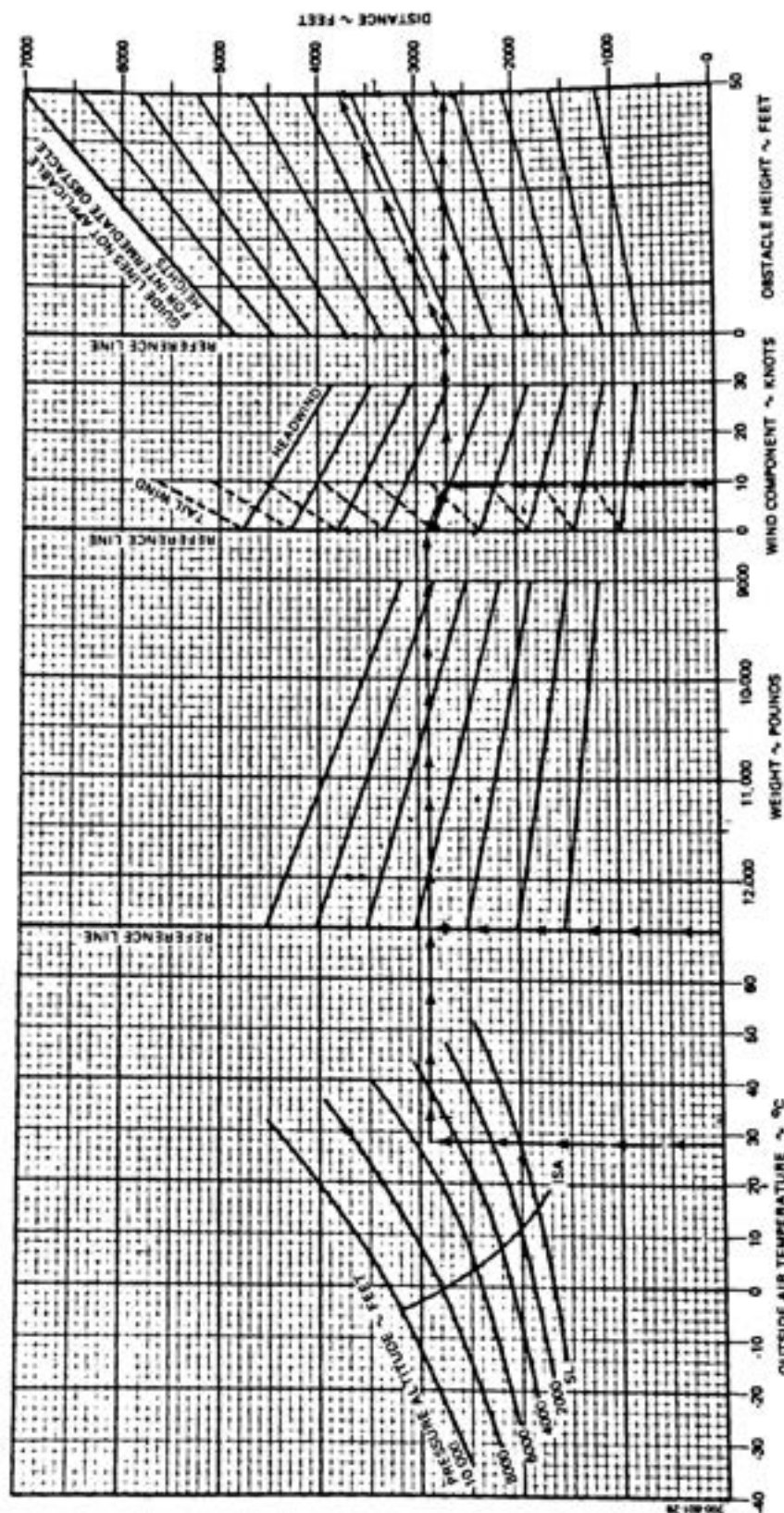
ASSOCIATED CONDITIONS:

POWER.....TAKE OFF POWER SET
BEFORE BRAKE RELEASE
FLAPS.....40%
LANDING GEAR...RETRACT AFTER LIFT OFF
RUNWAY.....PAVED, LEVEL, DRY SURFACE

WEIGHT ~ POUNDS	TAKE OFF SPEED ~ KNOTS	
	ROTATION	50 FT
12,500	84	106
12,000	84	105
11,000	84	103
10,000	84	101
9,000	84	99

EXAMPLE:
OAT.....28°C
PRESSURE ALTITUDE.....5430 FT
TAKE OFF WEIGHT.....12,500 LBS
HEADWIND COMPONENT.....8 KTS
GROUND ROLL.....2700 FT
TOTAL DISTANCE OVER
50 FT OBSTACLE.....3750 FT
TAKE OFF SPEED AT ROTATION.....84 KTS
AT 50 FT.....106 KTS

NOTE: FOR OPERATION WITH ICE VANES EXTENDED ADD 18' C
TO THE ACTUAL OAT BEFORE ENTERING GRAPH



ACCELERATE - STOP - FLAPS 40%

ASSOCIATED CONDITIONS:

POWER 1. TAKE-OFF POWER SET BEFORE

BRAKE RELEASE

2. BOTH ENGINES IDLE AT V₁

SPEED AND REVERSE OPERATING ENGINE

FLAPS 40%

AUTOFEATHER ARMED

BRAKING MAXIMUM

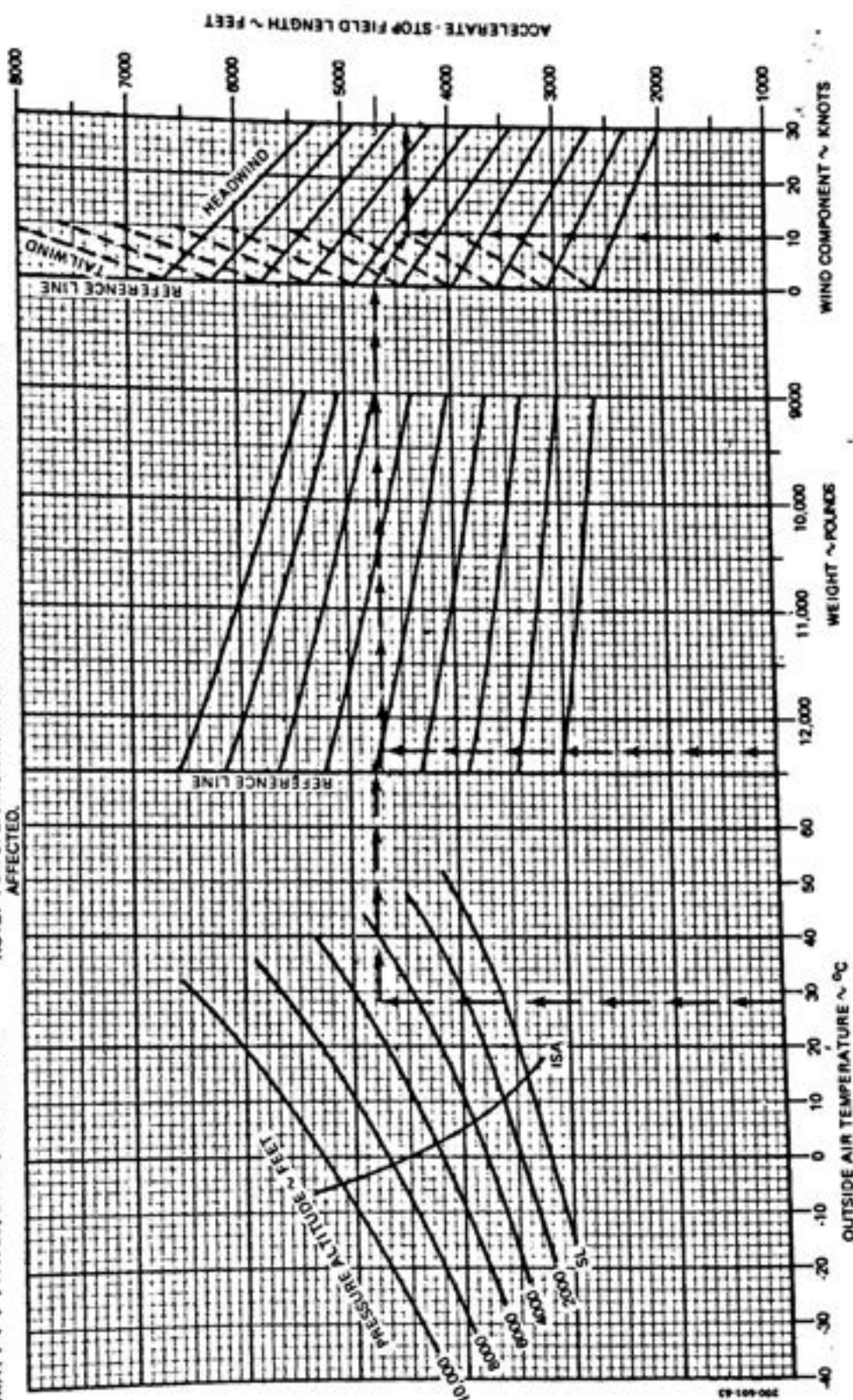
RUNWAY PAVED, LEVEL, DRY SURFACE

EXAMPLE:

OAT 28°C
PRESSURE ALTITUDE 5430 FT
WEIGHT 12,300 LBS
HEADWIND COMPONENT 9.5 KTS
FIELD LENGTH 4370 FT
V₁ 94 KTS

WEIGHT ~ POUNDS	V ₁ ~ KNOTS
12,500	94
12,000	94
11,000	94
10,000	94
9,000	94

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, PERFORMANCE IS NOT AFFECTED.



ACCELERATE - GO - FLAPS 40%

ASSOCIATED CONDITIONS:

POWER TAKE-OFF POWER SET
BEFORE BRAKE RELEASE
FLAPS 40%
AUTOFEATHER . ARMED
LANDING GEAR . RETRACT AFTER LIFT-OFF
RUNWAY PAVED, LEVEL, DRY SURFACE

WEIGHT ~ POUNDS	SPEED ~ KNOTS V _R	V ₂
12,500	94	108
12,000	94	105
11,000	94	103
10,000	94	101
9,000	94	99

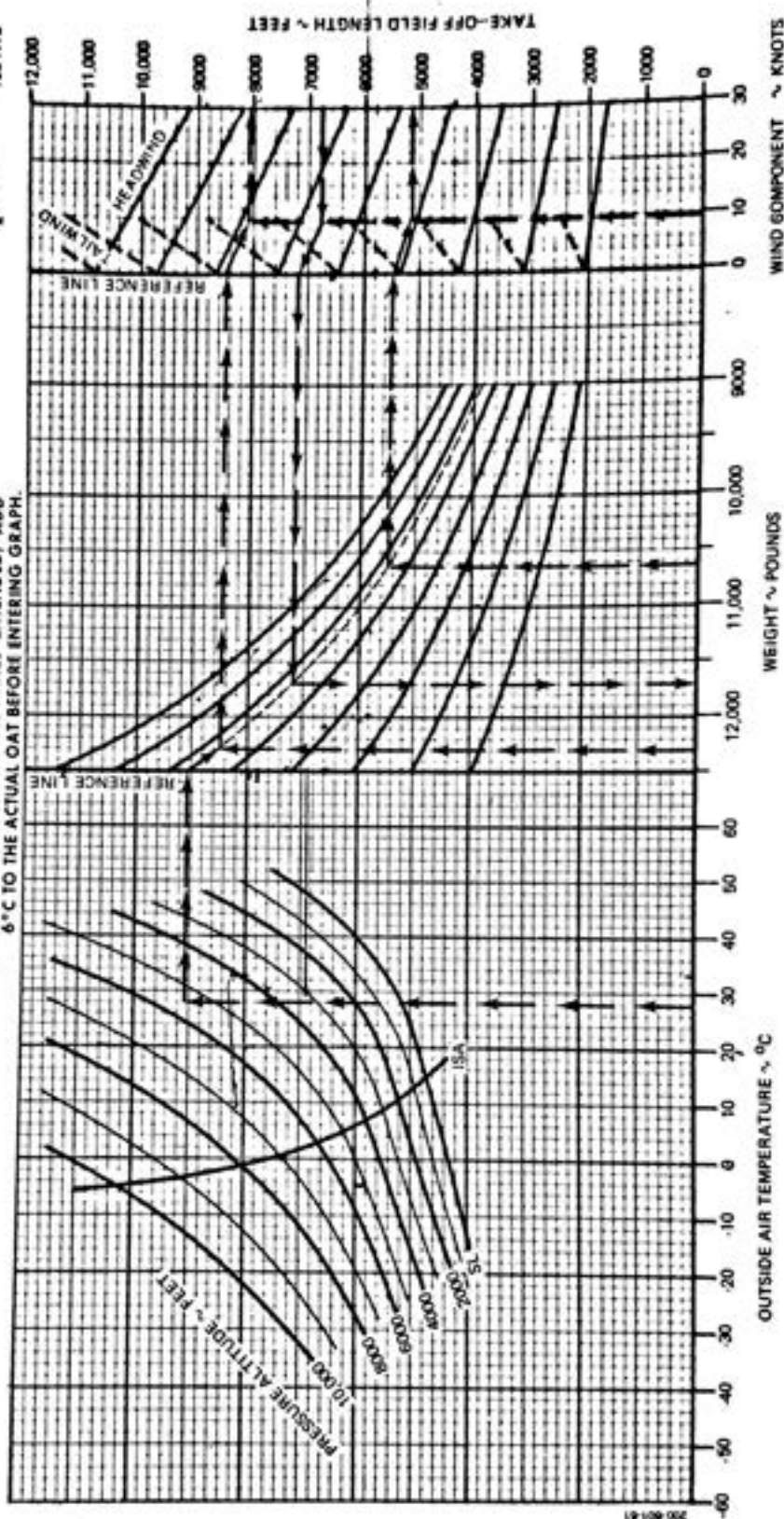
EXAMPLE:

OAT 28°C
PRESSURE ALTITUDE 5430 FT
HEADWIND COMPONENT 9.5 KTS

TAKE-OFF WEIGHT ~ POUNDS	TAKE-OFF FIELD LENGTH ~ FEET
12,300	8090
11,700	8796
10,625	5150

SPEEDS (10,625 POUNDS) V_R 94 KTS
V₂ 102 KTS

- NOTE:
1. AIR DISTANCE IS 50% OF TAKE-OFF FIELD LENGTH.
 2. V₁ (ENGINE FAILURE SPEED) EQUALS V_R (ROTATION SPEED).
 3. USABLE CLEARWAY CANNOT EXCEED 25% OF THE RUNWAY LENGTH.
 4. FOR OPERATION WITH ICE VANES EXTENDED, ADD 6°C TO THE ACTUAL OAT BEFORE ENTERING GRAPH.



NET GRADIENT OF CLIMB - FLAPS 40%

ASSOCIATED CONDITIONS:

POWER . . . TAKE-OFF
FLAPS . . . 40%
LANDING GEAR . UP
INOPERATIVE
PROPELLER . FEATHERED

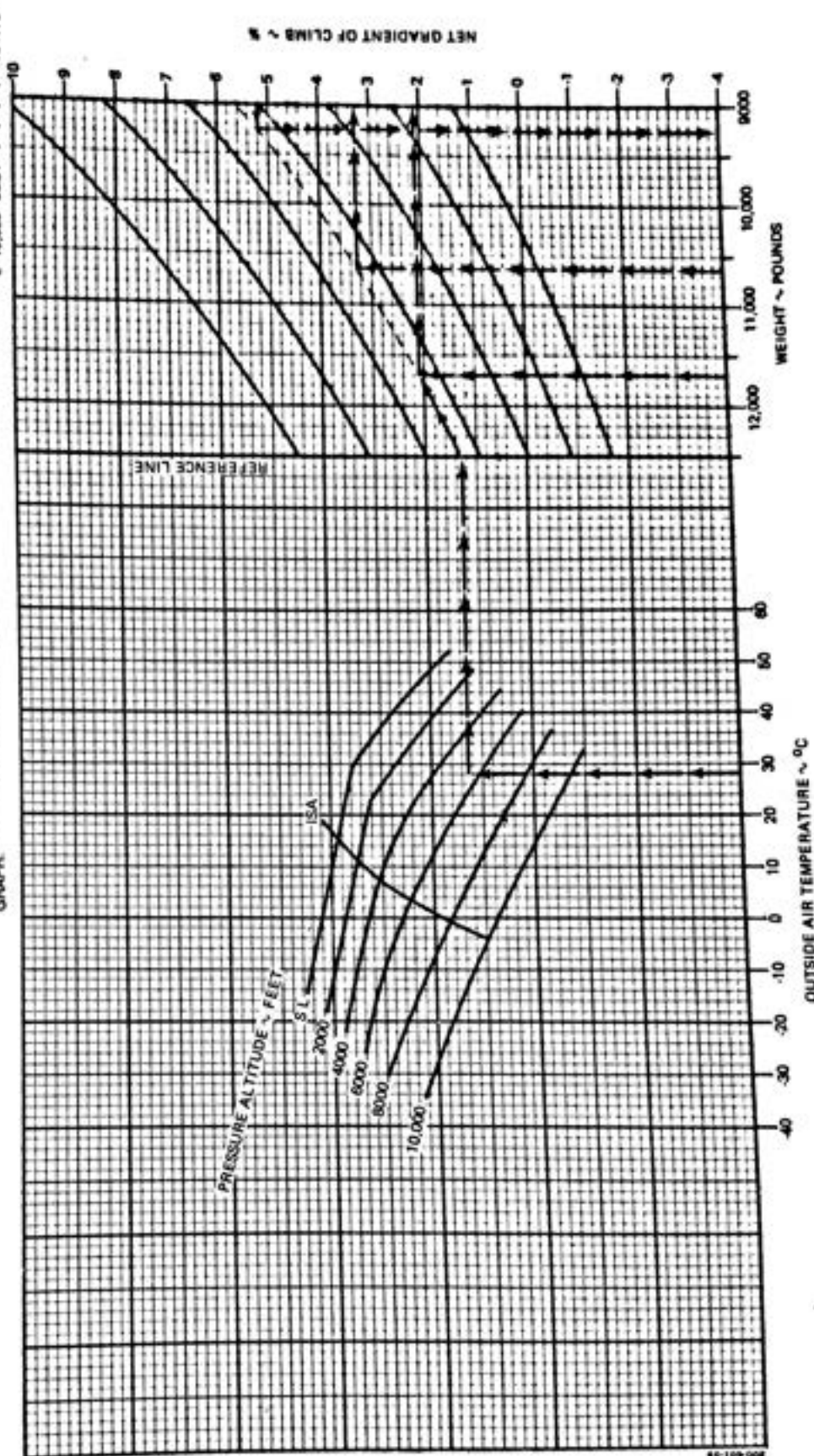
WEIGHT ~ POUNDS	CLIMB SPEED ~ KNOTS
12,500	106
12,000	105
11,000	103
10,000	101
9,000	99

NOTE: FOR OPERATION WITH ICE VANS EXTENDED, ADD
10°C TO THE ACTUAL OAT BEFORE ENTERING
GRAPH.

EXAMPLE:

OAT 20°C	PRESSURE ALTITUDE . . . 5400 FT
WEIGHT . . . 11,700	NET GRADIENT OF CLIMB . . . 2.1
~ POUNDS	~ %
10,825	5.2
	3.3

CLIMB SPEED
• 10,825 LBS. • 102 KTS



CLIMB — TWO ENGINES — FLAPS 0%

ASSOCIATED CONDITIONS:

POWER MAXIMUM CONTINUOUS
FLAPS 0%
LANDING GEAR UP

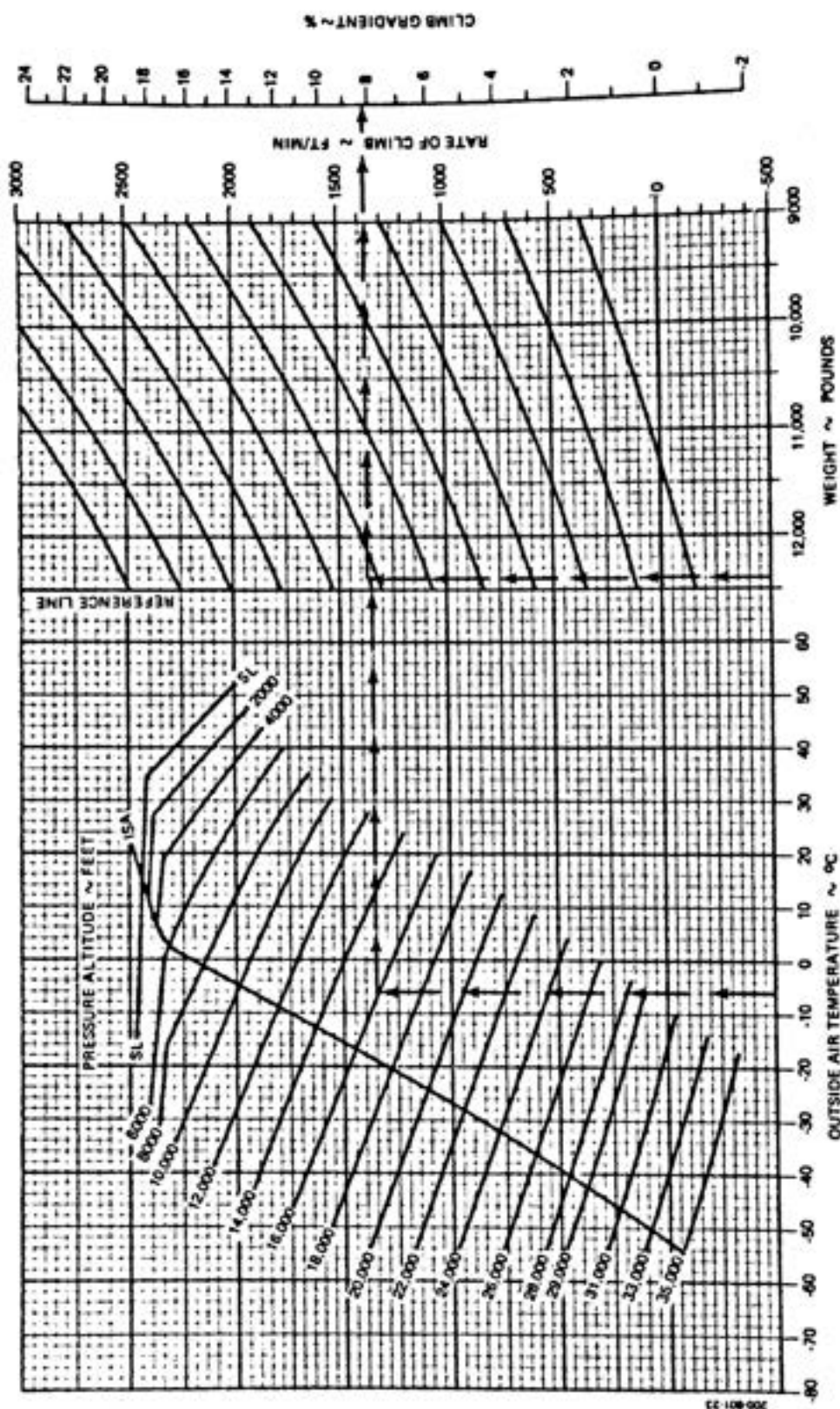
WEIGHT ~ POUNDS	CLIMB GRADIENT ~ %
12,500	125
12,000	124
11,000	121
10,000	118
9,000	115

EXAMPLE:

OAT -6°C
PRESSURE ALTITUDE 16,000 FT
WEIGHT 12,405 LBS

RATE OF CLIMB 1,370 FT/MIN
CLIMB GRADIENT 8.2 %
CLIMB SPEED 125 KTS

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, ADD 15°C TO THE ACTUAL OAT BEFORE ENTERING GRAPH.



CLIMB — TWO ENGINES — FLAPS 40%

ASSOCIATED CONDITIONS:

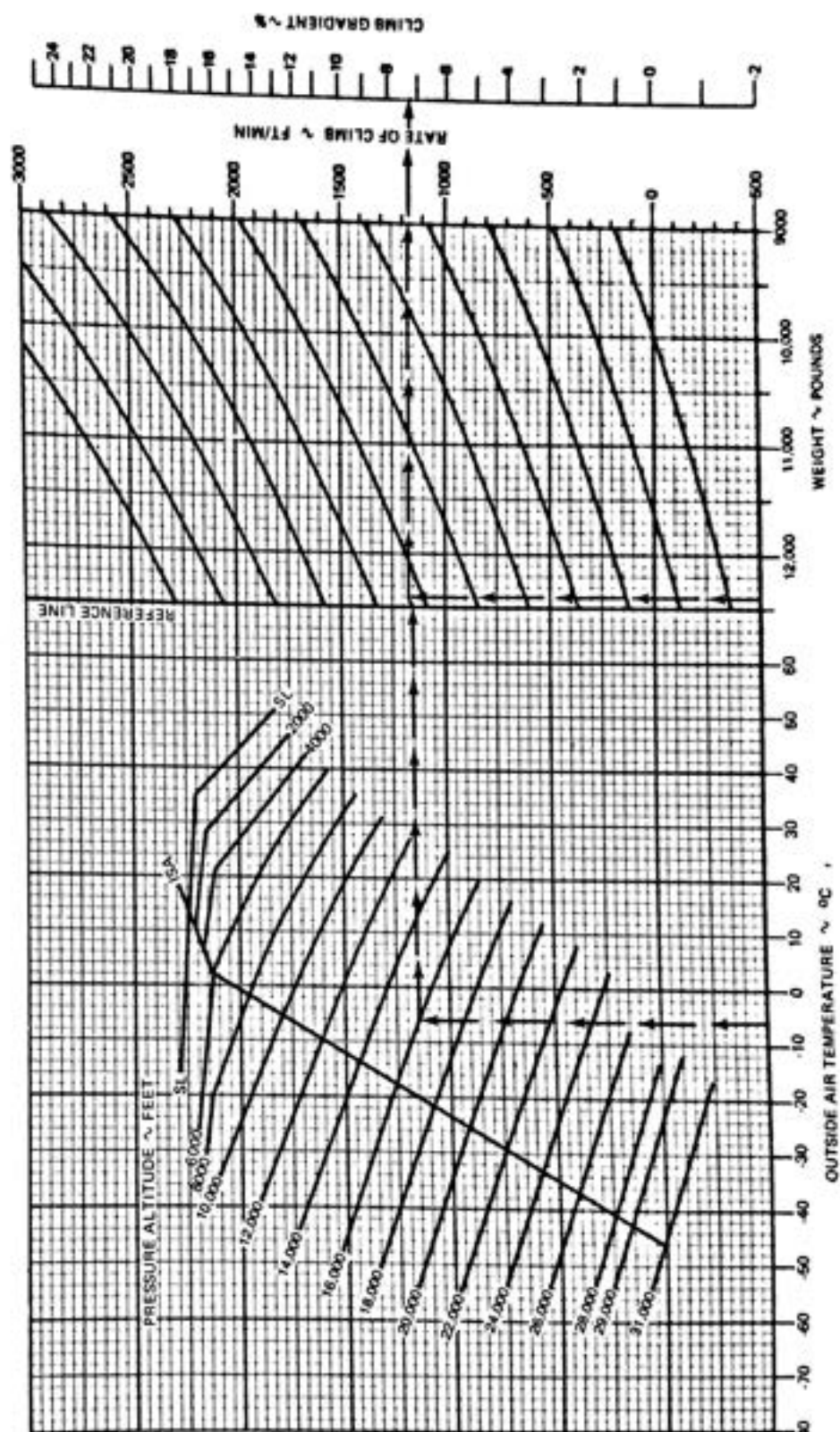
POWER.....MAXIMUM CONTINUOUS
FLAPS.....40%
LANDING GEAR.....UP

WEIGHT ~ POUNDS	CLIMB SPEED ~ KNOTS
12,500	126
12,000	124
11,000	121
10,000	118
9,000	115

EXAMPLE:

OAT.....-6°C
PRESSURE ALTITUDE.....16,000 FT
WEIGHT.....12,406 LBS
RATE-OF-CLIMB.....1,170 FT/MIN
CLIMB GRADIENT.....7.3 %
CLIMB SPEED.....126 KTS

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, ADD
15°C TO THE ACTUAL OAT BEFORE ENTERING GRAPH.



TIME, FUEL, AND DISTANCE TO CLIMB

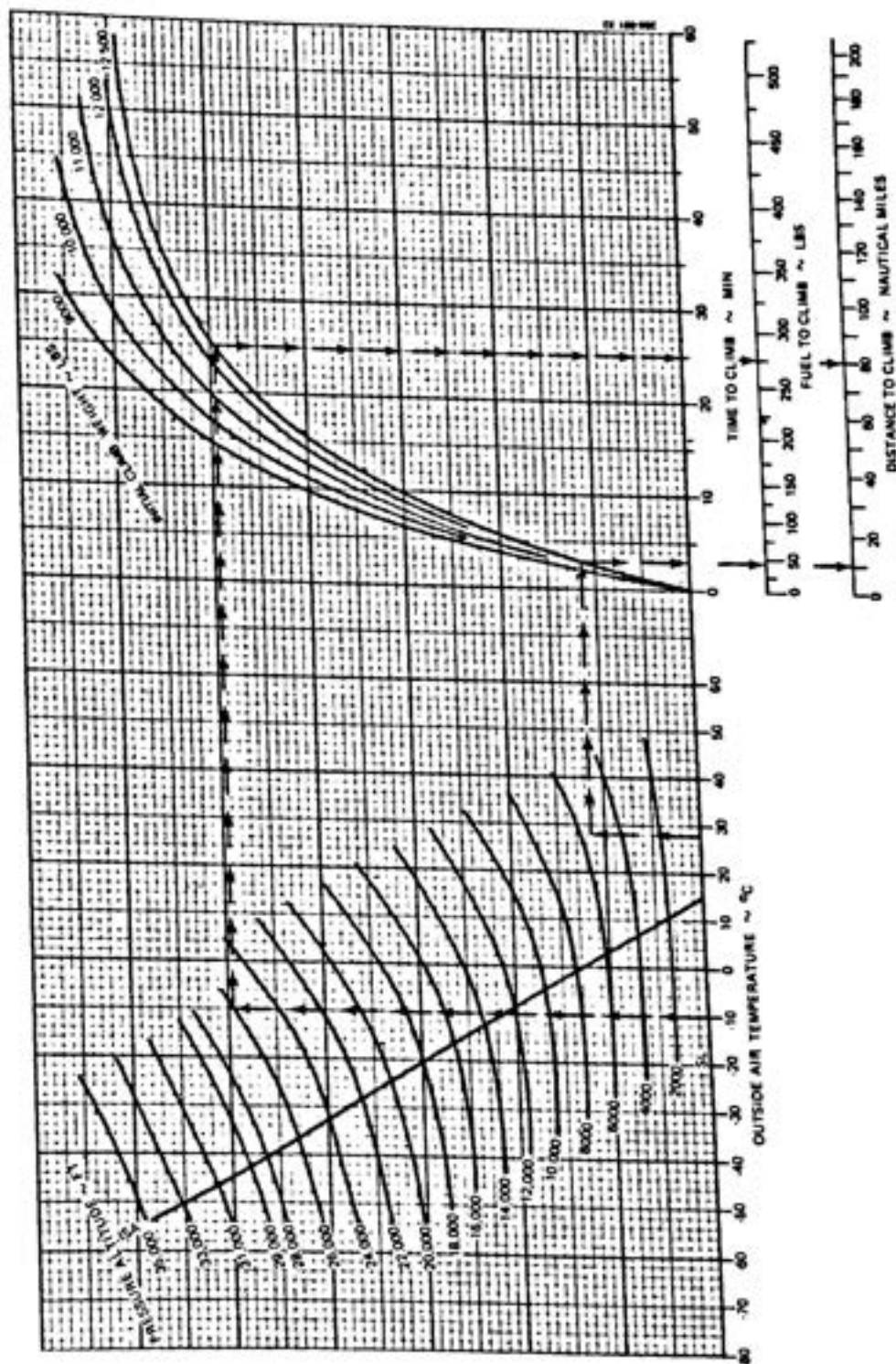
ASSOCIATED CONDITIONS:

PROPELLER SPEED 1900 RPM
ITT, OR 725°C
TORQUE 2230 FT-LBS

ALTITUDE ~ FEET	CLIMB SPEED ~ KNOTS
S.L. TO 10,000	160
10,000 TO 20,000	140
20,000 TO 25,000	130
25,000 TO 35,000	120

EXAMPLE
OAT AT TAKE OFF 20°C
OAT AT CRUISE 10°C
AIRPORT PRESSURE ALTITUDE 5400 FT
CRUISE ALTITUDE 26,000 FT
INITIAL CLIMB WEIGHT 12,500 LBS
TIME TO CLIMB (25-31) 22 MIN
FUEL TO CLIMB (275.45) 230 LBS
DISTANCE TO CLIMB (180 NM) 89 NM

NOTE: 1. ADD 80 LBS FUEL FOR START, TAXI AND TAKE OFF.
2. FOR OPERATION WITH ICE VANS EXTENDED ADD 20% TO THE ACTUAL OAT BEFORE ENTERING THE GRAPH



Section V
Performance

BEECHCRAFT
Super King Air 200

CLIMB — ONE ENGINE INOPERATIVE

ASSOCIATED CONDITIONS:

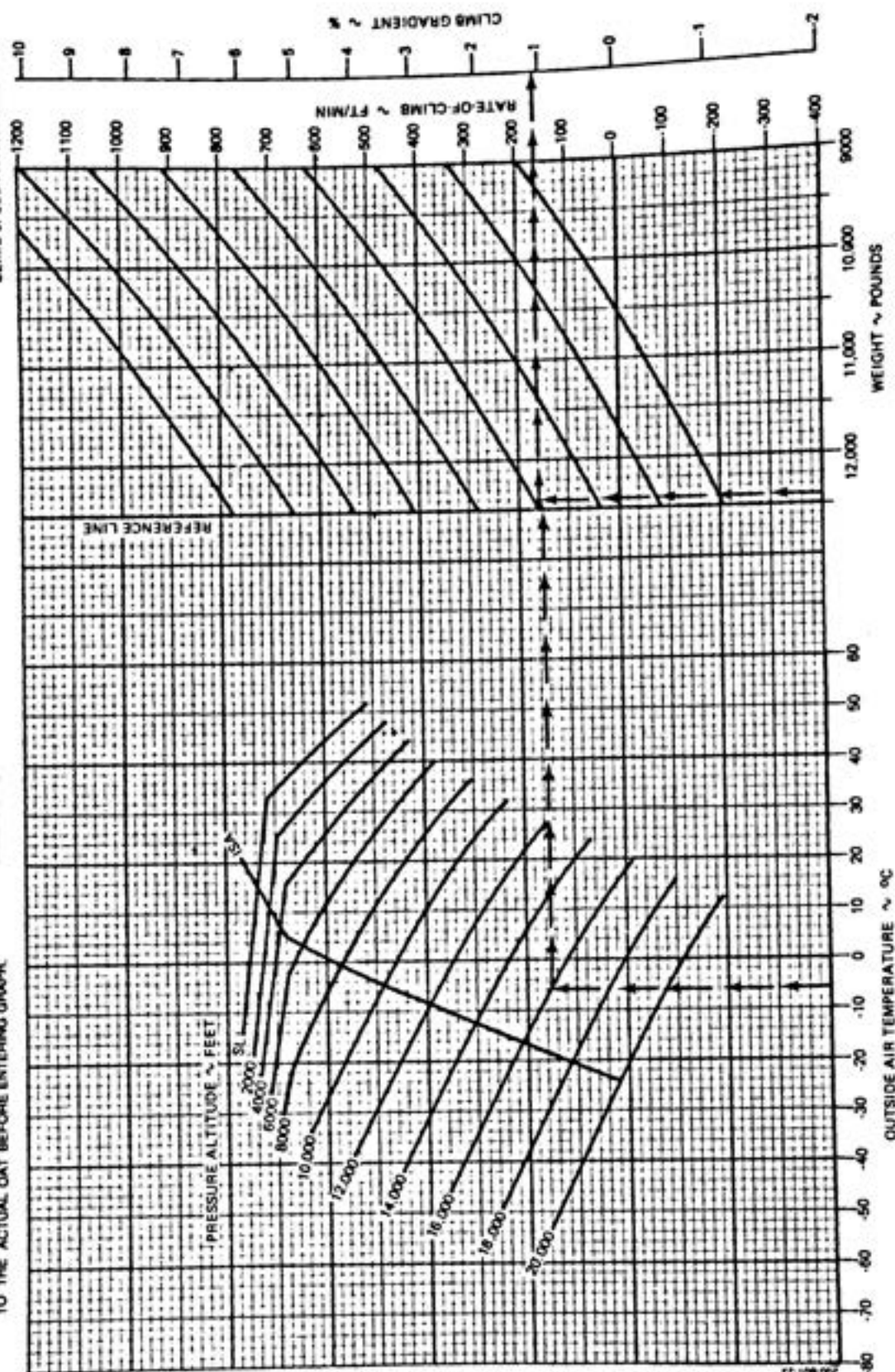
POWER..... MAXIMUM CONTINUOUS
FLAPS..... 0°
LANDING GEAR..... UP
INOPERATIVE PROPELLER..... FEATHERED

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, ADD 10° C
TO THE ACTUAL OAT BEFORE ENTERING GRAPH.

WEIGHT ~ POUNDS	CLIMB SPEED ~ KNOTS
12,500	121
12,000	119
11,000	117
10,000	114
9,000	111

EXAMPLE:

OAT..... -6°C
PRESSURE ALTITUDE..... 16,000 FT
WEIGHT..... 12,405 LBS
RATE OF CLIMB..... 168 FT/MIN
CLIMB GRADIENT..... 1.1 %
CLIMB SPEED..... 121 KTS



SERVICE CEILING - ONE-ENGINE-INOPERATIVE

ASSOCIATED CONDITIONS:

POWER..... MAXIMUM CONTINUOUS
LANDING GEAR..... UP
INOPERATIVE PROPELLER..... FEATHERED
FLAPS..... 0%

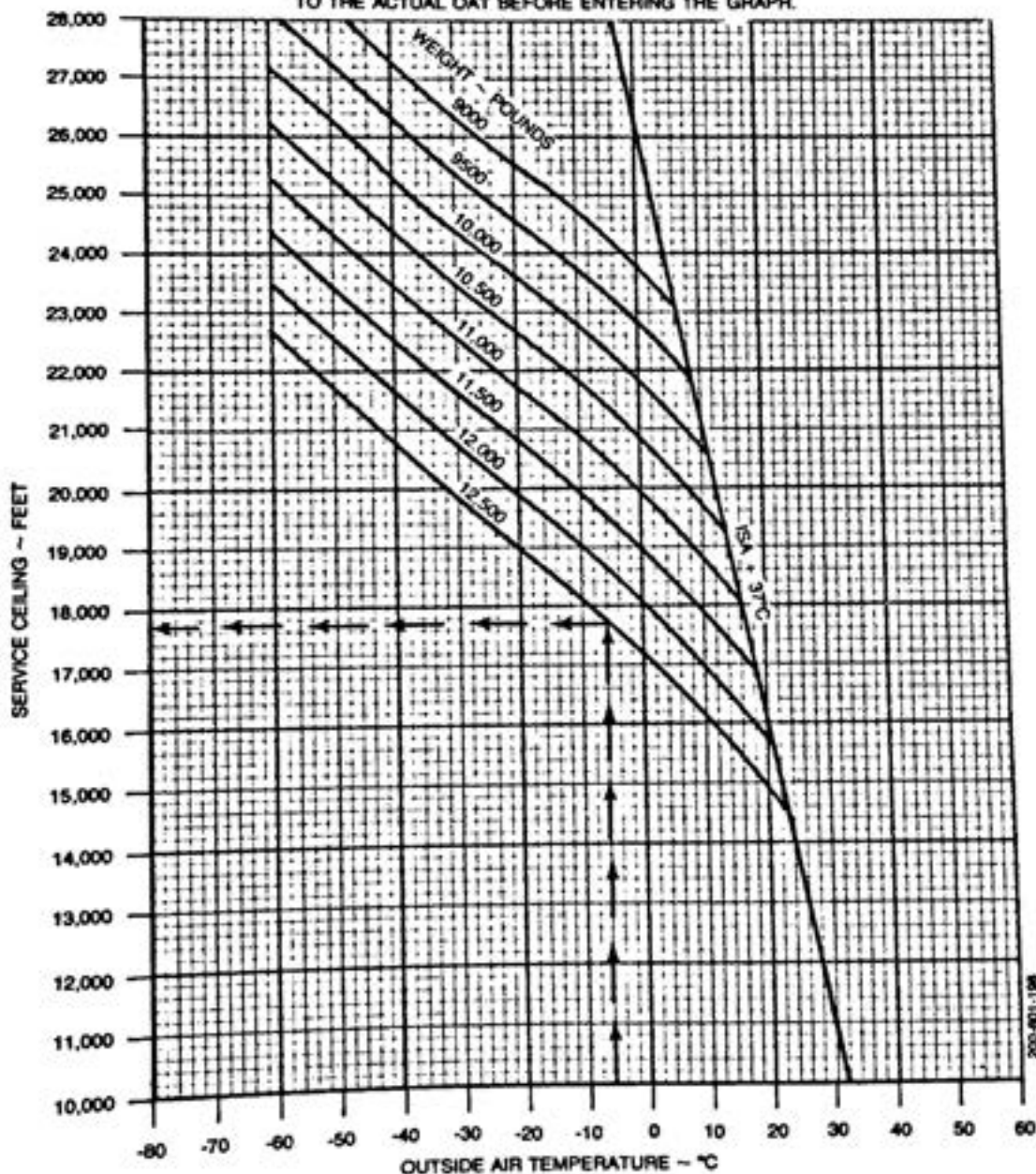
EXAMPLE:

OAT AT MEA..... -8°C
WEIGHT..... 12,500 LBS
ROUTE SEGMENT MEA..... 16,000 FT
SERVICE CEILING..... 17,700 FT

NOTE: SERVICE CEILING IS THE PRESSURE ALTITUDE WHERE THE AIRPLANE HAS CAPABILITY OF CLIMBING 50 FT MINUTE WITH ONE PROPELLER FEATHERED.

NOTE: SERVICE CEILING IS ABOVE ENROUTE MEA

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, ADD 10°C TO THE ACTUAL OAT BEFORE ENTERING THE GRAPH.



Section V
Performance

BEECHCRAFT
Super King Air 200

CLIMB — BALKED LANDING

CLIMB SPEED 100 KNOTS (ALL WEIGHTS)

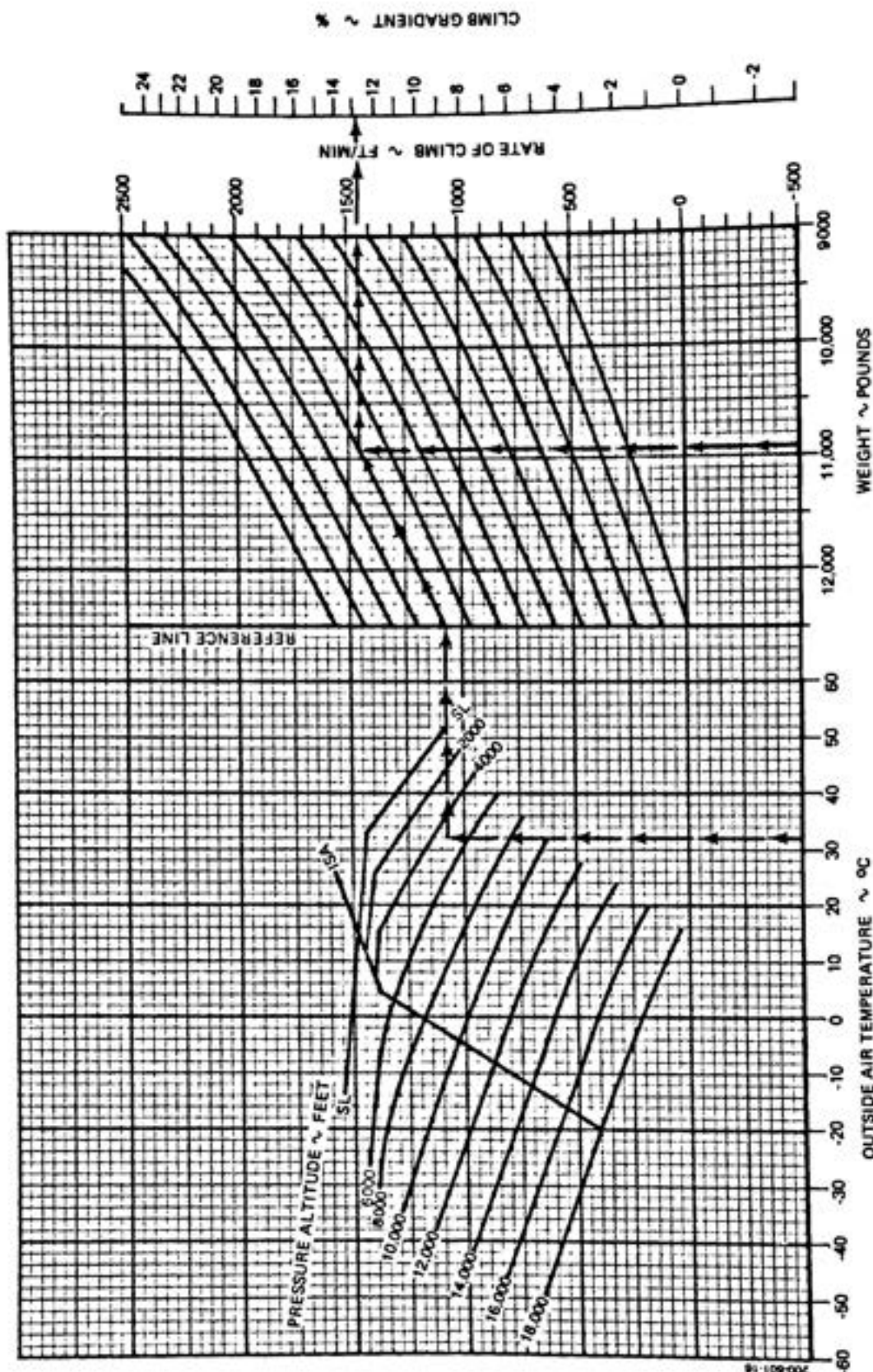
NOTE: FOR OPERATION WITH ICE VANES EXTENDED, ADD
10° C TO ACTUAL OAT BEFORE ENTERING GRAPH.

ASSOCIATED CONDITIONS:

POWER TAKE-OFF
FLAPS 100%
LANDING GEAR . . . DOWN

EXAMPLE:

OAT 32°C
PRESSURE ALTITUDE . . 4730 FT
WEIGHT 10,937 LBS
RATE OF CLIMB . . . 1450 FT/MIN
CLIMB GRADIENT . . . 12.8 %



RECOMMENDED CRUISE POWER

1700 RPM

ISA -30°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	-10	-15	2230	464	928	243	231	244	232	245	233
2000	-14	-19	2230	452	904	241	236	242	236	243	237
4000	-18	-23	2230	440	880	239	240	240	241	241	242
6000	-21	-27	2230	429	858	237	244	238	245	238	246
8000	-25	-31	2230	419	838	234	249	235	250	236	251
10,000	-29	-35	2230	410	820	232	254	233	255	234	256
12,000	-33	-39	2230	402	804	230	259	231	260	232	261
14,000	-36	-43	2230	397	794	227	264	229	265	229	266
16,000	-40	-47	2230	393	786	225	269	226	270	227	272
18,000	-44	-51	2230	389	778	223	274	224	276	225	277
20,000	—	—	—	—	—	—	—	—	—	—	—
22,000	—	—	—	—	—	—	—	—	—	—	—
24,000	—	—	—	—	—	—	—	—	—	—	—
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE POWER

1700 RPM

ISA -20°C

PRESSURE ALTITUDE FEET	IOAT °C	OAT °C	TORQUE PER ENGINE FT-LBS	FUEL FLOW PER ENGINE LBS/HR	TOTAL FUEL FLOW LBS/HR	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
						IAS	TAS	IAS	TAS	IAS	TAS
SL	0	- 5	2230	466	932	242	234	242	235	242	236
2000	- 4	- 9	2230	453	906	239	238	240	239	241	240
4000	- 7	-13	2230	440	880	237	243	238	244	239	245
6000	-11	-17	2230	429	858	235	248	236	249	237	249
8000	-15	-21	2230	420	840	233	252	235	253	234	254
10,000	-19	-25	2230	412	824	230	257	231	258	232	259
12,000	-22	-29	2230	404	808	228	262	229	263	230	264
14,000	-26	-33	2230	398	796	226	267	227	269	228	270
16,000	-30	-37	2230	394	788	223	273	224	274	225	275
18,000	-33	-41	2230	391	782	220	278	222	279	223	281
20,000	-37	-45	2124	371	742	214	278	215	280	217	281
22,000	-41	-48	1981	347	694	205	276	207	278	209	280
24,000	-46	-52	1835	322	644	197	273	199	276	201	278
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE POWER

1700 RPM

ISA -10°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED ~ KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	10	5	2230	469	938	240	237	241	238	242	238
2000	6	1	2230	456	912	238	241	239	242	239	243
4000	3	- 3	2230	443	886	236	246	236	247	237	248
6000	- 1	- 7	2230	431	862	233	251	234	252	235	252
8000	- 5	-11	2230	421	842	231	255	232	256	233	257
10,000	- 9	-15	2230	412	824	228	260	229	261	230	262
12,000	-12	-19	2230	406	812	226	265	227	267	228	268
14,000	-16	-23	2230	400	800	224	271	225	272	226	273
16,000	-20	-27	2230	396	792	221	276	222	277	223	279
18,000	-23	-31	2184	386	772	216	279	218	280	219	282
20,000	-27	-35	2028	358	716	208	276	209	278	211	280
22,000	-32	-38	1889	334	668	200	274	201	277	203	279
24,000	-36	-42	1750	310	620	191	271	193	274	195	277
26,000	-40	-46	1615	288	576	182	268	184	271	187	274
28,000	-44	-50	1491	267	534	173	263	176	268	178	272
29,000	-46	-54	1430	257	514	168	261	171	266	174	270
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE POWER

1700 RPM

ISA

PRESSURE ALTITUDE FEET	IOAT °C	OAT °C	TORQUE PER ENGINE FT-LBS	FUEL FLOW PER ENGINE LBS/HR	TOTAL FUEL FLOW LBS/HR	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
						IAS	TAS	IAS	TAS	IAS	TAS
SL	20	15	2230	473	946	238	239	239	240	240	241
2000	17	11	2230	459	918	236	244	237	245	238	246
4000	13	7	2230	446	892	234	249	235	250	236	251
6000	9	3	2230	433	866	232	253	232	254	233	255
8000	5	- 1	2230	423	846	229	258	230	259	231	260
10,000	2	- 5	2230	414	828	227	263	228	264	229	266
12,000	- 2	- 9	2230	406	812	224	269	225	270	226	271
14,000	- 6	-13	2230	400	800	222	274	223	275	224	277
16,000	-10	-17	2230	396	792	219	279	220	280	221	282
18,000	-13	-21	2096	373	746	211	278	213	280	214	281
20,000	-18	-25	1937	345	690	202	275	204	277	206	279
22,000	-22	-28	1803	322	644	194	272	196	275	198	278
24,000	-26	-32	1668	299	598	185	269	188	273	190	275
26,000	-30	-36	1537	277	554	176	265	179	269	181	273
28,000	-34	-40	1418	257	514	167	260	170	265	173	270
29,000	-36	-42	1360	247	494	162	257	166	263	169	268
31,000	-40	-46	1248	229	458	151	250	156	257	160	263
33,000	-42	-50	1140	211	422	138	236	146	250	151	258
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE POWER

1700 RPM

ISA +10°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
						IAS	TAS	IAS	TAS	IAS	TAS
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR						
SL	30	25	2230	475	950	237	242	238	243	239	244
2000	27	21	2230	462	924	235	247	236	248	236	248
4000	23	17	2230	449	898	232	251	233	252	234	253
6000	19	13	2230	437	874	230	256	231	257	232	258
8000	16	9	2230	426	852	228	261	229	262	229	263
10,000	12	5	2230	416	832	225	266	226	267	227	269
12,000	8	1	2230	408	816	223	272	224	273	225	274
14,000	4	- 3	2230	402	804	220	277	221	278	222	279
16,000	0	- 7	2126	381	762	213	277	215	279	216	280
18,000	- 4	-11	1999	358	716	206	276	207	278	209	280
20,000	- 8	-15	1871	334	668	198	274	200	277	201	279
22,000	-12	-18	1733	311	622	189	271	191	274	193	277
24,000	-16	-22	1594	288	576	180	267	182	271	185	274
26,000	-20	-26	1464	267	534	170	262	173	267	176	271
28,000	-24	-30	1349	247	494	161	257	165	262	168	267
29,000	-26	-32	1292	238	476	156	253	160	260	163	265
31,000	-30	-36	1183	220	440	144	242	150	253	155	260
33,000	-35	-40	1076	202	404	123	217	138	243	145	254
35,000	-40	-44	955	183	366	—	—	137	218	137	244

RECOMMENDED CRUISE POWER

1700 RPM

ISA +20°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	41	35	2230	478	956	236	245	236	245	237	246
2000	37	31	2230	465	930	233	249	234	250	235	251
4000	33	27	2230	452	904	231	254	232	255	233	256
6000	29	23	2230	439	878	228	259	229	260	230	261
8000	26	19	2230	429	858	226	264	227	265	228	266
10,000	22	15	2230	419	838	224	269	225	271	226	272
12,000	18	11	2202	406	812	220	273	221	275	222	276
14,000	14	7	2088	383	766	213	273	214	275	216	276
16,000	10	3	1973	360	720	206	272	207	274	209	276
18,000	6	- 1	1857	338	676	198	271	200	274	202	276
20,000	2	- 5	1739	315	630	190	269	193	272	194	275
22,000	- 2	- 8	1626	296	592	182	267	185	271	187	274
24,000	- 6	-12	1513	276	552	174	264	177	268	179	271
26,000	-10	-16	1401	256	512	165	259	168	265	171	269
28,000	-15	-20	1289	238	476	155	253	159	260	163	265
29,000	-16	-22	1230	229	458	149	247	154	256	158	262
31,000	-21	-26	1120	211	422	134	232	144	248	149	257
33,000	-25	-30	1011	193	386	—	—	130	232	139	249
35,000	-29	-34	928	179	358	—	—	—	—	126	234

RECOMMENDED CRUISE POWER

1700 RPM

ISA +30°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	51	45	2230	481	962	234	247	235	248	236	249
2000	47	41	2230	468	936	232	252	233	253	234	254
4000	43	37	2230	454	908	229	257	230	258	231	259
6000	40	33	2230	441	882	227	262	228	263	229	264
8000	36	29	2225	429	858	224	266	225	268	226	269
10,000	32	25	2131	406	812	218	267	219	269	221	270
12,000	28	21	2029	383	766	212	267	213	269	214	271
14,000	24	17	1917	360	720	205	267	206	269	208	271
16,000	20	13	1811	338	676	197	266	199	269	201	271
18,000	16	9	1709	318	636	190	265	192	268	194	271
20,000	12	5	1607	297	594	183	264	185	267	187	270
22,000	8	2	1506	279	558	175	261	178	265	180	269
24,000	4	- 2	1403	260	520	167	258	170	263	173	267
26,000	0	- 6	1304	242	484	158	253	162	259	165	264
28,000	- 4	-10	1211	226	452	148	246	153	255	157	261
29,000	- 7	-12	1163	218	436	141	240	148	251	153	259
31,000	- 9	-16	1058	201	402	—	—	136	240	143	252
33,000	-15	-20	968	186	372	—	—	—	—	131	240
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE POWER

1700 RPM

ISA +37°C

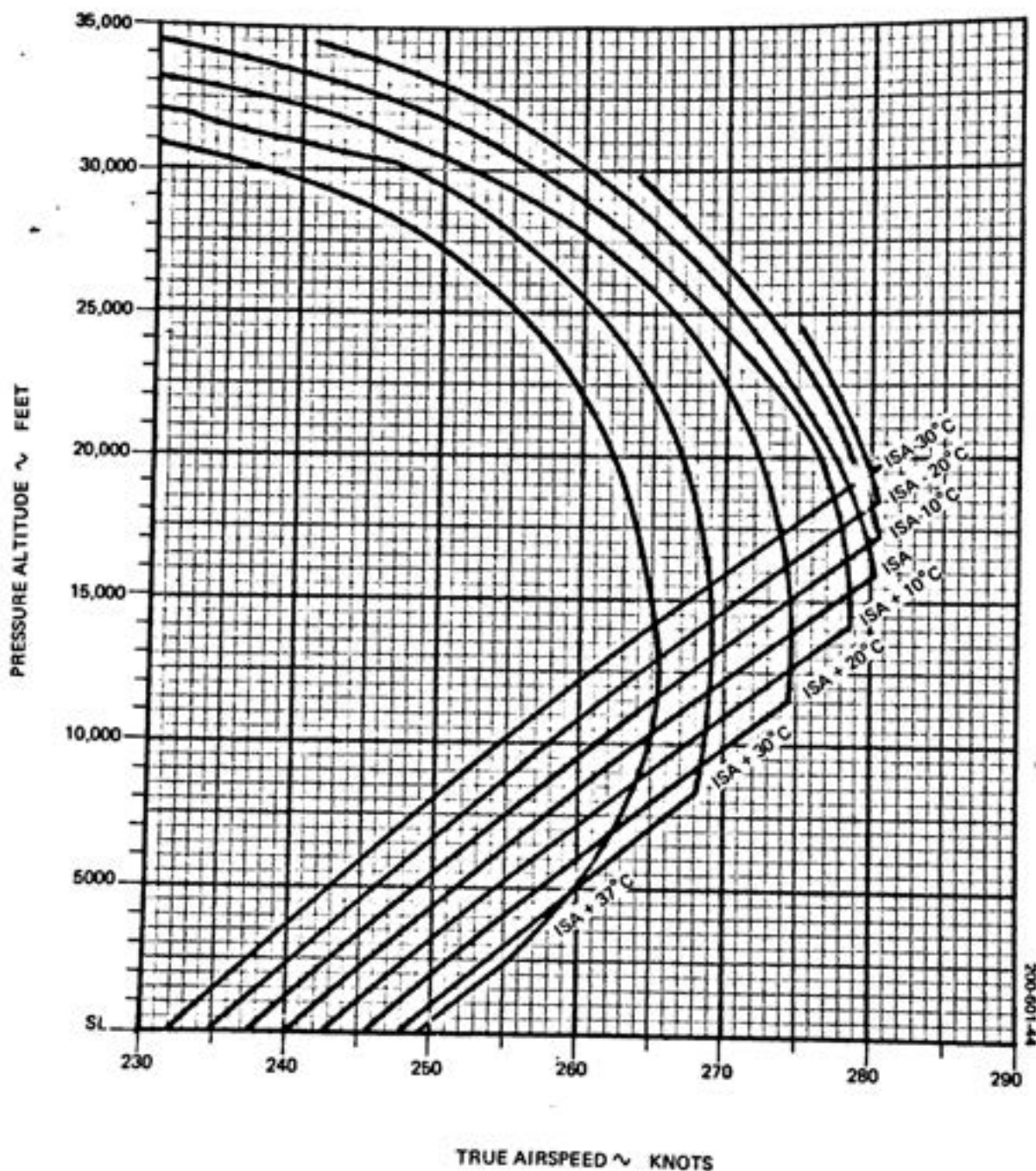
PRESSURE ALTITUDE FEET	IOAT °C	OAT °C	TORQUE PER ENGINE FT-LBS	FUEL FLOW PER ENGINE LBS/HR	TOTAL FUEL FLOW LBS/HR	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
						IAS	TAS	IAS	TAS	IAS	TAS
SL	58	52	2230	483	966	233	249	234	250	235	251
2000	54	48	2230	470	940	231	253	232	254	233	255
4000	50	44	2198	452	904	227	257	228	258	229	259
6000	46	40	2159	433	866	223	260	224	261	225	263
8000	43	36	2096	413	826	218	262	219	264	221	265
10,000	39	32	2013	391	782	212	263	214	265	215	267
12,000	35	28	1915	368	736	206	263	207	265	209	267
14,000	31	24	1809	346	692	199	263	201	265	202	267
16,000	27	20	1706	325	650	192	262	194	264	195	267
18,000	23	16	1607	305	610	184	260	187	263	189	266
20,000	19	12	1506	284	568	177	258	179	262	182	265
22,000	15	9	1414	267	534	169	255	172	260	175	264
24,000	11	5	1320	249	498	160	252	164	257	167	262
26,000	6	1	1227	232	464	151	246	156	253	160	259
28,000	2	- 3	1137	216	432	139	236	147	248	152	255
29,000	0	- 5	1090	206	416	131	226	141	243	147	253
31,000	- 3	- 9	994	192	384	—	—	128	229	138	245
33,000	- 8	-13	922	179	358	—	—	—	—	125	232
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE SPEEDS

1700 RPM

WEIGHT 11,000 LBS

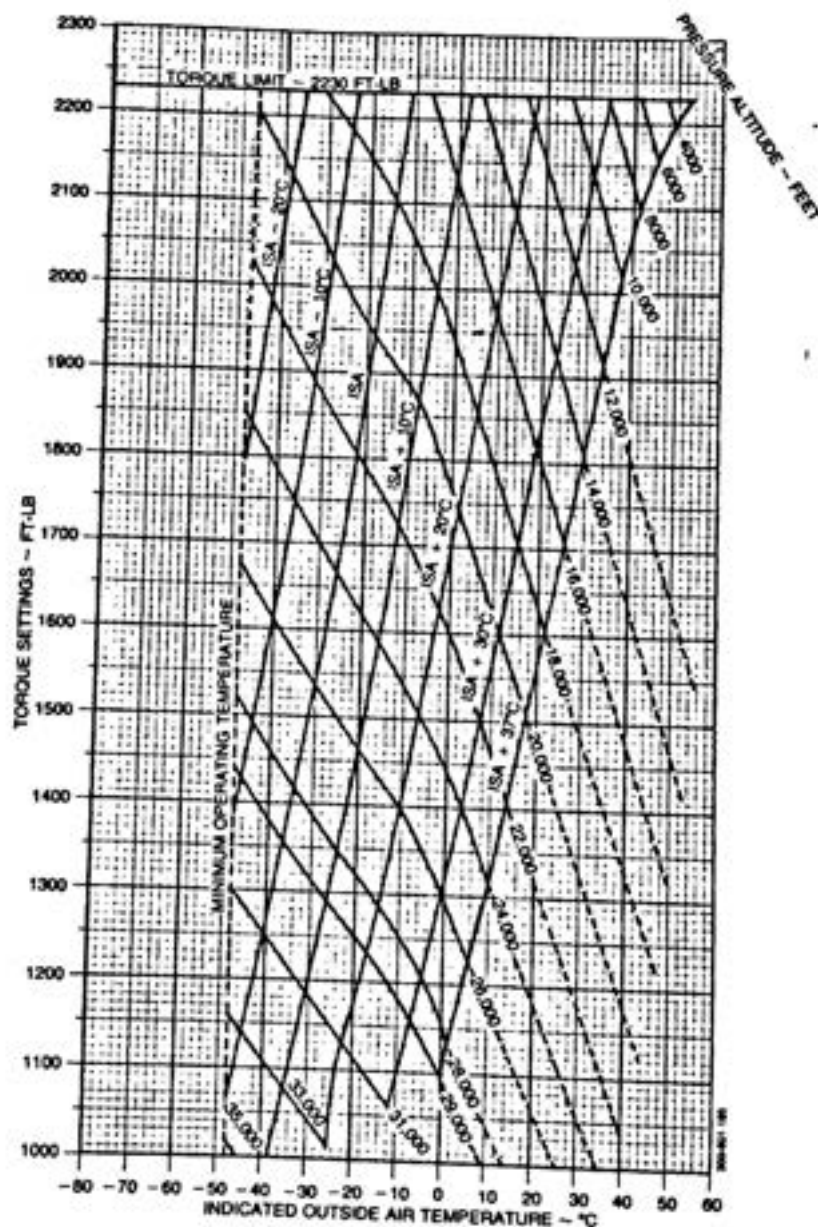
NOTE: FOR OPERATION WITH ICE VANES EXTENDED, TAS WILL BE
REDUCED BY APPROXIMATELY 25 KNOTS.



RECOMMENDED CRUISE POWER

1700 RPM

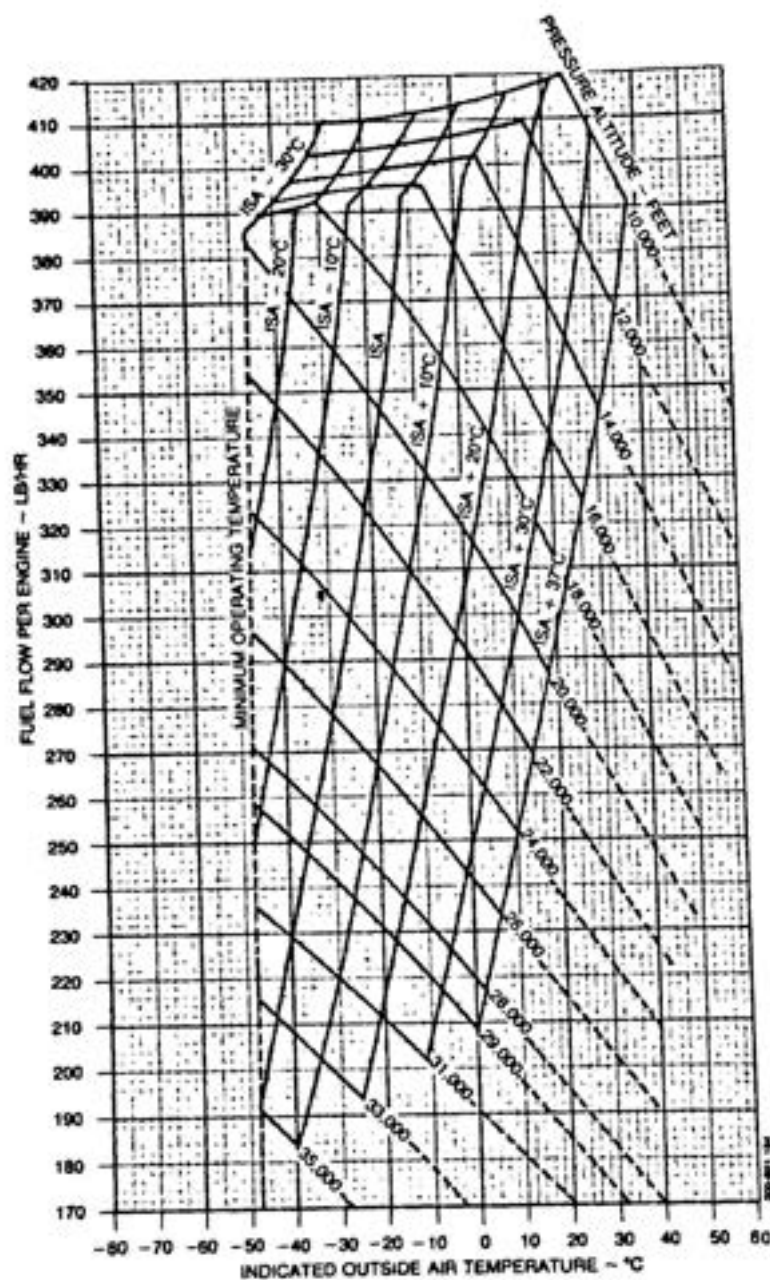
NOTE: FOR OPERATION WITH ICE VANES
EXTENDED, ADD 35°C TO THE
ACTUAL OAT BEFORE ENTERING
GRAPH.



FUEL FLOW AT RECOMMENDED CRUISE POWER

1700 RPM

NOTE: FOR OPERATION WITH ICE VANES
EXTENDED, ADD 30°C TO THE
ACTUAL OAT BEFORE ENTERING
GRAPH.



RECOMMENDED CRUISE POWER

1800 RPM

ISA -30°C

PRESSURE ALTITUDE FEET	IOAT °C	OAT °C	TORQUE PER ENGINE FT-LBS	FUEL FLOW PER ENGINE LBS/HR	TOTAL FUEL FLOW LBS/HR	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
						IAS	TAS	IAS	TAS	IAS	TAS
SL	-10	-15	2230	484	968	249	236	249	237	250	238
2000	-14	-19	2230	472	944	246	241	247	241	248	242
4000	-17	-23	2230	460	920	244	245	245	246	246	247
6000	-21	-27	2230	448	896	242	250	243	251	243	251
8000	-25	-31	2230	438	876	240	255	240	255	241	256
10,000	-29	-35	2230	429	858	237	260	238	261	239	261
12,000	-32	-39	2230	422	844	235	265	236	266	237	267
14,000	-36	-43	2230	417	834	233	270	234	271	235	272
16,000	-40	-47	2230	413	826	230	275	231	276	232	277
18,000	-43	-51	2230	409	818	228	281	229	282	230	283
20,000	—	—	—	—	—	—	—	—	—	—	—
22,000	—	—	—	—	—	—	—	—	—	—	—
24,000	—	—	—	—	—	—	—	—	—	—	—
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE POWER

1800 RPM

ISA -20°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED ~ KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	0	- 5	2230	486	972	247	239	248	240	248	241
2000	- 3	- 9	2230	473	946	245	244	245	244	246	245
4000	- 7	-13	2230	460	920	242	248	243	249	244	250
6000	-11	-17	2230	449	898	240	253	241	254	242	255
8000	-15	-21	2230	440	880	238	258	239	259	239	260
10,000	-18	-25	2230	431	862	236	263	236	264	237	265
12,000	-22	-29	2230	423	846	233	268	234	269	235	270
14,000	-26	-33	2230	418	836	231	273	232	274	233	276
16,000	-29	-37	2230	414	828	228	279	229	280	230	281
18,000	-33	-41	2170	400	800	223	281	225	283	226	284
20,000	-37	-45	2017	372	744	215	279	216	281	218	283
22,000	-41	-48	1881	347	694	207	277	208	280	210	282
24,000	-45	-52	1743	323	646	198	275	200	277	202	280
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE POWER

1800 RPM

ISA -10°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	10	5	2230	488	976	245	242	246	243	247	243
2000	7	1	2230	475	950	243	246	244	247	244	248
4000	3	- 3	2230	462	924	241	251	241	252	242	253
6000	- 1	- 7	2230	450	900	238	256	239	257	240	258
8000	- 5	-11	2230	440	880	236	261	237	262	238	263
10,000	- 8	-15	2230	431	862	234	266	235	267	235	268
12,000	-12	-19	2230	425	850	231	271	232	272	233	274
14,000	-16	-23	2230	420	840	229	277	230	278	231	279
16,000	-19	-27	2224	414	828	226	282	227	283	228	285
18,000	-23	-31	2076	386	772	218	280	219	282	220	284
20,000	-27	-35	1926	358	716	209	278	211	280	212	282
22,000	-31	-38	1795	335	670	201	276	203	278	204	281
24,000	-36	-42	1661	311	622	192	273	194	276	196	278
26,000	-40	-46	1534	288	576	183	269	186	273	188	276
28,000	-44	-50	1415	267	534	174	265	177	269	179	273
29,000	-46	-52	1357	257	514	169	262	172	267	175	271
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE POWER

1800 RPM

ISA

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	21	15	2230	491	962	244	245	244	245	245	246
2000	17	11	2230	477	954	241	249	242	250	243	251
4000	13	7	2230	463	926	239	254	240	255	241	256
6000	9	3	2230	451	902	237	259	238	260	238	261
8000	6	- 1	2230	441	882	234	264	235	265	236	266
10,000	2	- 5	2230	433	866	232	269	233	270	234	271
12,000	- 2	- 9	2230	425	850	230	275	231	276	231	277
14,000	- 5	-13	2230	419	838	227	280	228	281	229	283
16,000	- 9	-17	2147	401	802	221	282	223	283	224	285
18,000	-13	-21	1995	373	746	213	279	214	281	215	283
20,000	-17	-25	1842	346	692	203	276	205	279	207	281
22,000	-21	-28	1714	323	646	195	274	197	277	199	279
24,000	-26	-32	1584	299	598	186	271	189	274	191	277
26,000	-30	-36	1460	277	554	177	267	180	271	182	274
28,000	-34	-40	1346	257	514	168	262	171	267	174	271
29,000	-36	-42	1291	247	494	162	258	167	264	170	269
31,000	-40	-46	1184	229	458	151	249	157	258	161	265
33,000	-45	-50	1080	211	422	138	236	146	250	151	259
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE POWER

1800 RPM

ISA +10°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	31	25	2230	494	988	242	247	243	248	244	249
2000	27	21	2230	481	962	240	252	241	253	241	254
4000	23	17	2230	467	934	237	257	238	258	239	259
6000	20	13	2230	455	910	235	262	236	263	237	264
8000	16	9	2230	444	888	233	267	234	268	235	269
10,000	12	5	2230	434	868	230	272	231	273	232	274
12,000	8	1	2230	426	852	228	278	229	279	230	280
14,000	5	- 3	2141	406	812	222	279	223	280	224	282
16,000	1	- 7	2020	381	762	214	278	216	280	217	282
18,000	- 3	-11	1900	358	716	207	277	208	280	210	281
20,000	- 7	-15	1779	334	668	199	276	201	278	203	281
22,000	-12	-18	1648	312	624	190	273	192	276	194	279
24,000	-16	-22	1515	289	578	181	269	183	272	186	276
26,000	-20	-26	1391	267	534	171	264	174	268	177	272
28,000	-24	-30	1281	248	496	161	257	166	264	169	269
29,000	-26	-32	1227	238	476	156	253	161	261	164	266
31,000	-30	-36	1121	220	440	144	242	150	253	155	261
33,000	-35	-50	1019	202	404	127	223	139	243	145	254
35,000	-40	-54	911	184	368	—	—	122	224	134	244

RECOMMENDED CRUISE POWER

1800 RPM

ISA +20°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	41	35	2230	497	994	241	250	241	251	242	251
2000	37	31	2230	483	966	238	255	239	256	240	256
4000	33	27	2230	470	940	236	260	237	261	238	262
6000	30	23	2230	457	914	234	265	234	266	235	267
8000	26	19	2230	446	892	231	270	232	271	233	272
10,000	22	15	2192	431	862	227	273	228	275	229	276
12,000	18	11	2087	407	814	220	274	222	275	223	277
14,000	14	7	1980	383	766	214	274	215	276	216	277
16,000	10	3	1872	360	720	206	273	208	275	210	277
18,000	6	- 1	1762	338	676	199	272	201	275	203	277
20,000	2	- 5	1651	316	632	191	271	193	274	195	276
22,000	- 2	- 8	1545	296	592	183	269	186	272	188	275
24,000	- 6	- 12	1437	276	552	175	265	178	269	180	273
26,000	- 10	- 16	1331	257	514	166	261	169	266	172	270
28,000	- 14	- 20	1224	238	476	155	253	160	261	164	267
29,000	- 16	- 22	1168	229	458	149	248	155	257	159	264
31,000	- 21	- 26	1062	211	422	135	233	144	247	149	257
33,000	- 25	- 30	960	193	386	—	—	130	234	139	249
35,000	- 29	- 34	881	179	358	—	—	—	—	126	235

RECOMMENDED CRUISE POWER

1800 RPM

ISA +30°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	51	45	2230	499	998	239	252	240	253	241	254
2000	47	41	2230	485	970	237	257	238	258	239	259
4000	43	37	2218	470	940	234	262	235	263	236	264
6000	40	33	2173	450	900	230	265	231	266	232	267
8000	36	29	2104	429	858	225	267	226	268	227	269
10,000	32	25	2017	406	812	219	268	220	269	221	271
12,000	28	21	1921	383	766	212	268	214	270	215	271
14,000	24	17	1816	360	720	205	268	207	270	208	272
16,000	20	13	1716	339	678	198	267	200	270	201	272
18,000	16	9	1620	318	636	191	266	193	269	195	271
20,000	12	5	1524	297	594	183	265	186	268	188	271
22,000	8	2	1428	279	558	176	262	178	266	181	269
24,000	4	- 2	1331	260	520	167	258	171	264	173	268
26,000	0	- 6	1237	243	486	158	253	162	260	166	265
28,000	- 4	-10	1147	226	452	148	246	153	255	158	262
29,000	- 7	-12	1102	218	436	141	240	148	251	153	259
31,000	- 9	-16	1004	201	402	124	219	137	240	143	252
33,000	-16	-20	893	183	366	—	—	119	218	132	241
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE POWER

1800 RPM

ISA +37°C

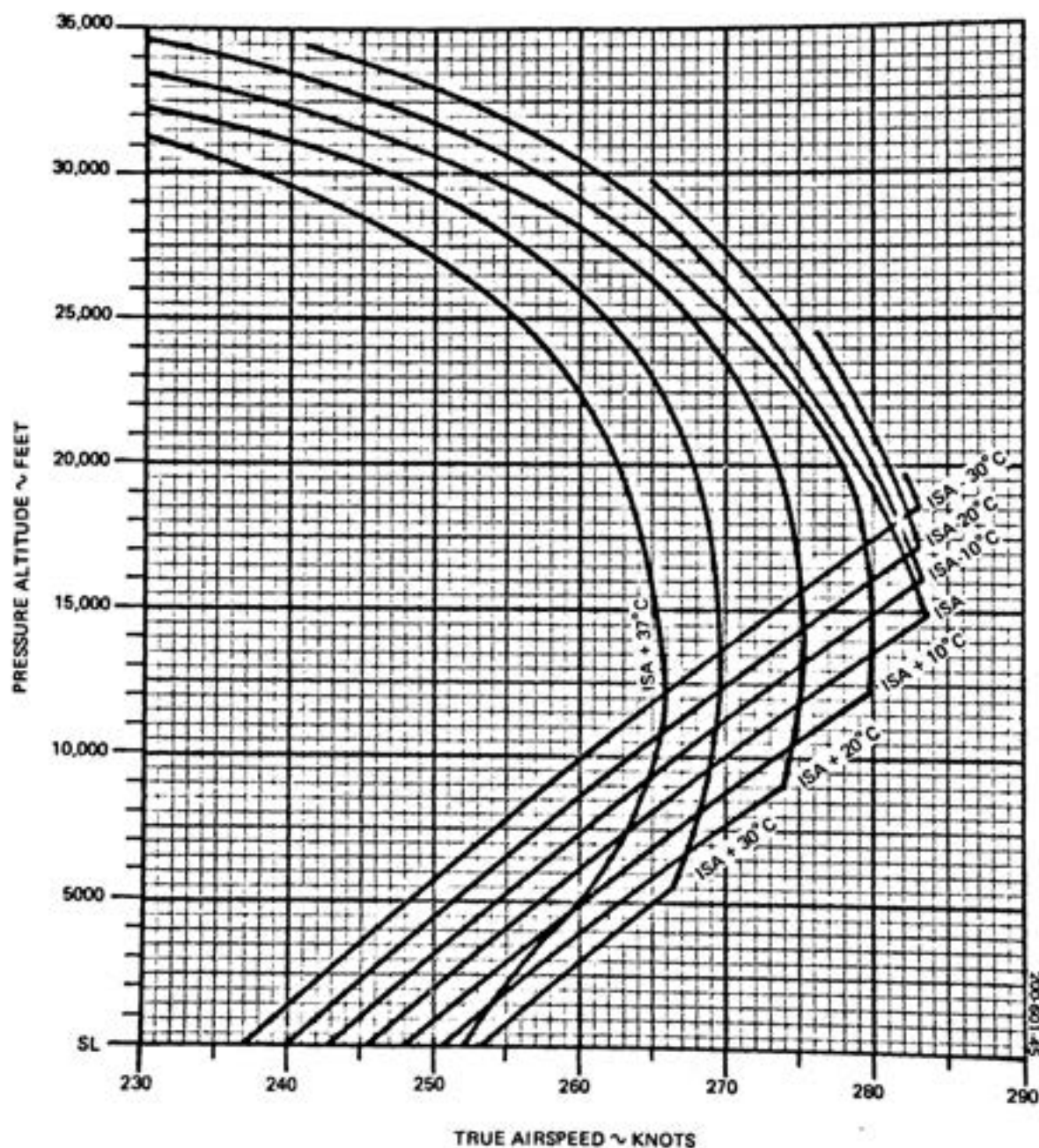
PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	58	52	2164	491	982	235	251	236	252	237	253
2000	54	48	2117	471	942	231	254	232	255	233	256
4000	50	44	2077	452	904	227	257	228	258	229	259
6000	46	40	2040	433	866	223	260	225	262	226	263
8000	43	36	1981	413	826	219	263	220	264	221	265
10,000	39	32	1903	391	782	213	264	214	265	215	267
12,000	35	28	1812	368	736	206	264	208	266	209	268
14,000	31	24	1712	346	692	199	263	201	266	203	268
16,000	27	20	1615	325	650	192	262	194	265	196	267
18,000	23	16	1522	305	610	185	261	187	264	189	267
20,000	19	12	1427	285	570	177	259	180	263	182	266
22,000	15	9	1340	267	534	169	256	172	261	175	265
24,000	11	5	1251	249	498	160	251	164	258	168	263
26,000	6	1	1162	232	464	151	245	156	253	160	260
28,000	2	- 3	1076	216	432	140	236	147	247	152	256
29,000	0	- 5	1033	208	416	133	228	141	243	147	253
31,000	- 2	- 9	943	192	384	—	—	129	231	138	245
33,000	- 8	-13	874	179	356	—	—	—	—	126	234
35,000	—	—	—	—	—	—	—	—	—	—	—

RECOMMENDED CRUISE SPEEDS

1800 RPM

WEIGHT 11,000 LBS

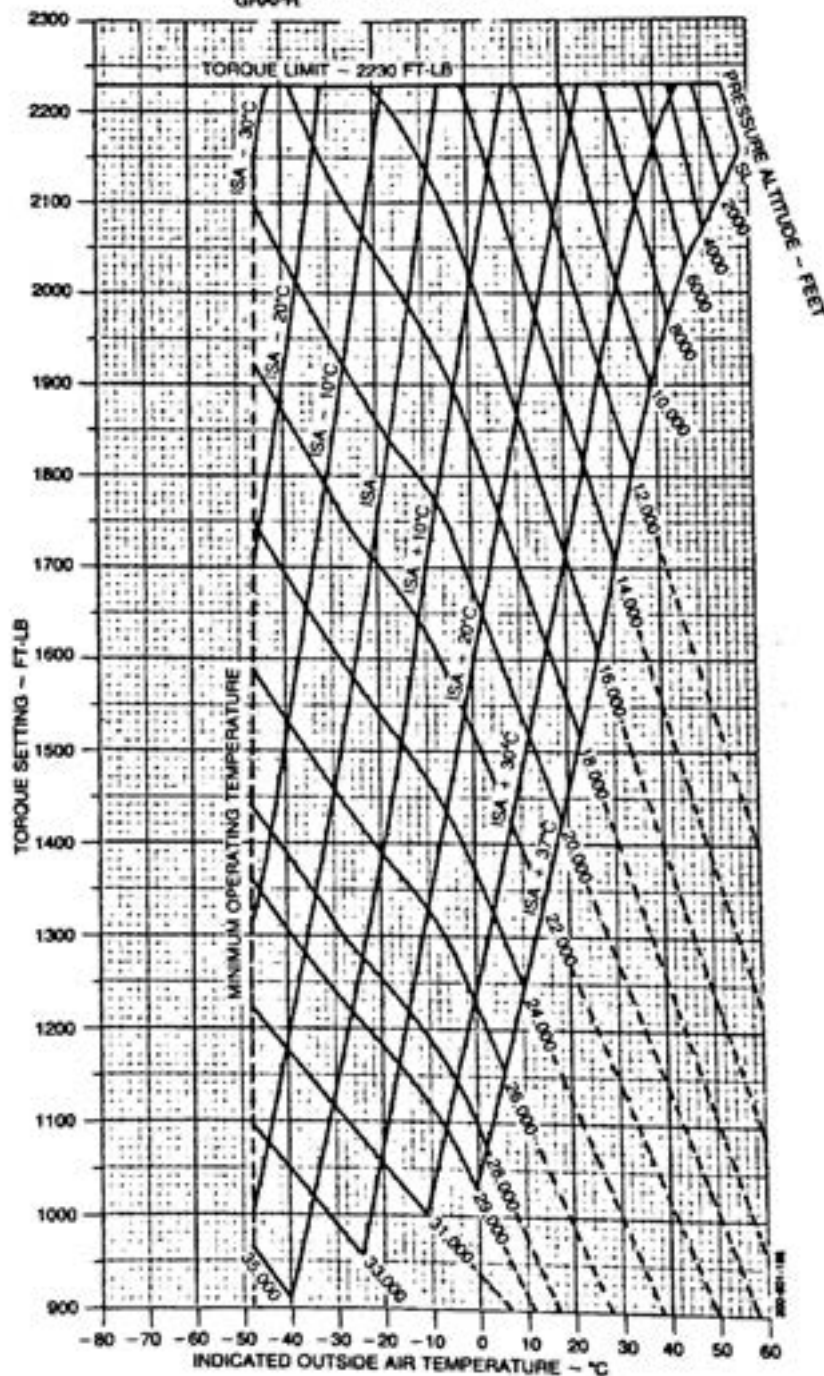
NOTE: FOR OPERATION WITH ICE VANES EXTENDED, TAS WILL BE
REDUCED BY APPROXIMATELY 25 KNOTS.



RECOMMENDED CRUISE POWER

1800 RPM

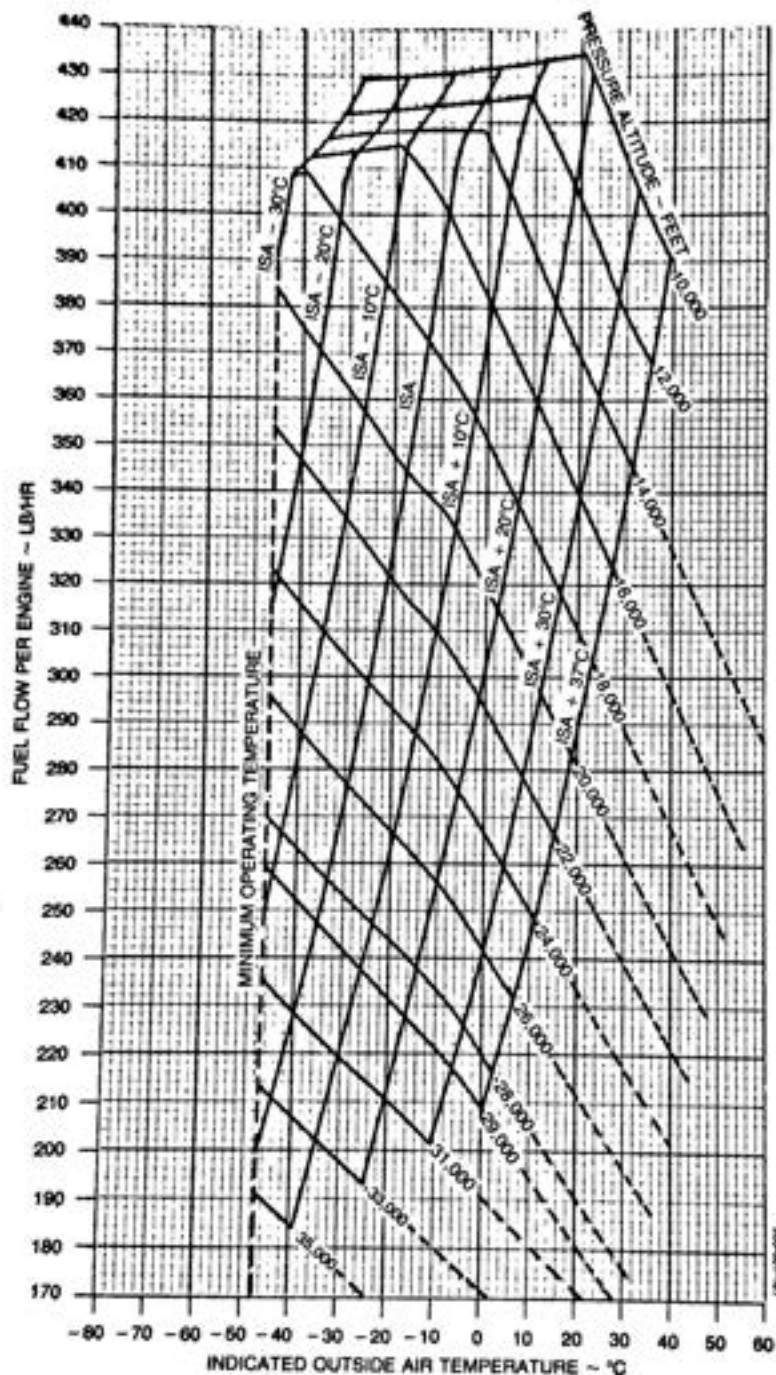
NOTE: FOR OPERATION WITH ICE VANES
EXTENDED, ADD 40°C TO THE
ACTUAL OAT BEFORE ENTERING
GRAPH.



FUEL FLOW AT RECOMMENDED CRUISE POWER

1800 RPM

NOTE: FOR OPERATION WITH ICE VANES
EXTENDED, ADD 30°C TO THE
ACTUAL OAT BEFORE ENTERING
GRAPH.



MAXIMUM CRUISE POWER

1900 RPM

ISA -30°C

PRESSURE ALTITUDE FEET	IOAT °C	OAT °C	TORQUE PER ENGINE FT-LBS	FUEL FLOW PER ENGINE LBS/HR	TOTAL FUEL FLOW LBS/HR	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
						IAS	TAS	IAS	TAS	IAS	TAS
SL	-10	-15	2230	500	1000	253	241	254	241	255	242
2000	-13	-19	2230	488	976	251	245	252	246	253	247
4000	-17	-23	2230	477	954	249	250	250	251	251	252
6000	-21	-27	2230	466	932	247	255	248	256	248	257
8000	-25	-31	2230	457	914	245	260	245	261	246	261
10,000	-28	-35	2230	449	898	242	265	243	266	244	263
12,000	-32	-39	2230	442	884	240	270	241	271	242	272
14,000	-36	-43	2230	437	874	238	275	239	277	240	278
16,000	-39	-47	2230	433	866	235	281	236	282	237	283
18,000	-43	-51	2226	429	858	233	286	234	288	235	289
20,000	—	—	—	—	—	—	—	—	—	—	—
22,000	—	—	—	—	—	—	—	—	—	—	—
24,000	—	—	—	—	—	—	—	—	—	—	—
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

MAXIMUM CRUISE POWER

1900 RPM

ISA -20°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	1	- 5	2230	503	1006	252	244	252	244	253	245
2000	3	- 9	2230	490	980	250	249	250	249	251	250
4000	- 7	-13	2230	478	956	247	253	248	254	249	255
6000	-11	-17	2230	467	934	245	258	246	259	246	260
8000	-14	-21	2230	459	918	243	263	244	264	244	265
10,000	-18	-25	2230	450	900	240	268	241	269	242	270
12,000	-22	-29	2230	443	886	238	274	239	275	240	276
14,000	-25	-33	2230	438	876	236	279	237	280	238	281
16,000	-29	-37	2230	435	870	233	285	234	286	235	287
18,000	-33	-41	2132	414	828	227	285	228	287	229	288
20,000	-37	-45	1982	385	770	218	284	220	285	221	287
22,000	-41	-48	1846	359	718	210	282	211	284	213	286
24,000	-45	-52	1709	334	668	201	279	203	281	205	284
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

MAXIMUM CRUISE POWER

1900 RPM

ISA -10°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	11	5	2230	505	1010	250	247	251	247	252	248
2000	7	1	2230	492	984	248	251	249	252	249	253
4000	3	- 3	2230	480	960	246	256	246	257	247	258
6000	- 1	- 7	2230	468	936	243	261	244	262	245	263
8000	- 4	-11	2230	458	916	241	266	242	267	243	268
10,000	- 8	-15	2230	450	900	239	272	240	273	240	274
12,000	-12	-19	2230	445	890	236	277	237	278	238	280
14,000	-16	-23	2230	440	880	234	283	235	284	236	285
16,000	-19	-27	2190	429	858	230	286	231	288	232	289
18,000	-23	-31	2042	400	800	221	285	223	286	224	288
20,000	-27	-35	1894	371	742	212	282	214	284	215	286
22,000	-31	-38	1765	346	692	204	280	206	283	207	285
24,000	-35	-42	1635	322	644	195	278	197	280	199	283
26,000	-39	-46	1510	298	596	186	274	189	277	191	280
28,000	-44	-50	1391	277	554	177	269	180	274	183	278
29,000	-46	-52	1333	266	532	172	266	175	271	178	276
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

MAXIMUM CRUISE POWER

1900 RPM

ISA

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	21	15	2230	508	1016	249	250	249	250	250	251
2000	17	11	2230	494	988	246	254	247	255	248	256
4000	13	7	2230	481	962	244	259	245	260	245	261
6000	10	3	2230	470	940	241	264	242	265	243	266
8000	6	- 1	2230	460	920	239	269	240	270	241	271
10,000	2	- 5	2230	452	904	237	275	238	276	239	277
12,000	- 1	- 9	2230	445	890	234	280	235	281	236	283
14,000	- 5	-13	2226	438	876	232	286	233	287	234	288
16,000	- 9	-17	2088	411	822	224	285	225	286	226	288
18,000	-13	-21	1952	385	770	216	283	217	285	218	287
20,000	-17	-25	1814	358	716	207	281	209	283	210	285
22,000	-21	-28	1688	334	668	199	279	201	281	202	284
24,000	-25	-32	1561	310	620	190	276	192	279	194	281
26,000	-29	-36	1440	287	574	180	271	183	275	186	279
28,000	-34	-40	1328	266	532	171	266	174	271	177	276
29,000	-36	-42	1273	256	512	166	263	170	269	173	274
31,000	-40	-46	1167	237	474	155	256	160	263	164	269
33,000	-44	-50	1065	218	436	143	245	149	256	154	263
35,000	—	—	—	—	—	—	—	—	—	—	—

MAXIMUM CRUISE POWER

1900 RPM

ISA +10°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	31	25	2230	511	1022	247	252	248	253	248	254
2000	27	21	2230	499	998	245	257	245	258	246	259
4000	23	17	2230	486	972	242	262	243	263	244	264
6000	20	13	2230	474	948	240	267	241	268	242	269
8000	16	9	2230	463	926	238	273	238	273	239	275
10,000	12	5	2230	454	908	236	278	236	279	237	280
12,000	9	1	2205	442	884	232	282	233	283	234	285
14,000	5	- 3	2085	415	830	224	282	226	284	227	285
16,000	1	- 7	1965	390	780	217	281	218	283	220	285
18,000	- 3	-11	1844	366	732	209	280	211	282	212	284
20,000	- 7	-15	1723	341	682	201	279	203	281	204	283
22,000	-11	-18	1603	319	638	193	276	195	279	197	282
24,000	-15	-22	1482	297	594	184	272	186	276	188	279
26,000	-20	-26	1369	276	552	174	268	177	273	180	277
28,000	-24	-30	1264	257	514	165	263	169	269	172	273
29,000	-26	-32	1211	247	494	160	259	164	266	167	271
31,000	-30	-36	1109	228	456	148	250	154	259	158	266
33,000	-35	-40	1011	210	420	135	236	143	251	149	260
35,000	-39	-44	911	192	384	—	—	130	236	138	251

MAXIMUM CRUISE POWER

1900 RPM

ISA + 20°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED ~ KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	41	35	2230	515	1030	246	255	246	256	247	256
2000	37	31	2230	501	1002	243	260	244	261	245	261
4000	34	27	2230	488	976	241	265	242	266	242	267
6000	30	23	2230	476	952	238	270	239	271	240	272
8000	26	19	2230	465	930	236	275	237	277	238	278
10,000	22	15	2145	442	884	230	277	231	278	232	279
12,000	18	11	2042	417	834	223	277	225	279	226	280
14,000	14	7	1935	393	786	216	277	218	279	219	281
16,000	11	3	1827	369	738	209	277	211	279	212	281
18,000	7	- 1	1719	346	692	202	276	204	278	205	280
20,000	2	- 5	1610	323	646	194	274	196	277	198	279
22,000	- 2	- 8	1505	303	606	186	272	188	275	190	278
24,000	- 6	-12	1399	283	566	177	268	180	273	183	276
26,000	-10	-16	1295	263	526	168	264	172	269	174	273
28,000	-14	-20	1192	244	488	158	257	162	264	166	270
29,000	-16	-22	1138	235	470	152	252	157	260	161	267
31,000	-20	-26	1039	217	434	140	241	147	253	152	261
33,000	-25	-30	946	200	400	121	218	135	242	142	254
35,000	-30	-34	843	181	362	—	—	117	218	131	243

MAXIMUM CRUISE POWER

1900 RPM

ISA +30°C

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	51	45	2230	518	1036	244	258	245	258	246	259
2000	47	41	2230	504	1008	241	262	242	263	243	264
4000	44	37	2182	483	966	237	265	238	266	239	267
6000	40	33	2136	462	924	233	268	234	270	235	271
8000	36	29	2065	440	880	228	270	229	272	230	273
10,000	32	25	1979	417	834	222	271	223	273	224	274
12,000	28	21	1883	394	788	215	272	216	274	218	275
14,000	24	17	1781	370	740	208	271	210	273	211	275
16,000	20	13	1681	348	696	201	271	203	273	204	275
18,000	16	9	1586	326	652	194	270	196	273	197	275
20,000	12	5	1489	305	610	186	268	188	271	190	274
22,000	8	2	1395	286	572	178	266	181	270	183	273
24,000	4	- 2	1301	267	534	170	262	173	267	176	271
26,000	0	- 6	1209	249	498	161	257	164	263	168	269
28,000	- 4	-10	1119	232	464	151	251	156	259	160	265
29,000	- 6	-12	1074	223	446	145	246	155	262	155	262
31,000	-11	-16	978	206	412	131	230	146	256	146	256
33,000	-15	-20	877	188	376	—	—	125	229	134	246
35,000	-19	-24	804	174	348	—	—	—	—	121	231

MAXIMUM CRUISE POWER

1900 RPM

ISA +37°C

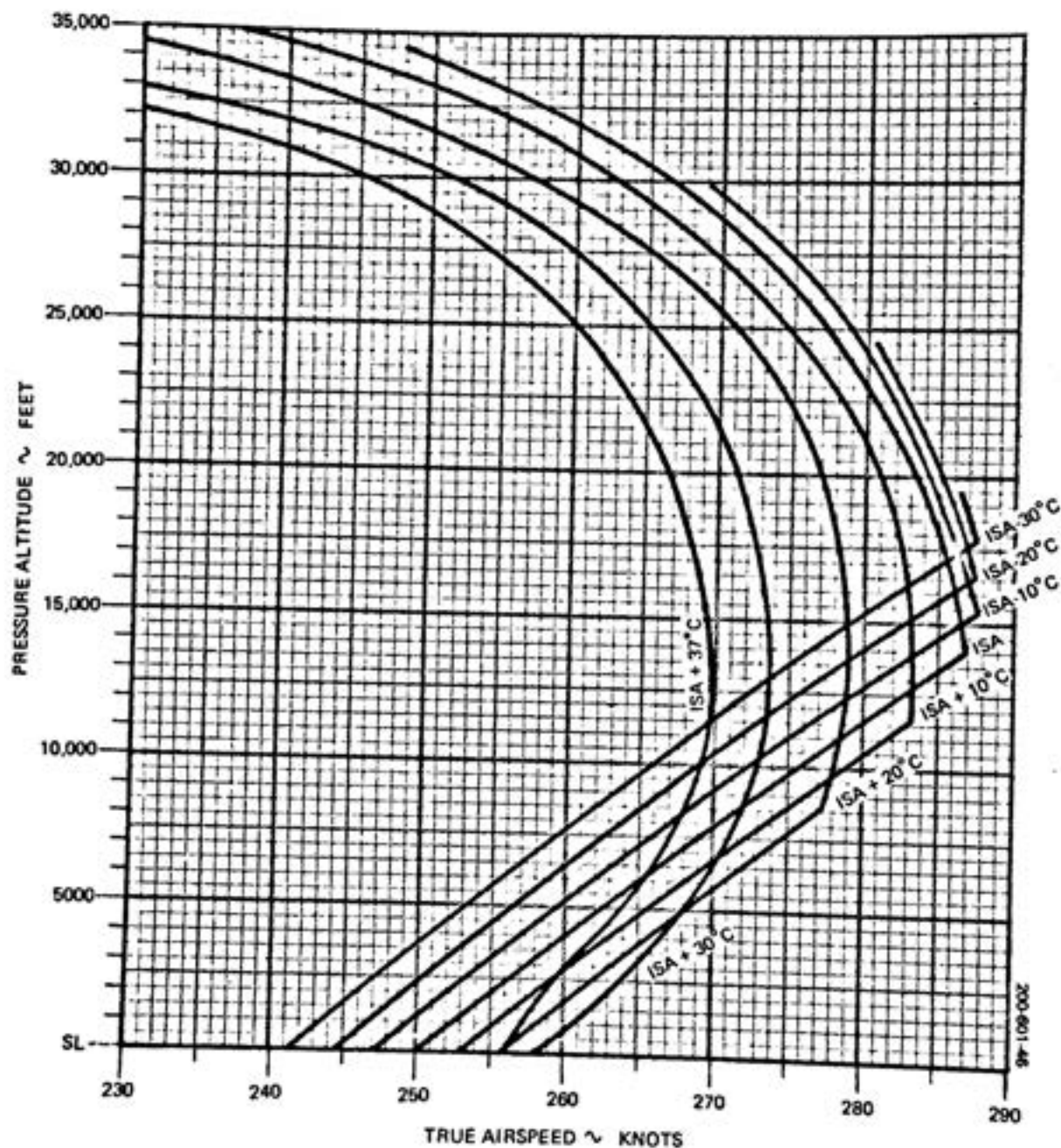
PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED -- KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	58	52	2134	506	1012	239	255	240	256	241	257
2000	54	48	2085	485	970	235	258	236	259	237	260
4000	50	44	2044	465	930	231	261	232	262	233	263
6000	47	40	2009	445	890	227	264	228	265	229	267
8000	43	36	1949	424	848	222	266	223	268	224	269
10,000	39	32	1870	401	802	216	268	217	269	218	271
12,000	35	28	1779	378	756	209	268	211	270	212	271
14,000	31	24	1681	355	710	202	267	204	269	205	271
16,000	27	20	1586	334	668	195	266	197	269	199	271
18,000	23	16	1493	313	626	188	265	190	268	192	271
20,000	19	12	1399	292	584	180	263	182	266	185	270
22,000	15	10	1313	274	548	172	260	175	265	178	268
24,000	11	6	1225	256	512	163	256	167	262	170	266
26,000	7	2	1139	238	476	154	251	159	258	162	264
28,000	2	- 2	1055	222	444	144	243	150	253	154	260
29,000	2	- 4	1013	214	428	138	237	149	249	150	257
31,000	- 2	- 8	927	198	396	119	213	134	238	142	251
33,000	- 9	-12	833	181	362	—	—	117	217	130	241
35,000	-14	-16	742	165	330	—	—	—	—	114	221

MAXIMUM CRUISE SPEEDS

1900 RPM

WEIGHT 11,000 LBS

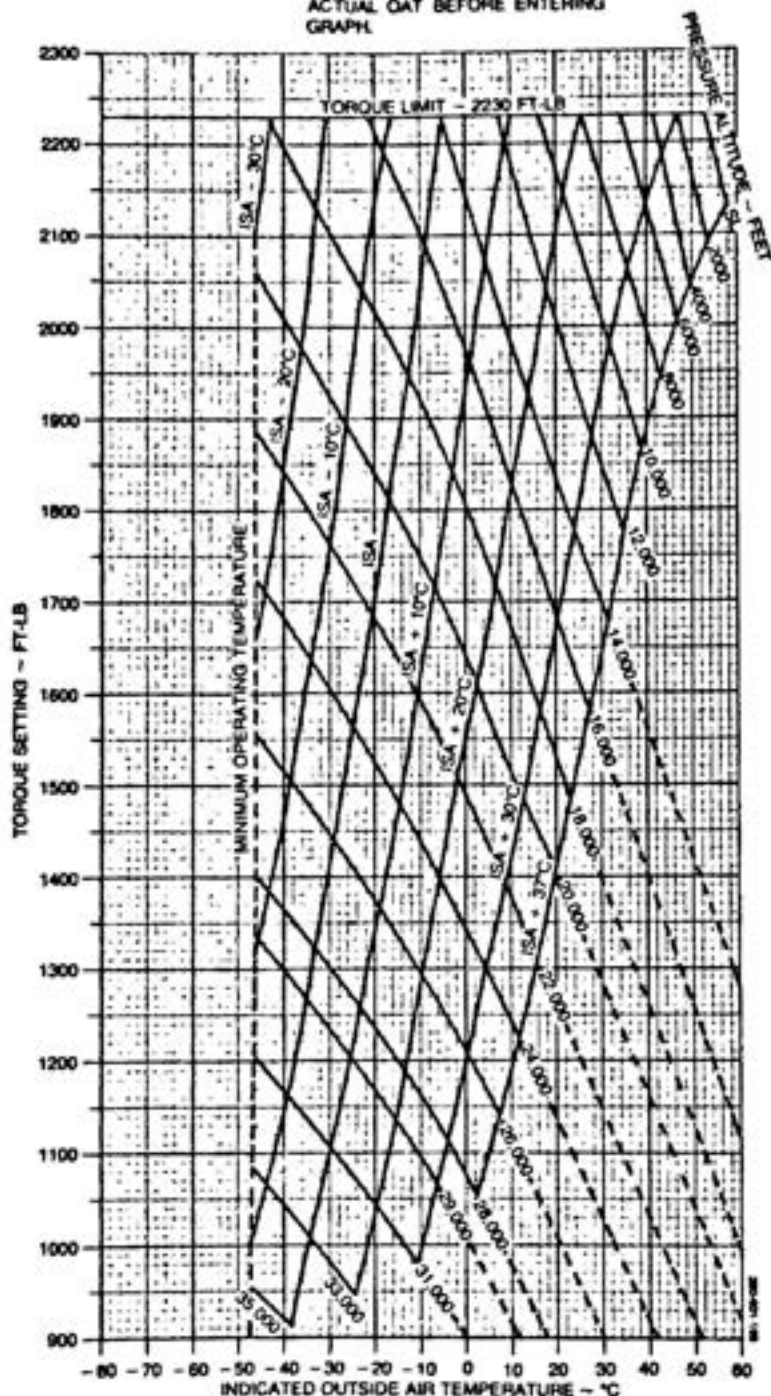
NOTE: FOR OPERATION WITH ICE VANES EXTENDED, TAS WILL BE
REDUCED BY APPROXIMATELY 25 KNOTS.



MAXIMUM CRUISE POWER

1900 RPM

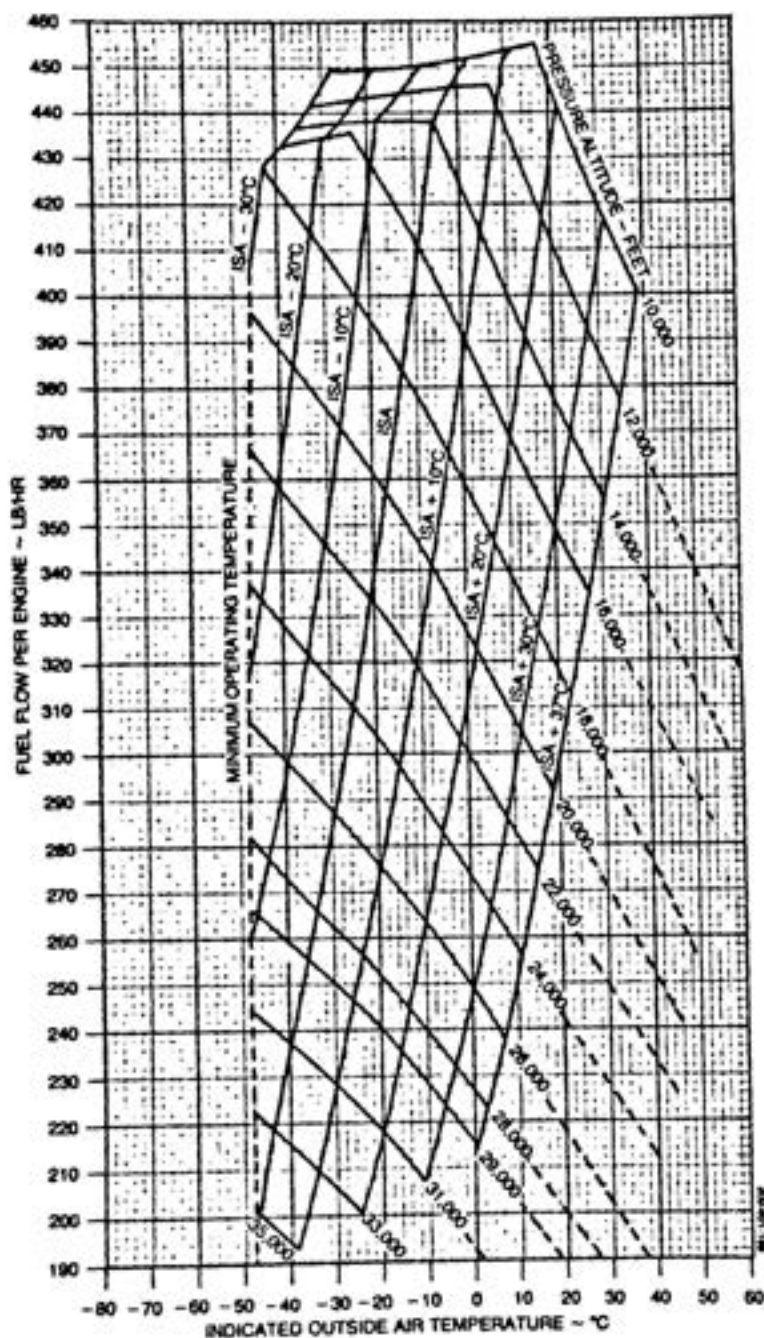
NOTE: FOR OPERATION WITH ICE VANES
EXTENDED, ADD 40°C TO THE
ACTUAL OAT BEFORE ENTERING
GRAPH.



FUEL FLOW AT MAXIMUM CRUISE POWER

1900 RPM

NOTE: FOR OPERATION WITH ICE VANES
EXTENDED, ADD 30°C TO THE
ACTUAL OAT BEFORE ENTERING
THE GRAPH.



MAXIMUM RANGE POWER

1700 RPM

ISA -30°C

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, MAINTAIN SAME POWER AS WITH ICE VANES RETRACTED.
FUEL FLOW WILL INCREASE APPROXIMATELY 15%.

WEIGHT--			12,000 POUNDS				11,000 POUNDS				10,000 POUNDS			
PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS
FEET	°C	°C	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR	KNOTS
SL	-11	-15	1556	387	774	211	1517	376	752	210	1465	366	732	208
2000	-15	-19	1476	362	724	212	1423	352	704	211	1360	342	684	209
4000	-20	-23	1407	339	678	213	1343	328	656	212	1276	321	642	210
6000	-23	-27	1345	317	634	215	1275	307	614	214	1205	300	600	212
8000	-27	-31	1294	297	594	216	1219	288	576	216	1145	281	562	213
10,000	-31	-35	1248	280	560	219	1170	271	542	218	1095	264	528	215
12,000	-35	-39	1210	265	530	221	1130	256	512	220	1053	249	498	216
14,000	-39	-43	1175	252	504	223	1095	244	488	221	1015	235	470	218
16,000	-43	-47	1150	240	480	226	1070	233	466	222	985	224	448	219
18,000	-47	-51	1130	231	462	230	1050	224	448	226	965	214	428	221
20,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-

MAXIMUM RANGE POWER

1700 RPM

ISA -20°C

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, MAINTAIN SAME POWER AS WITH ICE VANES RETRACTED.
FUEL FLOW WILL INCREASE APPROXIMATELY 15%.

WEIGHT →			12,000 POUNDS				11,000 POUNDS				10,000 POUNDS			
PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS
FEET	°C	°C	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR	KNOTS
SL	-1	-5	1485	383	766	193	1368	376	752	185	1282	362	724	177
2000	-6	-9	1420	359	718	198	1311	351	702	191	1225	340	680	183
4000	-9	-13	1362	336	672	200	1257	330	660	194	1174	317	634	188
6000	-13	-17	1315	316	632	202	1210	308	616	197	1128	297	594	190
8000	-17	-21	1267	297	594	203	1170	288	576	198	1086	278	556	193
10,000	-21	-25	1228	281	562	203	1133	272	544	199	1050	262	524	195
12,000	-25	-29	1195	267	534	204	1100	257	514	200	1019	247	494	197
14,000	-29	-33	1165	254	508	206	1074	244	488	202	992	234	468	198
16,000	-33	-37	1140	244	488	208	1051	233	466	204	970	223	446	199
18,000	-37	-41	1122	235	470	211	1033	224	448	206	952	213	426	201
20,000	-41	-45	1108	227	454	215	1020	216	432	209	940	206	412	204
22,000	-44	-48	1100	221	442	219	1012	209	418	214	930	199	398	210
24,000	-48	-52	1095	216	432	221	1010	203	406	219	929	193	386	214
26,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-

MAXIMUM RANGE POWER

1700 RPM

ISA -10°C

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, MAINTAIN SAME POWER AS WITH ICE VANES RETRACTED.
FUEL FLOW WILL INCREASE APPROXIMATELY 15%.

WEIGHT →		12,000 POUNDS				11,000 POUNDS				10,000 POUNDS			
PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL
FEET	°C	°C	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR
SL	8	5	1409	367	734	196	1335	358	716	183	1228	346	692
2000	4	1	1366	349	698	198	1292	335	670	191	1187	323	646
4000	1	-3	1327	332	664	201	1249	316	632	195	1150	304	608
6000	-3	-7	1290	314	628	203	1209	299	598	198	1115	286	572
8000	-7	-11	1255	297	594	204	1173	283	566	200	1083	271	542
10,000	-11	-15	1223	282	564	205	1140	269	538	201	1051	258	516
12,000	-15	-19	1195	269	538	207	1110	256	512	203	1025	246	492
14,000	-19	-23	1172	256	512	209	1085	244	488	205	1000	235	470
16,000	-23	-27	1150	246	492	212	1062	234	468	207	980	225	450
18,000	-27	-31	1133	237	474	215	1044	225	450	209	962	215	430
20,000	-30	-35	1119	228	456	217	1027	216	432	213	947	207	414
22,000	-34	-38	1113	222	444	219	1015	209	418	216	935	199	398
24,000	-38	-42	1101	215	430	220	1006	203	406	218	928	192	384
26,000	-42	-46	1099	210	420	221	1004	198	396	219	925	186	372
28,000	-46	-50	1100	207	414	224	1005	194	388	221	925	181	362
29,000	-48	-54	1103	206	412	227	1006	192	384	222	927	178	356
31,000	-	-	-	-	-	-	-	-	-	-	-	-	-
33,000	-	-	-	-	-	-	-	-	-	-	-	-	-
35,000	-	-	-	-	-	-	-	-	-	-	-	-	-

MAXIMUM RANGE POWER

1700 RPM

ISA

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, MAINTAIN SAME POWER AS WITH ICE VANES RETRACTED.
FUEL FLOW WILL INCREASE APPROXIMATELY 15%.

WEIGHT→		12,000 POUNDS				11,000 POUNDS				10,000 POUNDS			
PRESSURE ALTITUDE	IOAT	OAT °C	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL
FEET	°C	°C	FT-LB	LB/HR	LB/HR	KT	FT-LB	LB/HR	LB/HR	KT	FT-LB	LB/HR	LB/HR
SL	19	15	1417	374	748	201	1308	360	720	197	1204	347	694
2000	15	11	1304	344	688	198	1226	334	668	195	1157	326	652
4000	11	7	1252	323	646	199	1183	314	628	196	1120	306	612
6000	7	3	1223	306	612	200	1153	297	594	198	1088	289	578
8000	3	-1	1202	291	582	203	1125	282	564	200	1054	273	546
10,000	-1	-5	1178	276	552	204	1092	266	532	201	1015	256	512
12,000	-5	-9	1165	264	528	207	1068	252	504	202	984	242	484
14,000	-9	-13	1152	253	506	209	1050	241	482	204	959	229	458
16,000	-13	-17	1153	246	492	213	1060	234	468	209	959	221	442
18,000	-16	-21	1146	238	476	216	1071	228	456	213	978	216	432
20,000	-20	-25	1123	228	456	217	1059	220	440	216	986	210	420
22,000	-24	-28	1114	222	444	220	1026	210	420	216	980	203	406
24,000	-28	-32	1114	217	434	223	1005	202	404	217	949	194	388
26,000	-32	-36	1117	214	428	226	999	197	394	219	911	184	368
28,000	-36	-40	1121	212	424	230	1018	196	392	225	899	179	358
29,000	-38	-42	1140	214	428	234	1019	195	390	227	905	179	358
31,000	-41	-46	—	—	—	—	1033	195	390	232	918	178	356
33,000	-46	-50	—	—	—	—	—	—	—	—	926	177	354
35,000	—	—	—	—	—	—	—	—	—	—	—	—	—

MAXIMUM RANGE POWER

1700 RPM

ISA +10°C

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, MAINTAIN SAME POWER AS WITH ICE VANES RETRACTED.
FUEL FLOW WILL INCREASE APPROXIMATELY 15%.

WEIGHT--		12,000 POUNDS				11,000 POUNDS				10,000 POUNDS			
PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL
FEET	°C	°C	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR
SL	29	25	1583	395	790	213	1510	386	772	210	1431	377	754
2000	25	21	1486	369	738	211	1398	358	716	208	1252	341	682
4000	21	17	1388	342	684	209	1228	323	646	201	1116	309	618
6000	17	13	1264	313	626	205	1148	299	598	199	1066	288	576
8000	13	9	1213	295	590	205	1107	281	562	200	1030	271	542
10,000	9	5	1185	279	558	206	1076	265	530	201	999	256	512
12,000	5	1	1172	267	534	209	1059	253	506	203	972	242	484
14,000	1	-3	1165	257	514	212	1044	241	482	205	949	229	458
16,000	-3	-7	1171	249	498	216	1049	234	468	209	947	221	442
18,000	-6	-11	1177	242	484	221	1062	227	454	214	967	215	430
20,000	-10	-15	1172	234	468	224	1055	219	438	217	972	208	416
22,000	-14	-18	1159	228	456	226	1063	215	430	222	956	201	402
24,000	-18	-22	1122	219	438	226	1055	210	420	224	944	195	390
26,000	-22	-26	1131	217	434	230	1033	203	406	225	949	191	382
28,000	-26	-30	1175	221	442	239	1029	199	398	228	940	186	372
29,000	-27	-34	1180	221	442	241	1047	200	400	232	934	184	368
31,000	-31	-38	—	—	—	—	1069	202	404	239	939	182	364
33,000	-35	-42	—	—	—	—	—	—	—	—	959	183	366
35,000	—	—	—	—	—	—	—	—	—	—	—	—	—

MAXIMUM RANGE POWER

1700 RPM

ISA + 30°C

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, MAINTAIN SAME POWER AS WITH ICE VANES RETRACTED.
FUEL FLOW WILL INCREASE APPROXIMATELY 15%.

WEIGHT →		12,000 POUNDS					11,000 POUNDS					10,000 POUNDS				
PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW TOTAL
FEET	°C	°C	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR
SL	49	45	1520	392	784	211	1420	377	754	207	1353	369	738	205	1353	369
2000	45	41	1468	370	740	214	1373	358	716	210	1307	350	700	208	1307	350
4000	41	37	1420	350	700	216	1327	339	678	212	1264	330	660	210	1264	330
6000	37	33	1375	330	660	218	1285	322	644	214	1221	313	626	212	1221	313
8000	34	29	1335	312	624	219	1245	304	608	216	1156	295	590	213	1156	295
10,000	30	25	1299	296	592	220	1210	288	576	217	1145	279	558	214	1145	279
12,000	26	21	1267	282	564	221	1180	273	546	218	1111	263	528	215	1111	263
14,000	22	17	1240	269	538	222	1150	260	520	219	1081	249	498	216	1081	249
16,000	18	13	1215	258	516	223	1127	247	494	220	1055	236	472	217	1055	236
18,000	14	9	1195	249	498	225	1109	237	474	221	1033	225	450	218	1033	225
20,000	10	5	1180	241	482	229	1091	228	456	224	1014	216	432	219	1014	216
22,000	6	2	1170	234	468	233	1078	220	440	228	997	207	414	222	997	207
24,000	2	- 2	1165	228	456	236	1069	214	428	232	985	201	402	227	985	201
26,000	- 1	- 6	1165	223	446	239	1064	209	418	235	977	196	392	231	977	196
28,000	- 5	- 10	1170	220	440	241	1065	206	412	238	973	192	384	235	973	192
29,000	- 7	- 12	1175	219	438	241	1065	205	410	239	972	190	380	237	972	190
31,000	- 11	- 16	1190	217	434	241	1077	205	410	240	975	189	378	239	975	189
33,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

MAXIMUM RANGE POWER

1700 RPM

ISA +37°C

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, MAINTAIN SAME POWER AS WITH ICE VANES RETRACTED.
FUEL FLOW WILL INCREASE APPROXIMATELY 15%.

WEIGHT →			12,000 POUNDS				11,000 POUNDS				10,000 POUNDS			
PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENG	FUEL FLOW	TAS	TORQUE PER ENG	FUEL FLOW	TAS	TORQUE PER ENG	FUEL FLOW	TAS	TORQUE PER ENG	FUEL FLOW	TAS
FEET	°C	°C	FT-LB	LB/HR	KNOTS	FT-LB	LB/HR	KNOTS	FT-LB	LB/HR	KNOTS	FT-LB	LB/HR	KNOTS
SL	56	52	1470	397	211	1400	380	210	1344	370	208	1344	370	208
2000	52	48	1430	374	212	1355	360	211	1300	350	209	1300	350	209
4000	48	44	1390	352	213	1315	340	212	1258	331	210	1258	331	210
6000	44	40	1355	332	215	1279	321	214	1219	313	212	1219	313	212
8000	40	36	1323	313	217	1244	304	216	1180	295	213	1180	295	213
10,000	37	32	1295	297	218	1212	287	218	1145	279	215	1145	279	215
12,000	33	28	1269	284	221	1185	273	219	1115	264	216	1115	264	216
14,000	29	24	1245	271	224	1160	260	221	1087	250	218	1087	250	218
16,000	25	20	1227	261	227	1139	249	222	1063	238	219	1063	238	219
18,000	21	16	1212	252	230	1120	239	224	1041	227	221	1041	227	221
20,000	17	12	1200	245	233	1107	231	227	1025	219	222	1025	219	222
22,000	13	9	1192	238	236	1097	224	231	1010	211	225	1010	211	225
24,000	10	5	1189	233	240	1090	218	235	1000	205	227	1000	205	227
26,000	6	1	1190	229	245	1092	213	238	993	200	232	993	200	232
28,000	2	-3	1195	226	250	1090	210	241	991	197	235	991	197	235
29,000	-2	-5	1200	225	253	1095	208	242	993	196	236	993	196	236
31,000	-4	-9	1216	224	260	1104	206	243	998	196	239	998	196	239
33,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-

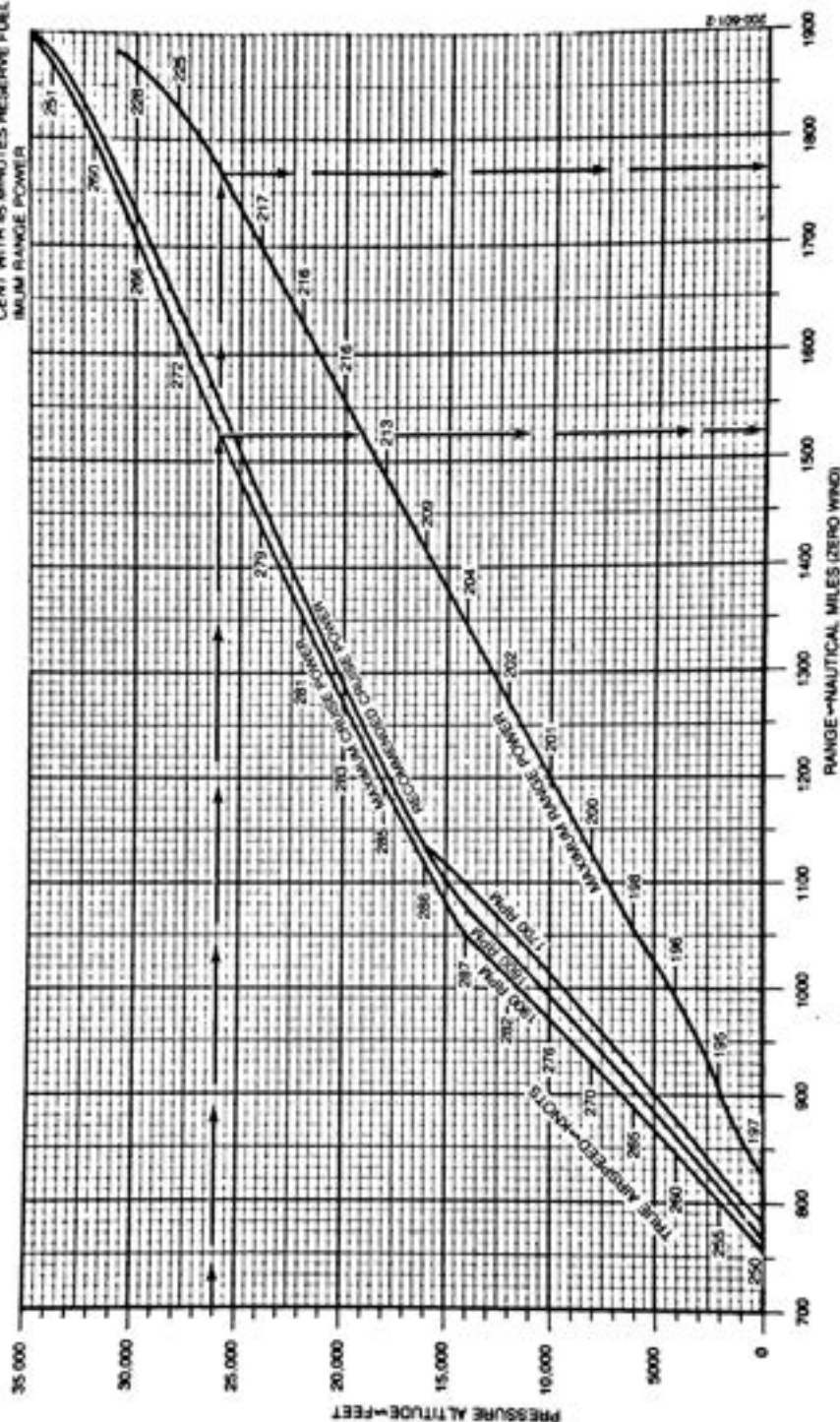
RANGE PROFILE — FULL MAIN AND AUX TANKS STANDARD DAY

ASSOCIATED CONDITIONS:

WEIGHT 12,500 LBS BEFORE ENGINE START
FUEL AVIATION KEROSENE
FUEL DENSITY 6.7 LBS/GAL
ICE VANES RETRACTED

EXAMPLE:

PRESSURE ALTITUDE 20,000 FT
RANGE @ MAX CRUISE POWER 1535 N.M.
RANGE @ MAX RANGE POWER 1770 N.M.
NOTE: RANGE INCLUDES START TAXI, CLIMB AND DESCENT WITH 45 MINUTES RESERVE FUEL AT MAXIMUM RANGE POWER



ENDURANCE PROFILE — FULL MAIN AND AUX TANKS

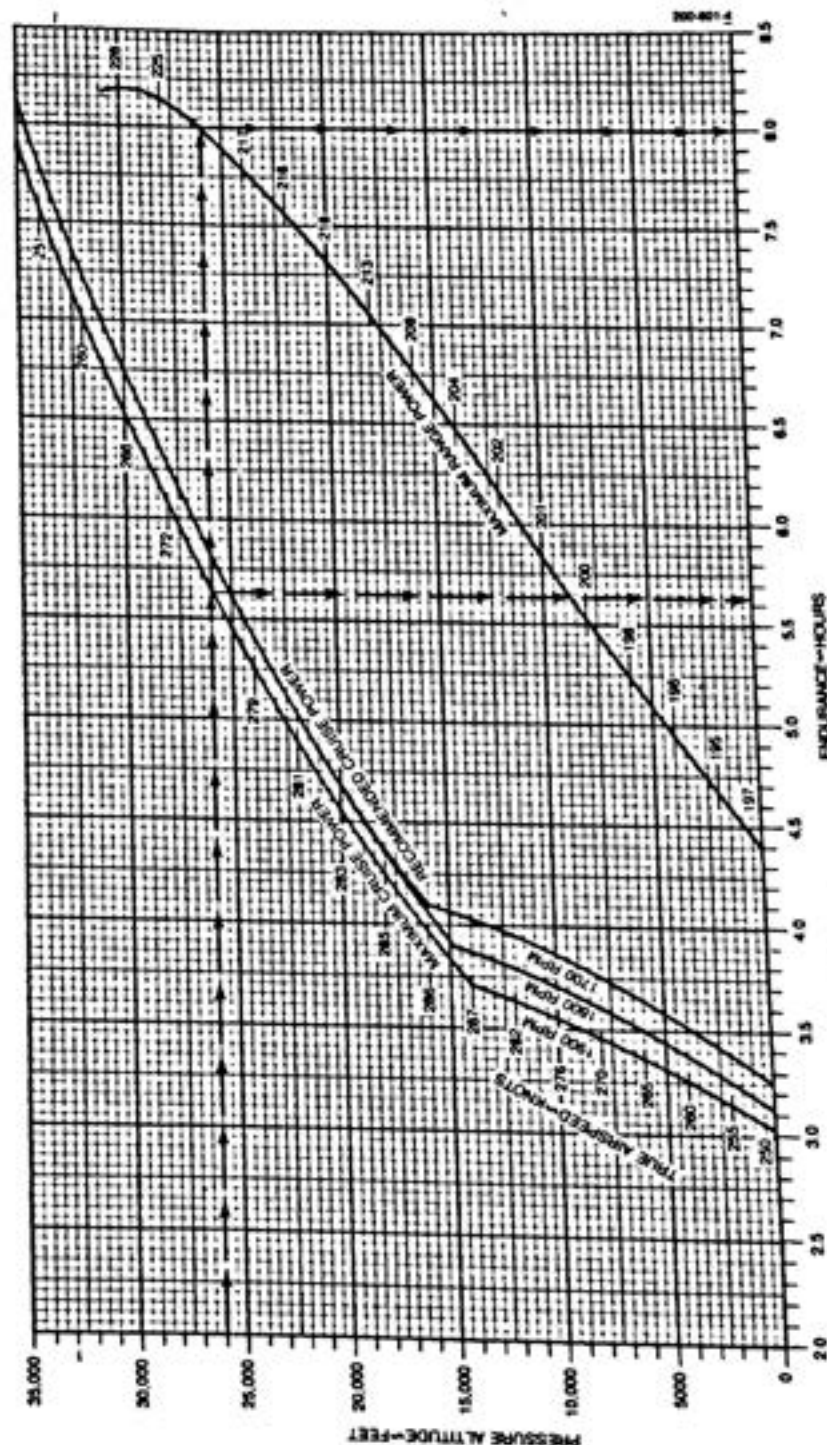
EXAMPLE
PRESSURE ALTITUDE 26,000 FT
ENDURANCE @ MAX CRUISE POWER 5.63 HRS
ENDURANCE @ MAX RANGE POWER 8.0 HRS

STANDARD DAY

ASSOCIATED CONDITIONS:
WEIGHT
FUEL
FUEL DENSITY
ICE VANES
RETRACTED

12,500 LBS BEFORE ENGINE START
AVIATION KEROSENE
6.7 LBS/GAL
RETRACTED

NOTE: ENDURANCE INCLUDES START, TAXI CLIMB AND DESCENT WITH
45 MINUTES RESERVE FUEL AT MAXIMUM RANGE POWER.

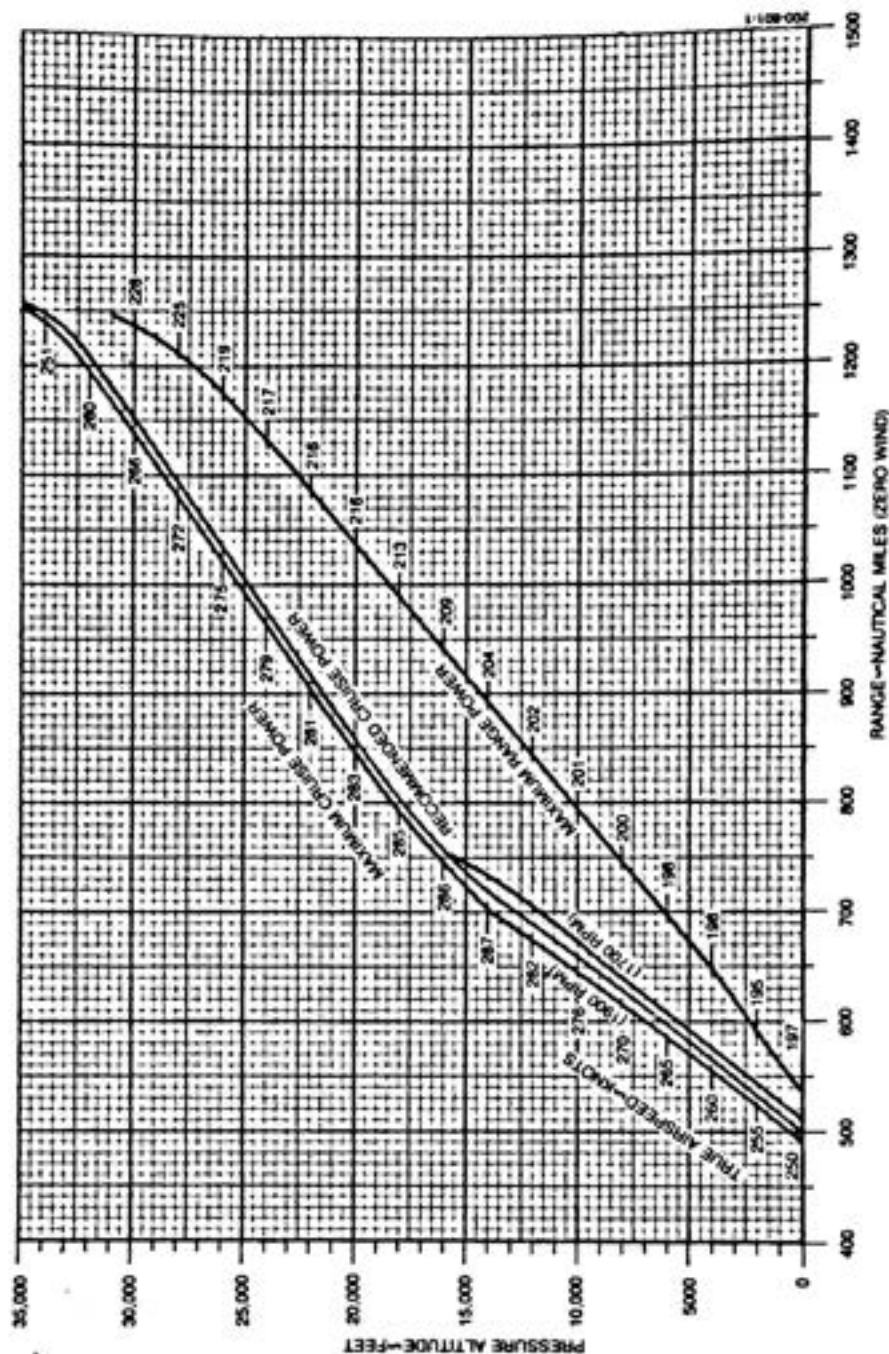


RANGE PROFILE — FULL MAIN TANKS STANDARD DAY

ASSOCIATED CONDITIONS:

WEIGHT 12,500 LBS BEFORE ENGINE START
FUEL AVIATION KEROSENE
FUEL DENSITY 6.7 LB/GAL
ICE VANES RETRACTED

NOTE: RANGE INCLUDES START, TAXI, CLIMB AND DESCENT WITH 45 MINUTES RESERVE FUEL AT MAXIMUM RANGE POWER

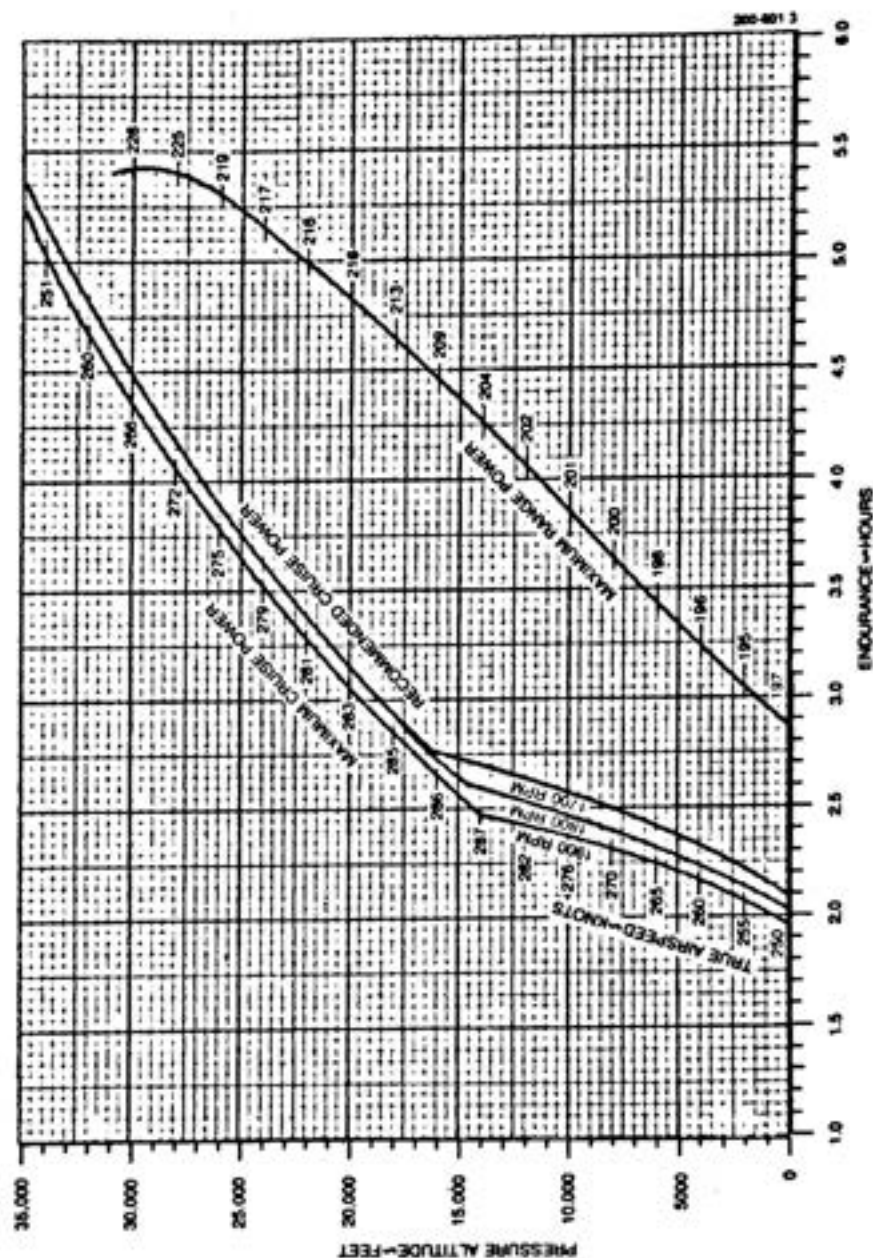


ENDURANCE PROFILE — FULL MAIN TANKS STANDARD DAY

ASSOCIATED CONDITIONS

WEIGHT 12,500 LBS BEFORE ENGINE START
FUEL AVIATION KEROSENE
FUEL DENSITY 6.7 LBS/GAL
ICE VANES RETRACTED

NOTE: ENDURANCE INCLUDES START, TAXI CLIMB AND DESCENT WITH 45 MINUTES RESERVE FUEL AT MAXIMUM RANGE POWER



ONE ENGINE INOPERATIVE MAXIMUM CRUISE POWER

1900 RPM

ISA -30°C

NOTE: FOR OPERATION WITH ICE VANE EXTENDED, DECREASE FUEL FLOW AND TAS BY 7%.

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	-12	-15	2230	512	512	191	182	193	183	194	185
2000	-16	-19	2230	500	500	189	185	191	187	192	188
4000	-20	-23	2230	488	488	186	188	188	190	190	191
6000	-23	-27	2230	477	477	184	191	186	193	188	195
8000	-27	-31	2230	467	467	182	194	184	196	186	198
10,000	-31	-35	2230	458	458	179	197	182	199	184	202
12,000	-35	-39	2230	452	452	177	200	179	203	181	205
14,000	-39	-43	2230	448	448	174	203	177	206	179	209
16,000	-43	-47	2151	431	431	168	202	171	206	174	209
18,000	-47	-51	2001	401	401	159	198	163	203	167	207
20,000	—	—	—	—	—	—	—	—	—	—	—
22,000	—	—	—	—	—	—	—	—	—	—	—
24,000	—	—	—	—	—	—	—	—	—	—	—
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

ONE ENGINE INOPERATIVE
MAXIMUM CRUISE POWER

1900 RPM

ISA -20°C

NOTE: FOR OPERATION WITH ICE VANE EXTENDED, DECREASE FUEL FLOW AND TAS BY 7%.

PRESSURE ALTITUDE FEET	IOAT °C	OAT °C	TORQUE PER ENGINE FT-LBS	FUEL FLOW PER ENGINE LBS/HR	TOTAL FUEL FLOW LBS/HR	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
						IAS	TAS	IAS	TAS	IAS	TAS
SL	- 2	- 5	2230	515	515	189	184	191	185	193	187
2000	- 6	- 9	2230	501	501	187	187	189	189	191	190
4000	-10	-13	2230	489	489	185	190	187	192	189	194
6000	-13	-17	2230	478	478	182	193	184	195	186	197
8000	-17	-21	2230	467	467	180	196	182	198	184	200
10,000	-21	-25	2230	460	460	177	199	180	202	182	204
12,000	-25	-29	2230	454	454	175	202	177	205	180	207
14,000	-29	-33	2209	445	445	171	203	174	207	177	210
16,000	-33	-37	2060	416	416	162	199	166	204	169	208
18,000	-37	-41	1917	387	387	153	195	158	201	162	205
20,000	-41	-45	1777	360	360	143	188	149	196	154	202
22,000	-45	-48	1648	335	335	130	177	139	189	145	197
24,000	—	—	—	—	—	—	—	—	—	—	—
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

ONE ENGINE INOPERATIVE MAXIMUM CRUISE POWER

1900 RPM

ISA -10°C

NOTE: FOR OPERATION WITH ICE VANE EXTENDED, DECREASE FUEL FLOW AND TAS BY 7%.

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	8	5	2230	517	517	188	185	190	187	192	189
2000	4	1	2230	503	503	185	188	188	191	189	192
4000	1	-3	2230	490	490	183	191	185	194	187	196
6000	-3	-7	2230	479	479	181	195	183	197	185	199
8000	-7	-11	2230	469	469	178	198	181	200	183	203
10,000	-11	-15	2230	461	461	175	201	178	204	180	206
12,000	-15	-19	2230	455	455	173	204	175	207	178	209
14,000	-19	-23	2118	430	430	165	201	169	205	172	209
16,000	-23	-27	1971	401	401	157	197	161	202	164	206
18,000	-27	-31	1834	374	374	147	191	153	198	157	203
20,000	-31	-35	1698	347	347	135	182	143	192	148	199
22,000	—	—	—	—	—	—	—	—	—	—	—
24,000	—	—	—	—	—	—	—	—	—	—	—
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

ONE ENGINE INOPERATIVE MAXIMUM CRUISE POWER

1900 RPM

ISA

NOTE: FOR OPERATION WITH ICE VANE EXTENDED, DECREASE FUEL FLOW AND TAS BY 7%.

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	18	15	2230	522	522	186	187	188	189	190	191
2000	14	11	2230	508	508	184	190	186	192	188	194
4000	11	7	2230	494	494	181	193	184	196	186	198
6000	7	3	2230	482	482	179	196	181	199	184	201
8000	3	- 1	2230	472	472	176	200	179	202	181	205
10,000	- 1	- 5	2230	462	462	174	202	176	205	179	208
12,000	- 5	- 9	2173	445	445	168	203	172	206	174	210
14,000	- 9	-13	2036	416	416	160	199	164	204	167	208
16,000	-13	-17	1897	388	388	151	194	156	200	160	205
18,000	-17	-21	1761	361	361	141	187	147	195	152	201
20,000	—	—	—	—	—	—	—	—	—	—	—
22,000	—	—	—	—	—	—	—	—	—	—	—
24,000	—	—	—	—	—	—	—	—	—	—	—
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

ONE ENGINE INOPERATIVE MAXIMUM CRUISE POWER

1900 RPM

ISA +10°C

NOTE: FOR OPERATION WITH ICE VANE EXTENDED, DECREASE FUEL FLOW AND TAS BY 7%.

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED ~ KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	28	25	2230	525	525	185	189	187	191	189	193
2000	25	21	2230	511	511	182	192	185	194	187	196
4000	21	17	2230	497	497	180	195	182	198	184	200
6000	17	13	2230	485	485	177	198	180	201	182	203
8000	13	9	2230	474	474	175	201	177	204	180	207
10,000	9	5	2135	449	449	168	200	172	204	174	207
12,000	5	1	2019	422	422	161	197	165	202	168	206
14,000	1	- 3	1902	396	396	153	194	158	199	161	204
16,000	- 3	- 7	1787	371	371	144	188	150	196	154	201
18,000	- 7	-11	1673	347	347	133	179	141	191	147	198
20,000	—	—	—	—	—	—	—	—	—	—	—
22,000	—	—	—	—	—	—	—	—	—	—	—
24,000	—	—	—	—	—	—	—	—	—	—	—
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

ONE ENGINE INOPERATIVE MAXIMUM CRUISE POWER

1900 RPM

ISA +20°C

NOTE: FOR OPERATION WITH ICE VANE EXTENDED, DECREASE FUEL FLOW AND TAS BY 7%.

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED ~ KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	33	35	2230	529	529	183	191	186	193	187	195
2000	35	31	2230	514	514	181	194	183	196	185	198
4000	31	27	2226	499	499	178	196	181	199	183	202
6000	27	23	2161	476	476	173	197	176	200	179	203
8000	23	19	2074	451	451	167	196	171	200	173	203
10,000	19	15	1973	425	425	160	194	164	199	167	202
12,000	15	11	1867	400	400	153	191	157	196	161	201
14,000	11	7	1764	375	375	144	186	150	193	154	199
16,000	7	3	1661	352	352	134	179	142	189	147	196
18,000	2	- 1	1556	329	329	—	—	132	183	139	192
20,000	—	—	—	—	—	—	—	—	—	—	—
22,000	—	—	—	—	—	—	—	—	—	—	—
24,000	—	—	—	—	—	—	—	—	—	—	—
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

ONE ENGINE INOPERATIVE MAXIMUM CRUISE POWER

1900 RPM

ISA +30°C

NOTE: FOR OPERATION WITH ICE VANE EXTENDED, DECREASE FUEL FLOW AND TAS BY 7%.

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED - KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	48	45	2129	517	517	178	188	181	191	183	193
2000	44	41	2087	496	496	174	190	177	193	179	195
4000	41	37	2047	475	475	170	191	173	194	176	197
6000	37	33	1995	453	453	165	191	169	195	171	198
8000	33	29	1918	429	429	159	190	163	195	166	198
10,000	29	25	1825	404	404	152	187	157	193	160	197
12,000	25	21	1726	379	379	144	183	150	190	154	196
14,000	20	17	1625	355	355	134	176	142	186	147	193
16,000	16	13	1528	333	333	—	—	133	180	140	189
18,000	—	—	—	—	—	—	—	—	—	—	—
20,000	—	—	—	—	—	—	—	—	—	—	—
22,000	—	—	—	—	—	—	—	—	—	—	—
24,000	—	—	—	—	—	—	—	—	—	—	—
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

ONE ENGINE INOPERATIVE
MAXIMUM CRUISE POWER**1900 RPM**

ISA +37°C

NOTE: FOR OPERATION WITH ICE VANE EXTENDED, DECREASE FUEL FLOW AND TAS BY 7%.

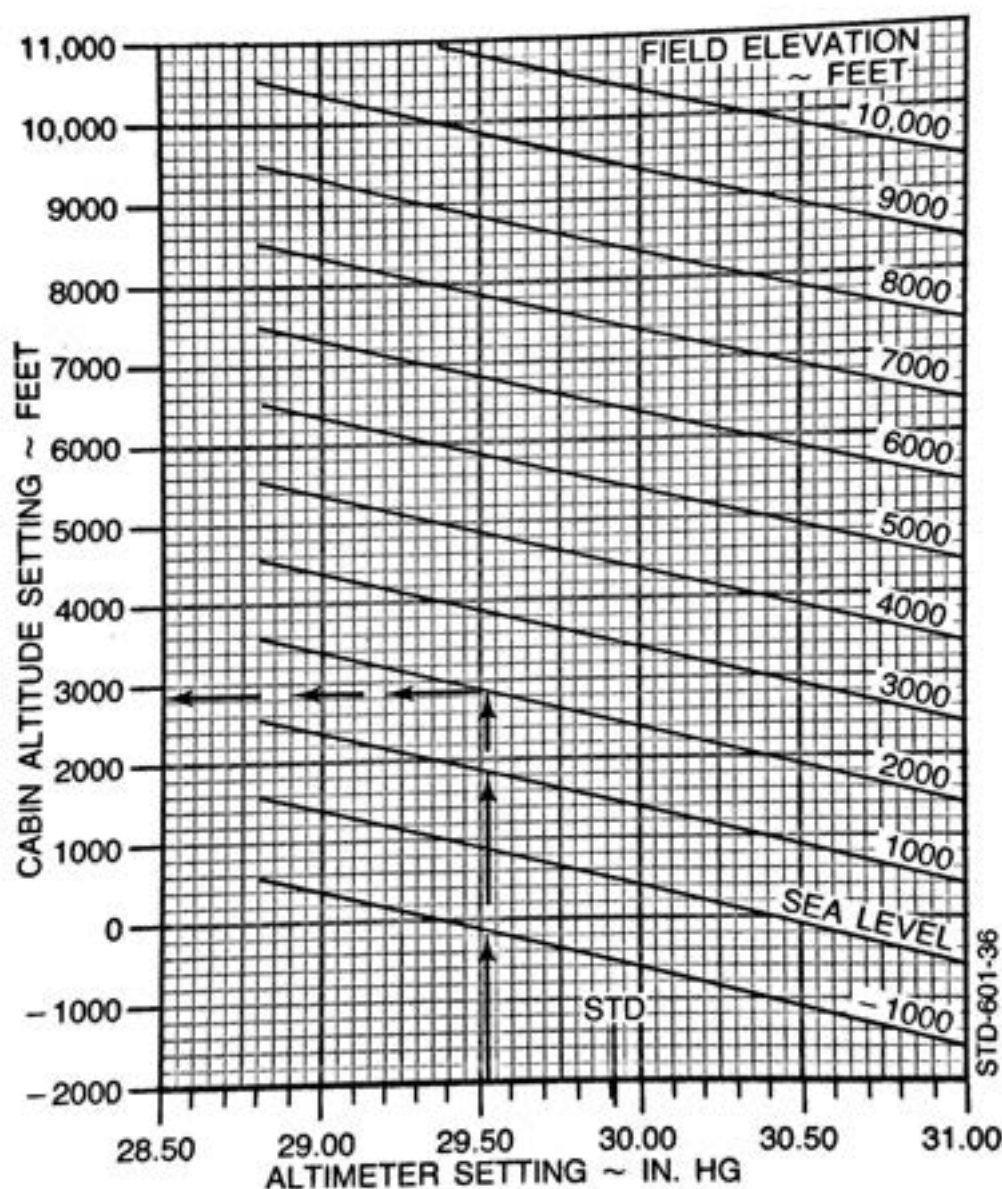
PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED ~ KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	55	52	1985	497	497	172	184	175	187	177	189
2000	51	48	1951	477	477	168	185	171	188	174	191
4000	47	44	1917	457	457	164	186	167	190	170	193
6000	43	40	1876	437	437	159	186	163	191	166	194
8000	40	36	1808	414	414	153	185	158	190	161	194
10,000	35	32	1724	390	390	146	182	151	188	155	193
12,000	31	28	1630	366	366	137	176	144	185	149	191
14,000	27	24	1534	342	342	124	165	135	180	142	188
16,000	23	20	1439	320	320	—	—	125	171	134	184
18,000	—	—	—	—	—	—	—	—	—	—	—
20,000	—	—	—	—	—	—	—	—	—	—	—
22,000	—	—	—	—	—	—	—	—	—	—	—
24,000	—	—	—	—	—	—	—	—	—	—	—
26,000	—	—	—	—	—	—	—	—	—	—	—
28,000	—	—	—	—	—	—	—	—	—	—	—
29,000	—	—	—	—	—	—	—	—	—	—	—
31,000	—	—	—	—	—	—	—	—	—	—	—
33,000	—	—	—	—	—	—	—	—	—	—	—
35,000	—	—	—	—	—	—	—	—	—	—	—

PRESSURIZATION CONTROLLER SETTING FOR LANDING

EXAMPLE

ALTIMETER SETTING 29.52 IN. HG
LANDING FIELD ELEVATION ... 2000 FT

CABIN ALTITUDE SETTING 2885 FT



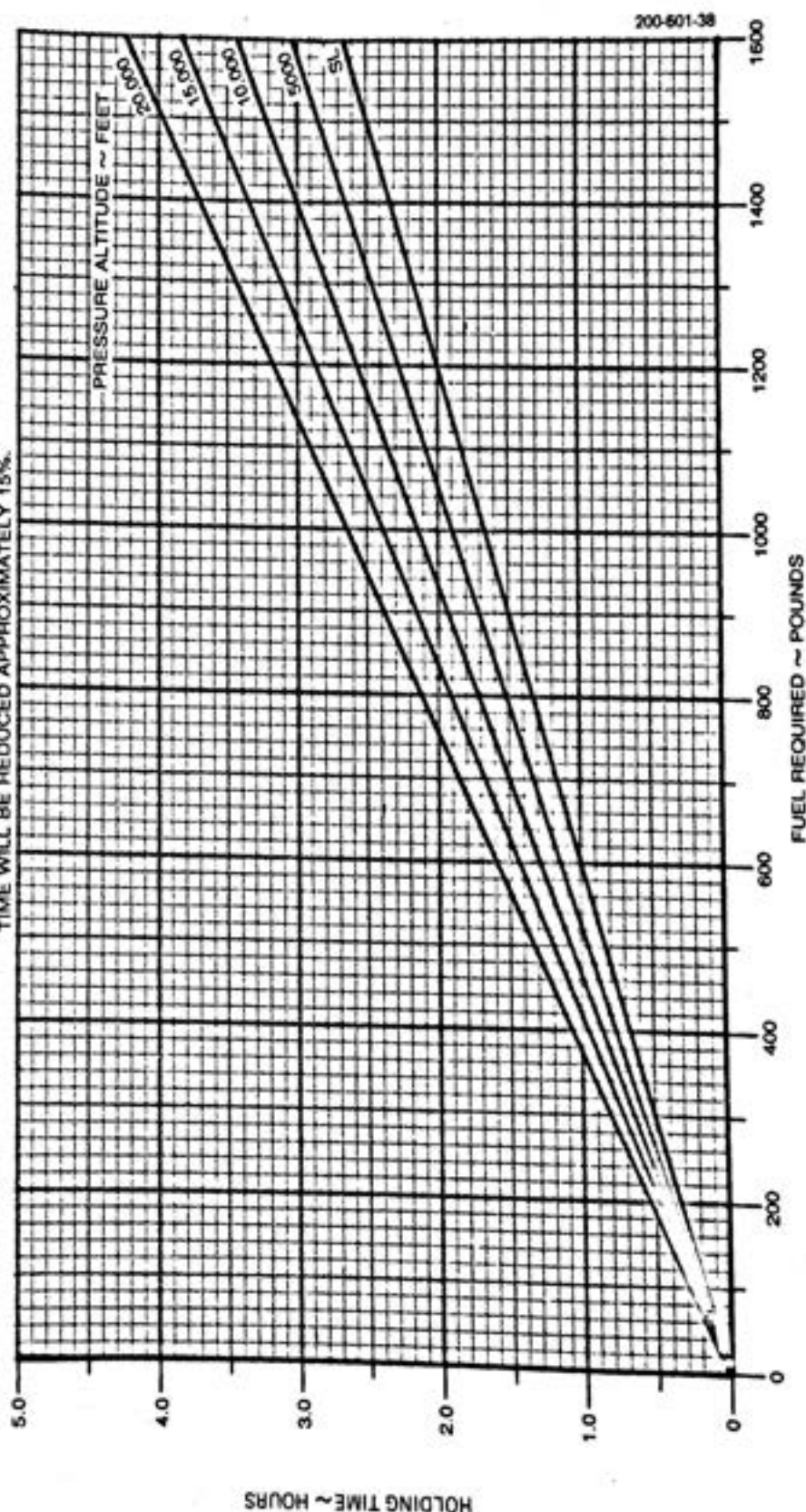
HOLDING TIME

POWER SETTING

800 FT. LBS AT 1700 RPM

APPLICABLE FOR ALL TEMPERATURES

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, HOLDING
TIME WILL BE REDUCED APPROXIMATELY 15%.



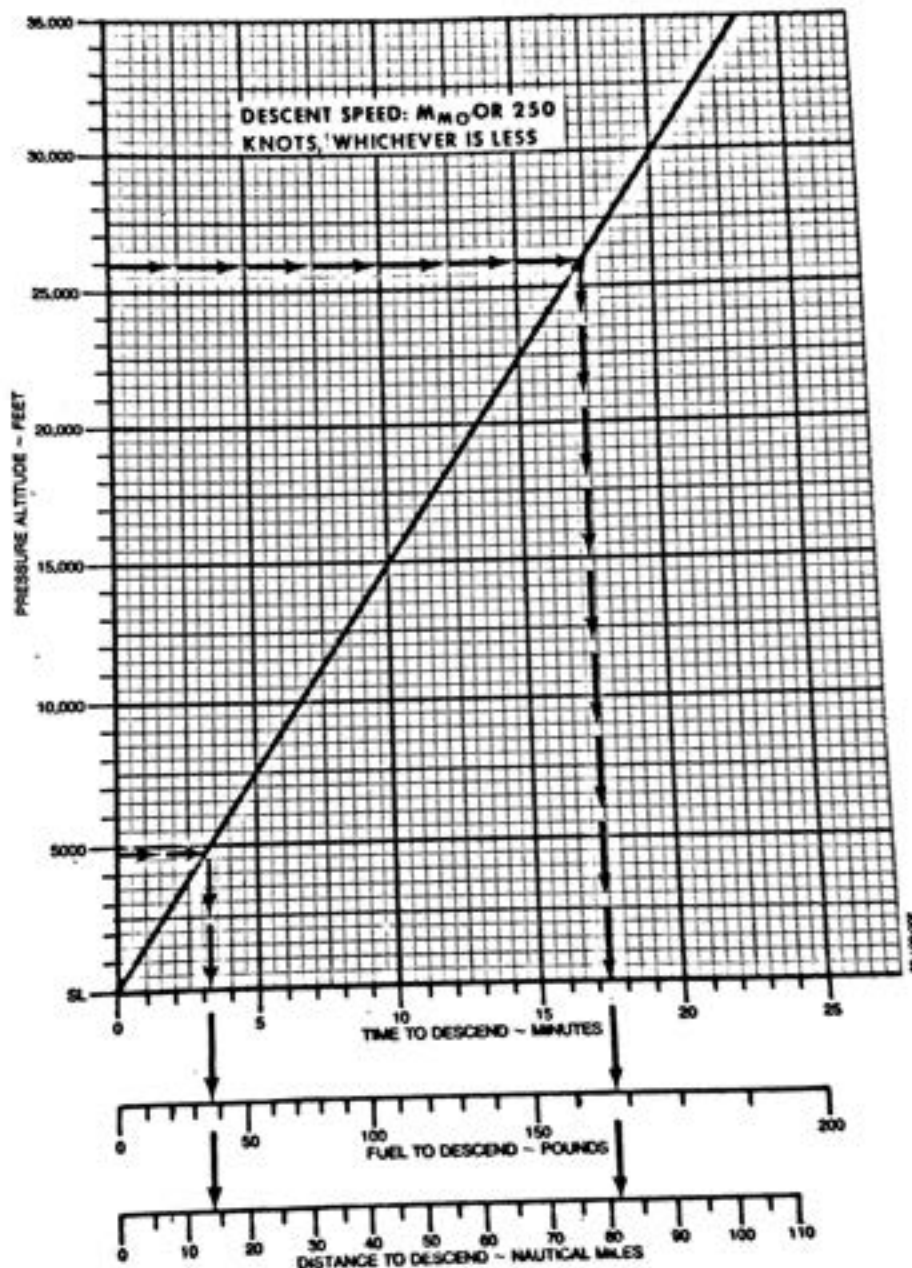
TIME, FUEL, AND DISTANCE TO DESCEND

ASSOCIATED CONDITIONS:

POWER _____ AS REQUIRED TO
DESCEND AT 1500 FT/MIN
GEAR _____ UP
FLAPS _____ 0%

EXAMPLE:

INITIAL ALTITUDE _____ 36,000 FEET
FINAL ALTITUDE _____ 4730 FEET
TIME TO DESCEND (17.3) _____ 14 MINUTES
FUEL TO DESCEND (1186-38) _____ 132 POUNDS
DISTANCE TO DESCEND (81-14) _____ 87 NM



LANDING DISTANCE WITHOUT PROPELLER REVERSING — FLAPS 100%

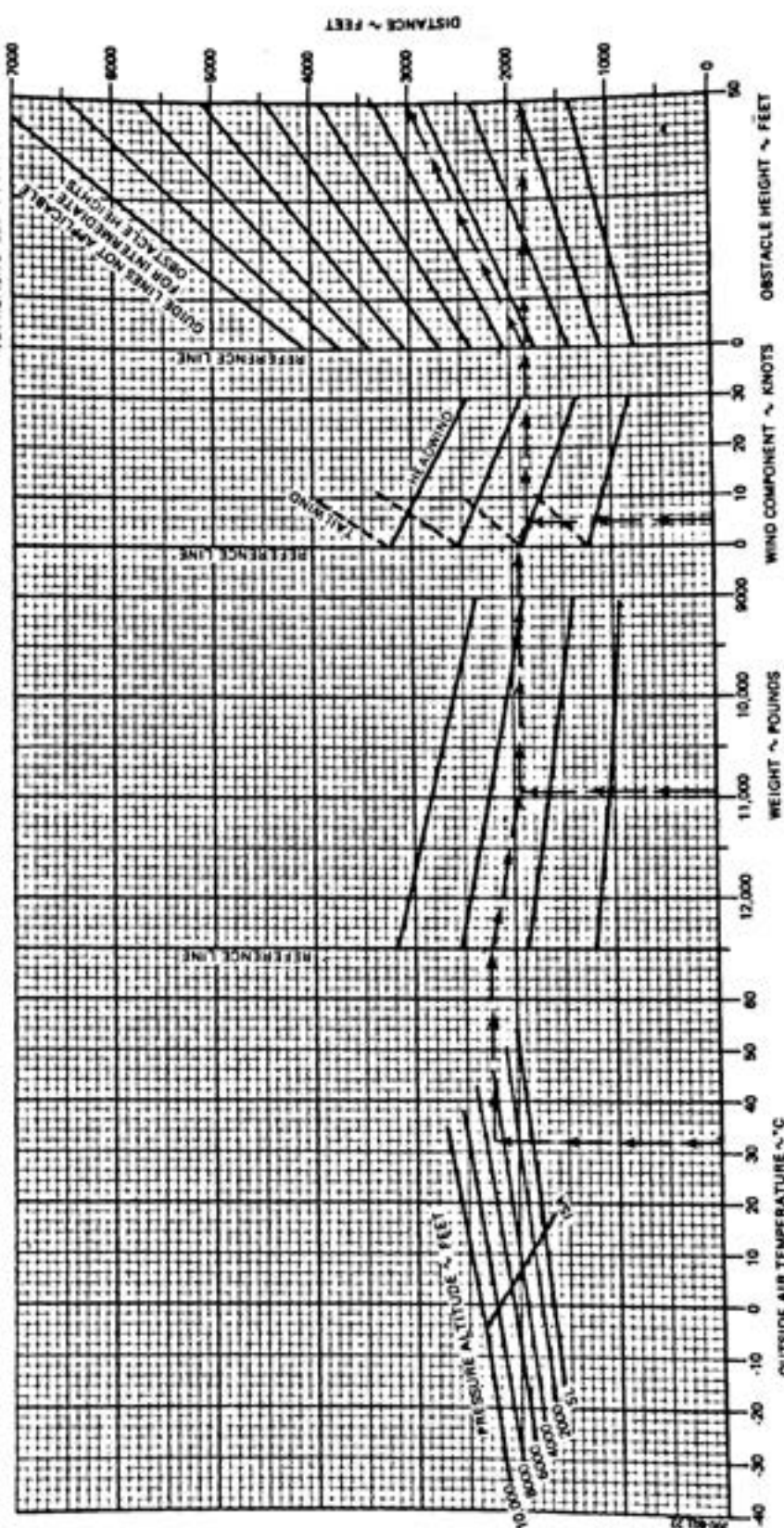
ASSOCIATED CONDITIONS:

POWER RETARDED TO MAINTAIN
800 FT/MIN ON FINAL APPROACH
FLAPS 100%
RUNWAY PAVED, LEVEL, DRY SURFACE
APPROACH SPEED ... IAS AS TABULATED
BRAKING MAXIMUM

WEIGHT ~ POUNDS	APPROACH SPEED ~ KNOTS
12,500	103
12,000	102
11,000	99
10,000	96
9,000	93

EXAMPLE:

OAT 30°C
PRESSURE ALTITUDE 4700 FT
LANDING WEIGHT 10,837 LBS
HEADWIND COMPONENT 4.7 KTS
GROUND ROLL 1850 FT
TOTAL OVER 50 FT OBSTACLE 3000 FT
APPROACH SPEED 99 KNOTS



LANDING DISTANCE WITHOUT PROPELLER REVERSING

FLAPS 0%

ASSOCIATED CONDITIONS

POWER RETARDED TO MAINTAIN
900 FT/MIN ON FINAL
APPROACH
PROPELLER CONTROLS . . . FULL FORWARD
FLAPS UP
RUNWAY PAVED, LEVEL, DRY SURFACE
APPROACH SPEED IAS AS TABULATED
BRAKING MAXIMUM

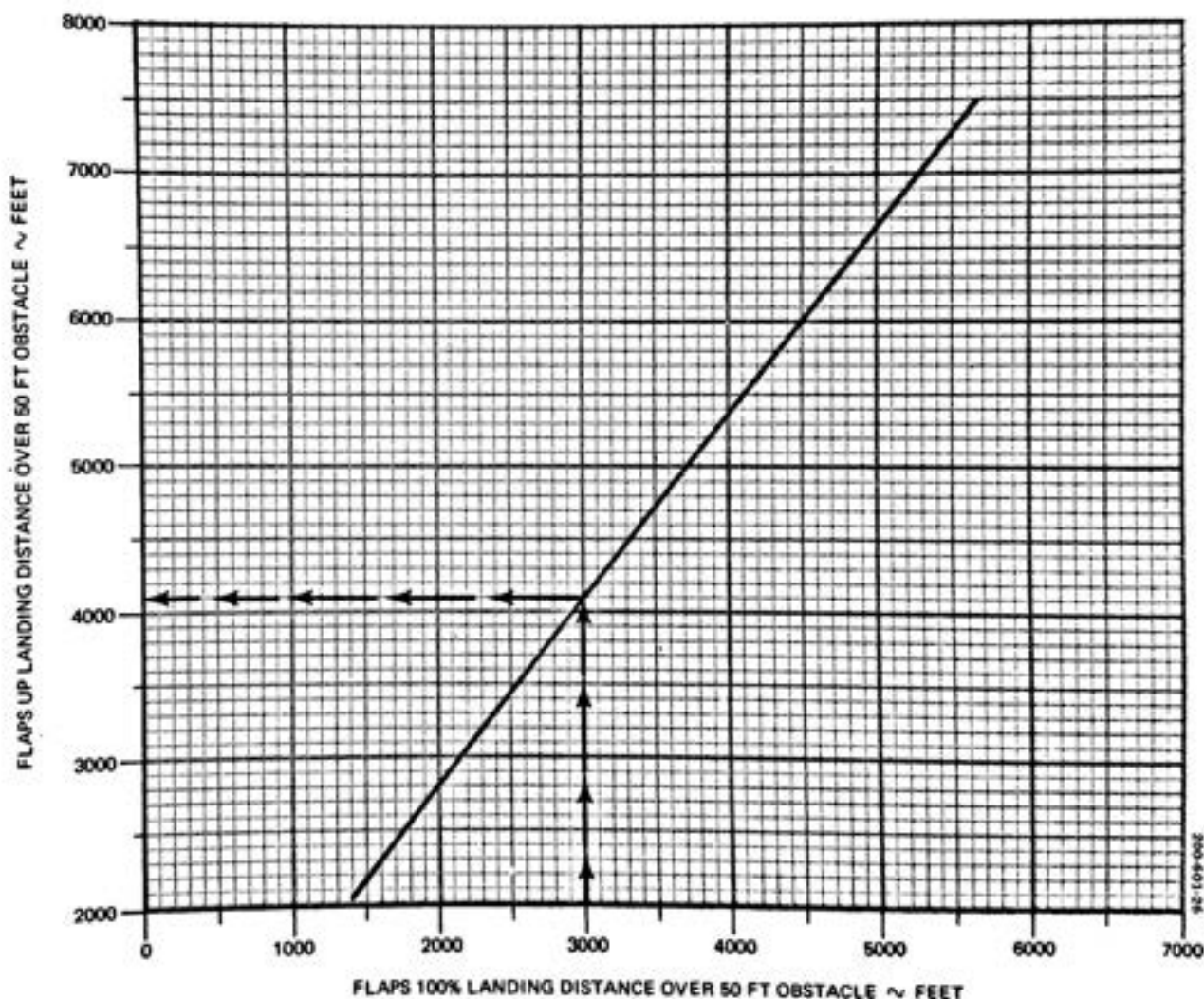
WEIGHT POUNDS	APPROACH SPEED ~ KNOTS
12,500	132
12,000	130
11,000	126
10,000	122
9000	117

EXAMPLE:

FLAPS 100% LANDING
DISTANCE OVER
50 FT OBSTACLE . . . 3000 FT
LANDING WEIGHT 10,937 LBS

FLAPS UP LANDING
DISTANCE OVER
50 FT OBSTACLE . . . 4100 FT
APPROACH SPEED 126 KNOTS

- NOTES: 1. LANDING WITH FLAPS FULL DOWN (100%) IS NORMAL PROCEDURE. USE THIS GRAPH WHEN IT IS NECESSARY TO LAND WITH FLAPS UP (0%).
2. TO DETERMINE FLAPS-UP LANDING DISTANCE, READ FROM THE LANDING DISTANCE WITHOUT PROPELLER REVERSING - FLAPS 100% GRAPH THE LANDING DISTANCE APPROPRIATE TO OAT, ALTITUDE, WEIGHT, WIND, AND 50-FT OBSTACLE. THEN ENTER THIS GRAPH WITH THE DERIVED VALUE AND READ THE FLAPS-UP LANDING DISTANCE.



Section V
Performance

BEECHCRAFT
Super King Air 200

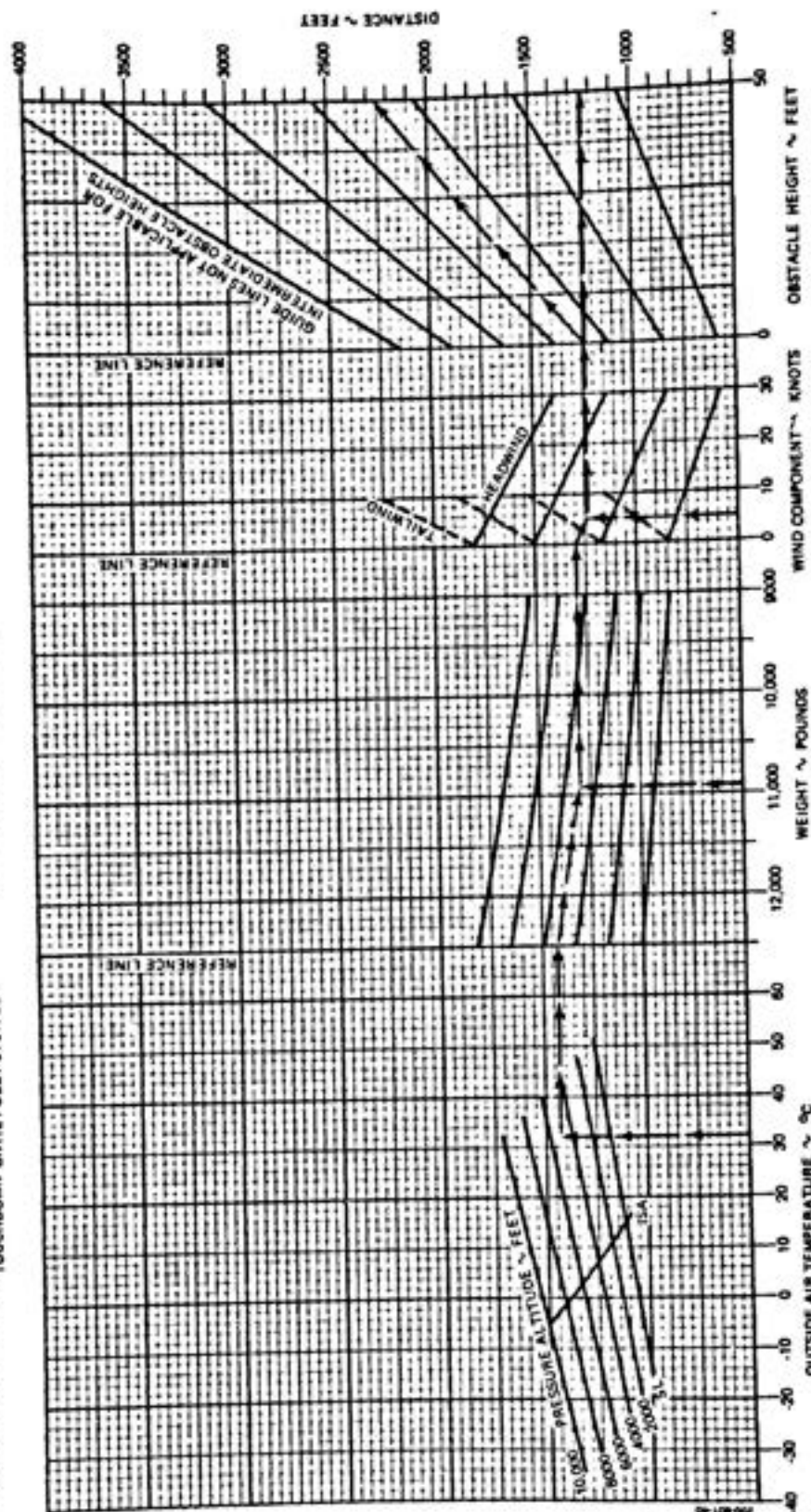
LANDING DISTANCE WITH PROPELLER REVERSING — FLAPS 100%

ASSOCIATED CONDITIONS:

POWER RETARD TO MAINTAIN
1000 FT/MIN ON FINAL APPROACH
FLAPS 100%
RUNWAY PAVED, LEVEL, DRY SURFACE
APPROACH SPEED IAS AS TABULATED
BRAKING MAXIMUM
CONDITION LEVERS HIGH IDLE
PROPELLER CONTROLS FULL FORWARD
POWER LEVERS MAXIMUM REVERSE AFTER
TOUCHDOWN UNTIL FULLY STOPPED

WEIGHT ~ POUNDS	APPROACH SPEED ~ KNOTS
12,500	103
12,000	102
11,000	99
10,000	96
9,000	93

EXAMPLE:
OAT 32°C
PRESSURE ALTITUDE 4730 FEET
LANDING WEIGHT 10,937 POUNDS
HEADWIND COMPONENT 47 KNOTS
GROUND ROLL 1240 FEET
TOTAL OVER 50 2240 FEET
FOOT OBSTACLE 99 KNOTS
APPROACH SPEED 99 KNOTS



LANDING DISTANCE WITH PROPELLER REVERSING

FLAPS 0%

ASSOCIATED CONDITIONS:

POWER.....RETARD TO MAINTAIN
1000 FT/MIN ON FINAL
APPROACH
FLAPS.....UP
RUNWAY.....PAVED, LEVEL, DRY SURFACE
APPROACH SPEED.....IAS AS TABULATED
BRAKING.....MAXIMUM
CONDITION LEVERS...HIGH IDLE
PROPELLER CONTROLS..FULL FORWARD
POWER LEVERS.....MAXIMUM REVERSE
AFTER TOUCHDOWN

WEIGHT ~ POUNDS	APPROACH SPEED ~ KNOTS
12,500	132
12,000	130
11,000	128
10,000	122
9,000	117

EXAMPLE:

FLAPS 100% LANDING
DISTANCE OVER 50
FOOT OBSTACLE.....2260 FEET
LANDING WEIGHT.....10,937 POUNDS
FLAPS UP LANDING
DISTANCE OVER 50
FOOT OBSTACLE.....2820 FEET
APPROACH SPEED.....126 KNOTS

- NOTES: 1. LANDING WITH FLAPS FULL DOWN (100%) IS NORMAL PROCEDURE. USE THIS GRAPH WHEN IT IS NECESSARY TO LAND WITH FLAPS UP (0%).
2. TO DETERMINE FLAPS-UP LANDING DISTANCE, READ FROM THE LANDING DISTANCE WITH PROPELLER REVERSING - FLAPS 100% GRAPH THE LANDING DISTANCE APPROPRIATE TO OAT, ALTITUDE, WEIGHT, WIND, AND 50-FT OBSTACLE. THEN ENTER THIS GRAPH WITH THE DERIVED VALUE AND READ THE FLAPS-UP LANDING DISTANCE.

