

AERO

LOAD DATA SHEET - PAGE 1 OF 3 - AEROPLANE WEIGHT

Aeroplane Type:..... BEECH 76

Registration Marking:..... **VH-DVF** Serial No: ME-258

ISSUE:..... ONE DATE:..... 16.Jun.09 EXPIRY:..... INDEFINITE

AEROPLANE WEIGHT AND CENTRE OF GRAVITY DATA:

ITEM	WEIGHT (Kg)	ARM (mm aft of datum)	INDEX (Kg.mm)	CABIN CONFIGURATION
EMPTY	1218.3	2781.7	3389077	FOUR SEATS TOTAL
FOUR SINGLE SEATS CABIN CONFIGURATION				
THE FOLLOWING IMPERIAL UNITS ARE FOR USE WITH THE PILOTS HANDBOOK SECTION SIX				
	(lb)	(in)	(in.lb/100)	
EMPTY	2686.0	109.5	2941.59	FOUR SEATS TOTAL

NOTE: The above empty weights include:-

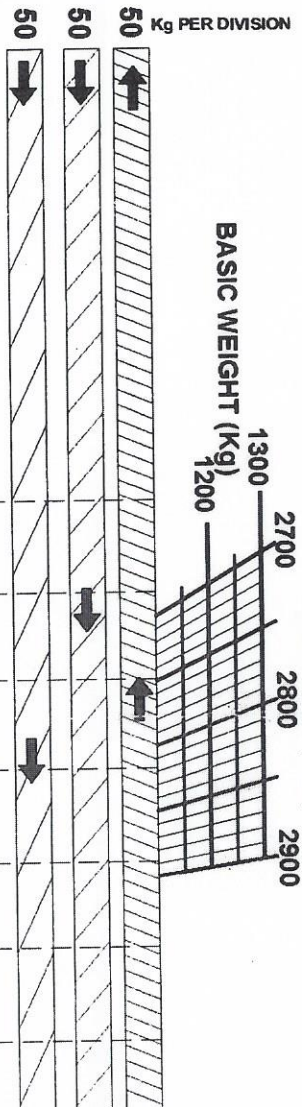
EMPTY - unusable fuel and full oil


AeroWeigh Pty. Ltd.
BRUCE CLISSOLD
AUTHORITY NUMBER AN-9
PHONE: 0755 7104 FAX: 9755 7126
1300 6112 33551

LOAD CHART BC/BCH76/1 BEECH 76 DUCHESS

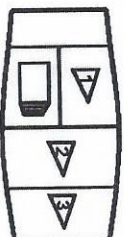
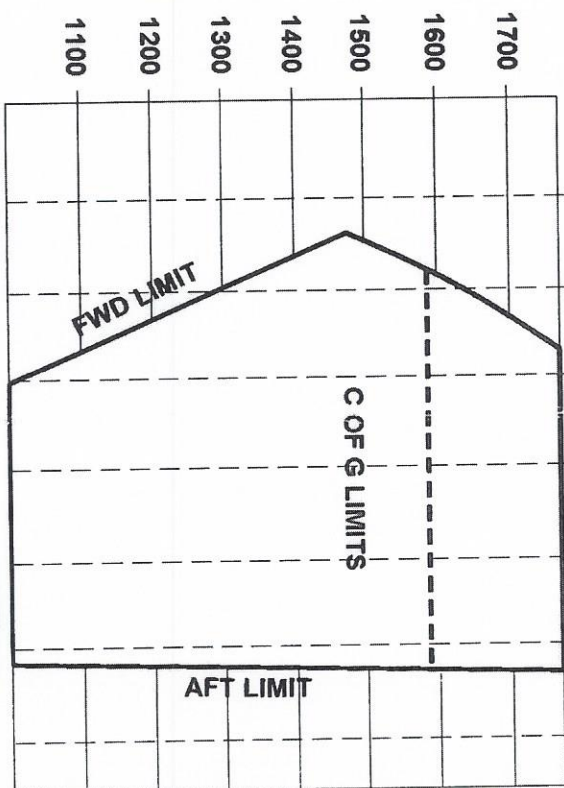
	WEIGHT (Kg)
BASIC WEIGHT	
FRONT SEATS/CARGO	
REAR SEATS/CARGO	
BAGGAGE/CARGO	
ZERO FUEL WEIGHT*	
FUEL	
TAKE-OFF WEIGHT*	
FLIGHT FUEL	
LANDING WEIGHT	

50 Kg PER DIVISION



AeroWeigh Pty Ltd
BRUCE GIBSON
WEIGHT CONTROL AUTHORITY AM-6
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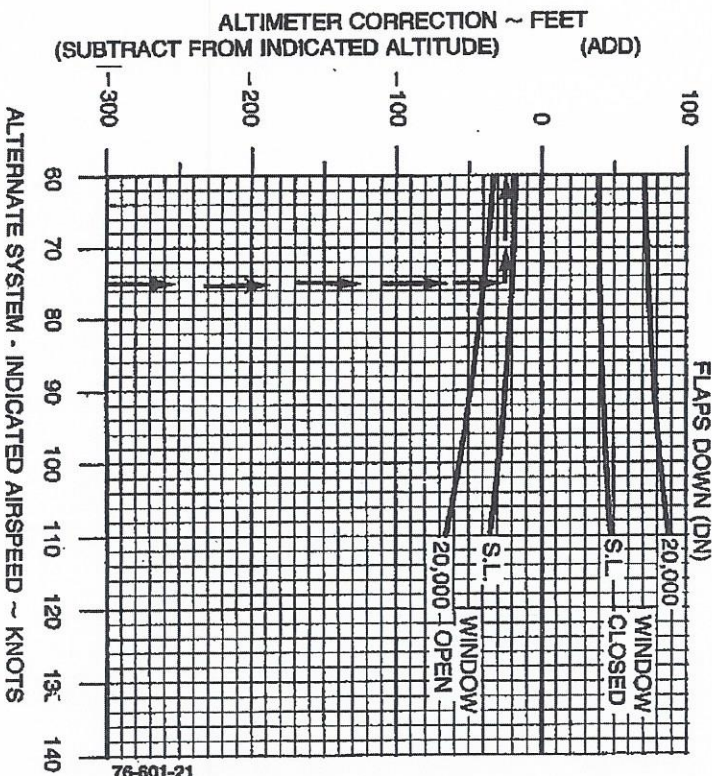
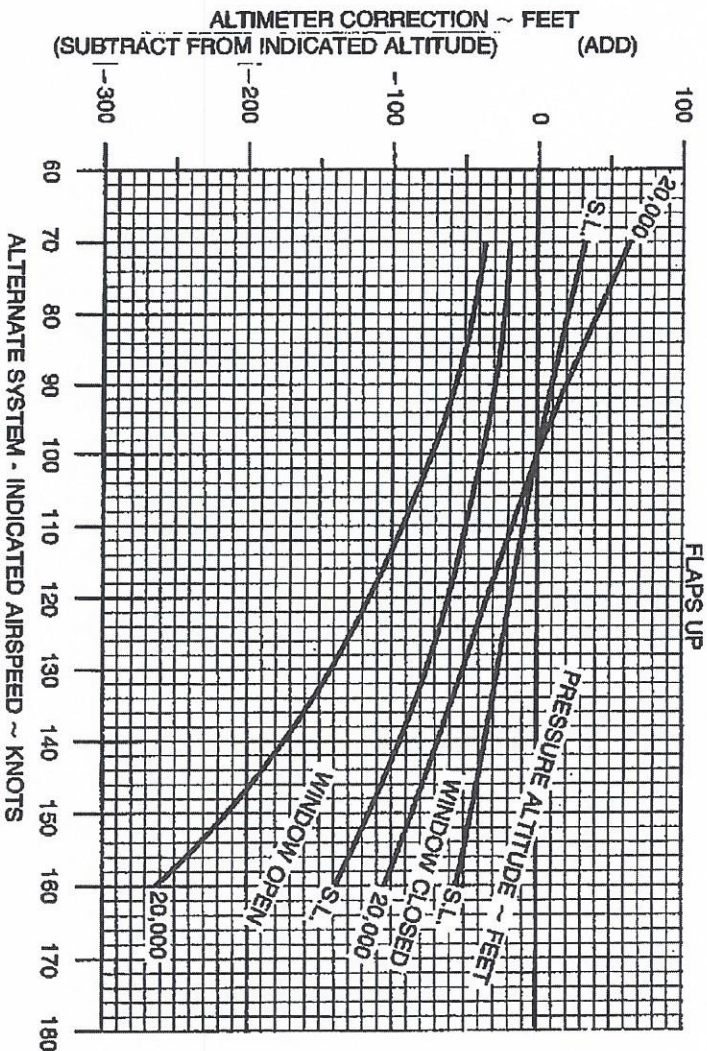
GROSS WEIGHT (Kg)



- 1 MAX CARGO IN LIEU OF CO-PILOT SEAT..84 Kg
- 2 MAX CARGO IN PLACE OF REAR SEATS..172 Kg
- 3 MAX REAR BAGGAGE AREA AND/OR CARGO..90 Kg

* MAXIMUM TAKE-OFF WEIGHT 1769 Kg
* MAXIMUM ZERO FUEL WEIGHT 1588 Kg

ALTIMETER CORRECTION - ALTERNATE SYSTEM



EXAMPLE:

IAS..... 75 KTS

FLAPS..... DOWN (DN)

INDICATED PRESSURE ALTITUDE..... 4000 FT

STORM WINDOW..... OPEN

ALTIMETER CORRECTION..... -25 FT

ACTUAL PRESSURE ALTITUDE..... 3975 FT

TAKE-OFF DISTANCE

ASSOCIATED CONDITIONS:

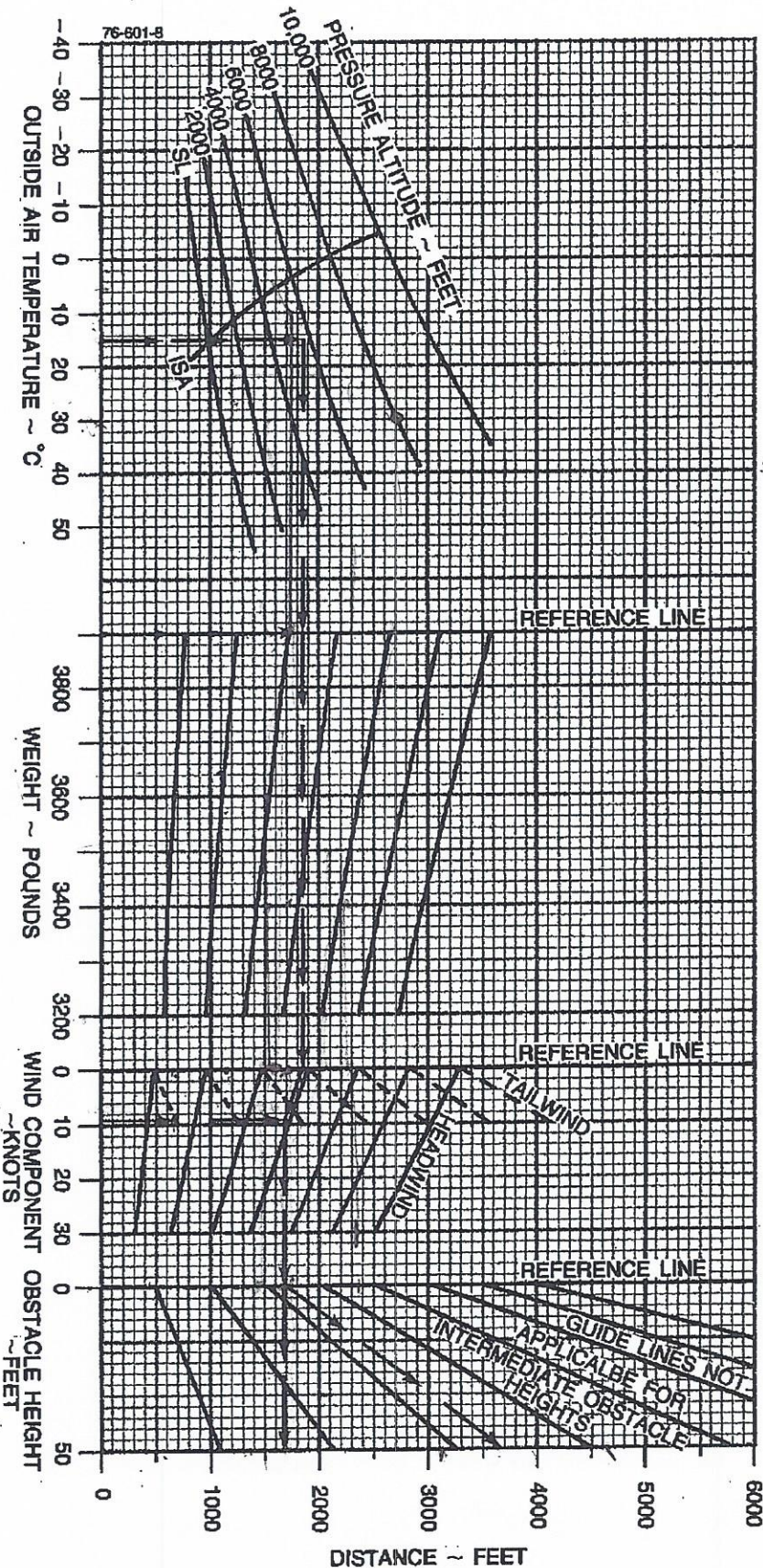
POWER TAKE-OFF POWER AT 2700 RPM SET
BEFORE BRAKE RELEASE
MIXTURE FULL, RICH (ABOVE 5000 FT LEAN TO
75-100°F ON RICH SIDE OF PEAK EGT)
FLAPS UP
LANDING GEAR RETRACT AFTER POSITIVE CLIMB ESTABLISHED
RUNWAY PAVED, LEVEL, DRY SURFACE
COWL FLAPS OPEN

TAKE-OFF SPEEDS (ALL WEIGHTS)

LIFT-OFF 71 KNOTS
50 FEET 80 KNOTS

EXAMPLE:

OAT 15°C
PRESSURE ALTITUDE 5850 FT
TAKE-OFF WEIGHT 3900 LBS
HEADWIND COMPONENT 9.5 KTS
GROUND ROLL 1680 FT
TOTAL DISTANCE OVER
50-FT OBSTACLE 3670 FT



Section V Performance

**BEECHCRAFT
Duchess 76**

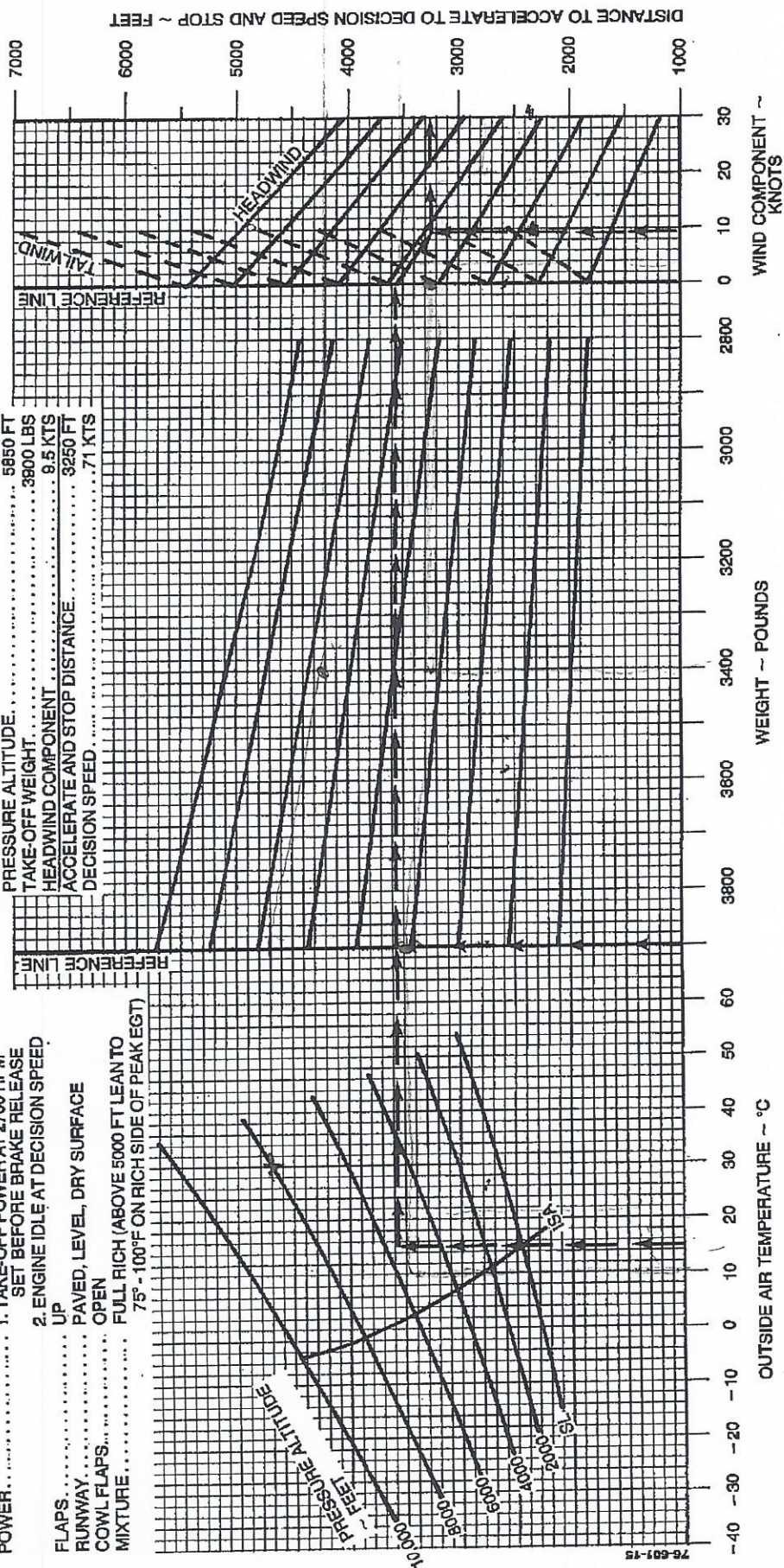
ACCELERATE - STOP DISTANCE DECISION SPEED 71 KNOTS (ALL WEIGHTS)

EXAMPLE:

ASSOCIATED CONDITIONS:

- POWER..... 1. TAKE-OFF POWER AT 2700 RPM
SET BEFORE BRAKE RELEASE
2. ENGINE IDLE AT DECISION SPEED
FLAPS..... UP
RUNWAY..... PAVED, LEVEL, DRY SURFACE
COWL FLAPS..... OPEN
MIXTURE..... FULL RICH (ABOVE 5000 FT LEAN TO
75° - 100°F ON RICH SIDE OF PEAK EGT)

OAT..... 15°C
PRESSURE ALTITUDE..... 5850 FT
TAKE-OFF WEIGHT..... 3800 LBS
HEADWIND COMPONENT..... 9.5 KTS
ACCELERATE AND STOP DISTANCE..... 9250 FT
DECISION SPEED..... 71 KTS



ACCELERATE-GO DISTANCE

ASSOCIATED CONDITIONS:

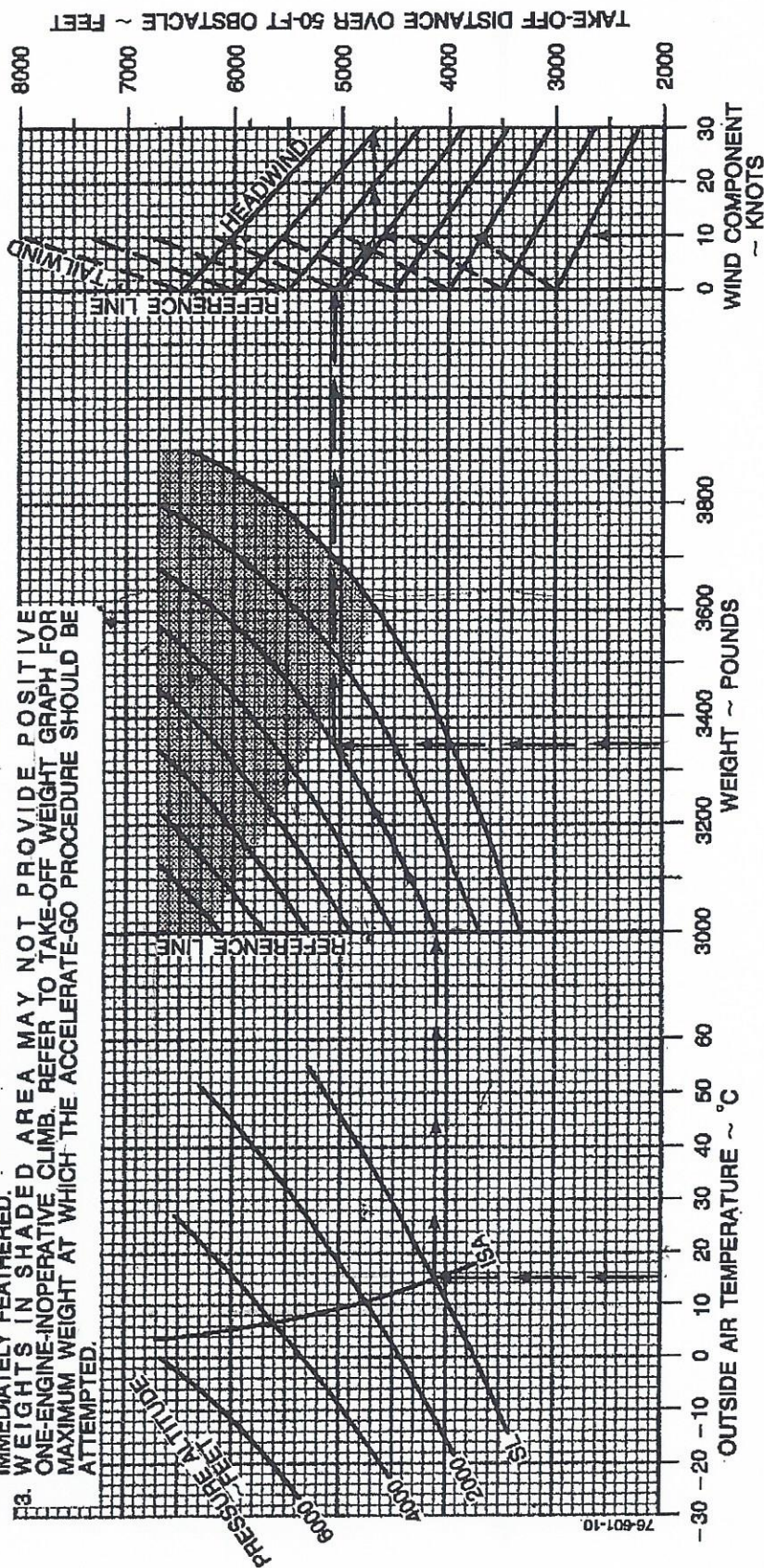
POWER TAKE-OFF POWER AT 2700 RPM.
SET BEFORE BRAKE RELEASE.
FLAPS UP
LANDING GEAR RETRACT AFTER LIFT-OFF
RUNWAY PAVED, LEVEL, DRY SURFACE.
COWL FLAPS OPEN
MIXTURE FULL RICH (ABOVE 5000 FT, SET TO
75-100°F ON RICH SIDE OF PEAK EGT)

TAKE-OFF SPEEDS (ALL WEIGHTS)	
LIFT-OFF 50 FT	71 KNOTS
50 FT	80 KNOTS

EXAMPLE:

OAT 15°C
PRESSURE ALTITUDE SL
TAKE-OFF WEIGHT 3350 LBS
HEADWIND COMPONENT 10 KTS
TOTAL DISTANCE OVER
50-FT OBSTACLE 4700 FT
GROUND ROLL 940 FT

- NOTE: 1. GROUND ROLL DISTANCE IS 20% OF TAKE-OFF DISTANCE OVER 50-FT OBSTACLE.
2. DISTANCES ASSUME AN ENGINE FAILURE AT LIFT-OFF AND PROPELLER IMMEDIATELY FEATHERED.
3. WEIGHTS IN SHADED AREA MAY NOT PROVIDE POSITIVE ONE-ENGINE-INOPERATIVE CLIMB. REFER TO TAKE-OFF WEIGHT GRAPH FOR MAXIMUM WEIGHT AT WHICH THE ACCELERATE-GO PROCEDURE SHOULD BE ATTEMPTED.



Section V Performance

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Duchess 76**

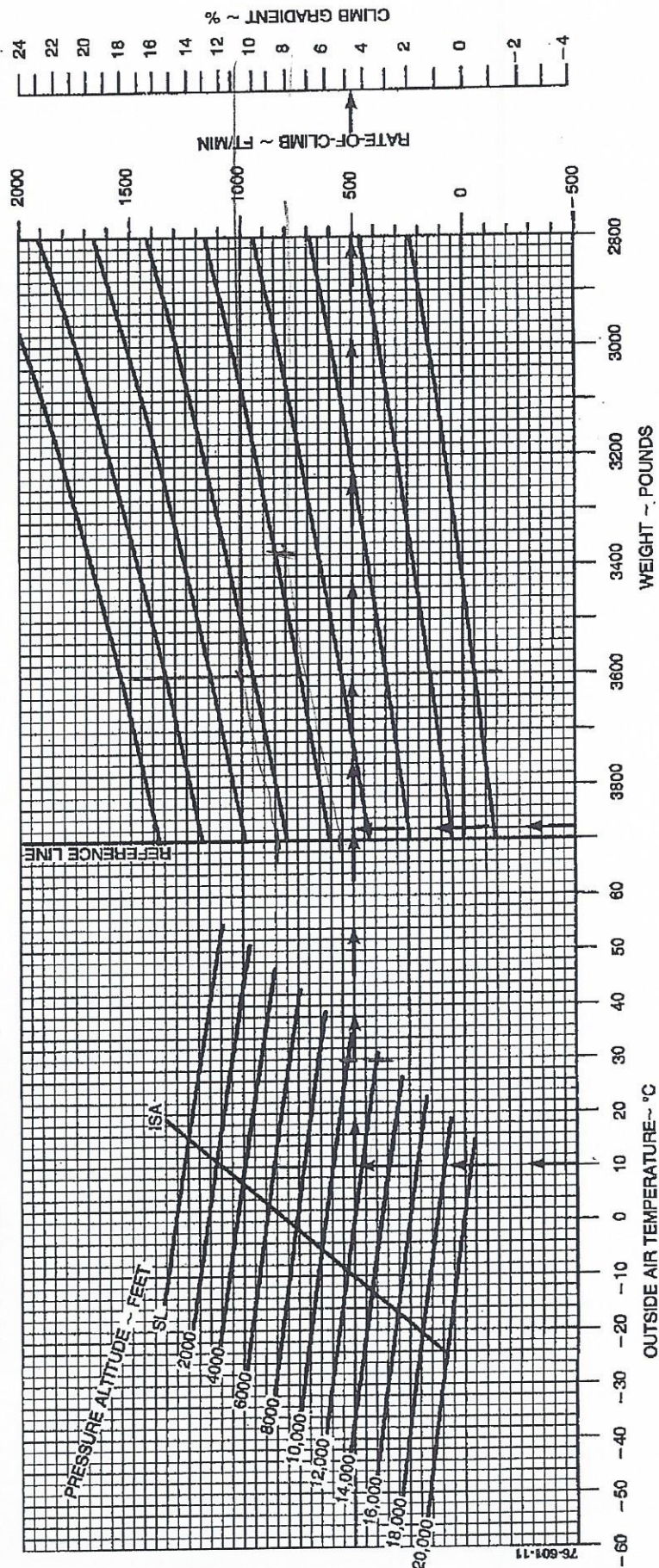
CLIMB - TWO ENGINE CLIMB SPEED 85 KNOTS (ALL WEIGHTS)

ASSOCIATED CONDITIONS:

POWER..... MAXIMUM CONTINUOUS AT 2700 RPM
FLAPS..... UP
LANDING GEAR..... UP
COWL FLAPS..... OPEN
MIXTURE..... FULL RICH (ABOVE 5000 FT LEAN TO 75° - 100°F ON RICH SIDE OF PEAK EGT)

EXAMPLE:

OAT.....10°C
PRESSURE ALTITUDE.....11,500 FT
WEIGHT.....3980 LBS
RATE OF CLIMB.....500 FT/MIN
CLIMB GRADIENT.....4.6%



TAKE-OFF CLIMB GRADIENT - ONE ENGINE INOPERATIVE

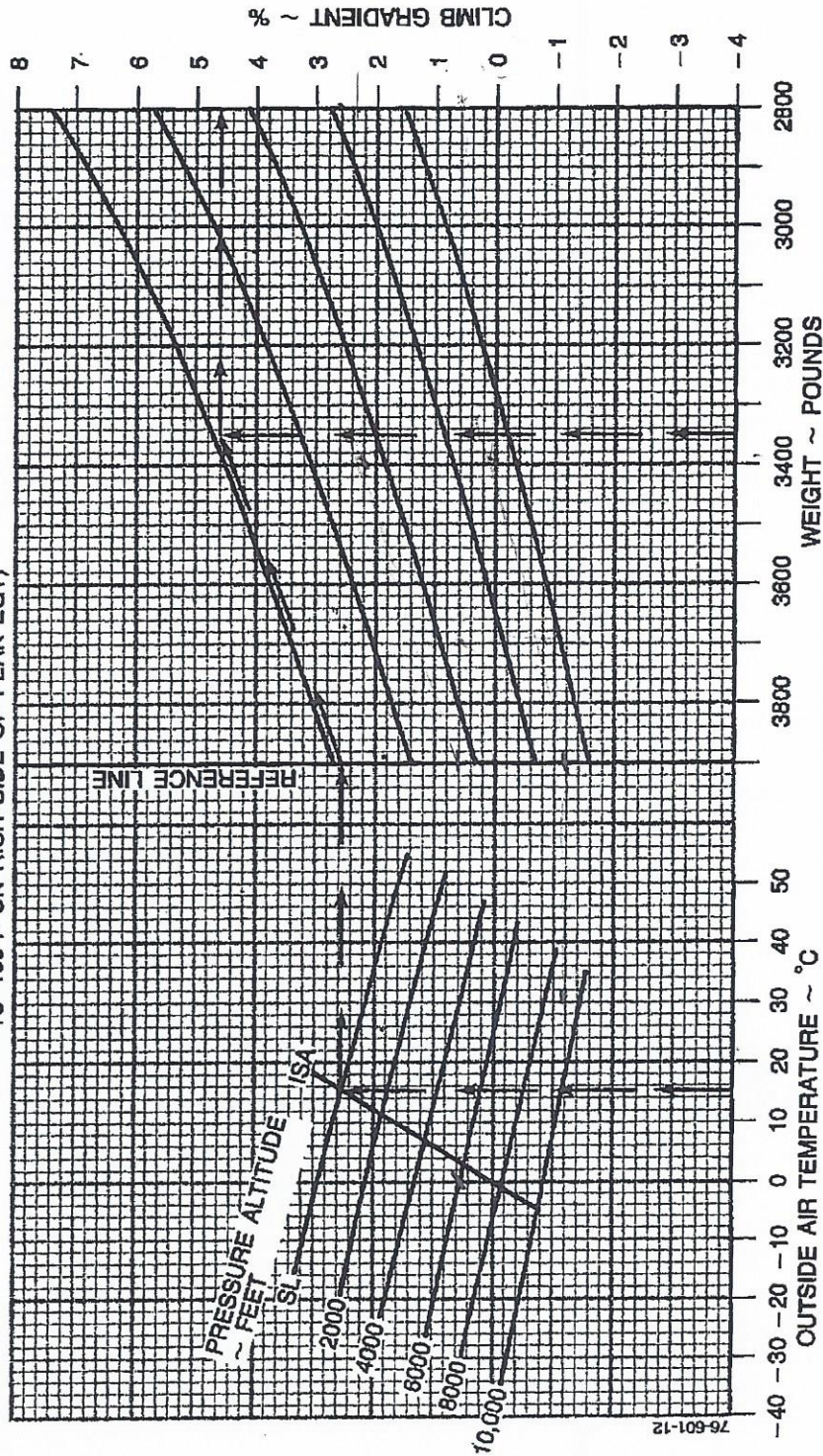
CLIMB SPEED 80 KNOTS (ALL WEIGHTS)

ASSOCIATED CONDITIONS:

POWER TAKE-OFF AT 2700 RPM
LANDING GEAR UP
FLAPS UP
INOPERATIVE PROPELLER FEATHERED
COWL FLAPS OPEN
MIXTURE FULL RICH (ABOVE 5000 FT LEAN TO 75-100 F ON RICH SIDE OF PEAK EGT)

EXAMPLE:

OAT 15°C
PRESSURE ALTITUDE SL
WEIGHT 3350 LBS
GRADIENT OF CLIMB 4.6%



CLIMB - ONE ENGINE INOPERATIVE

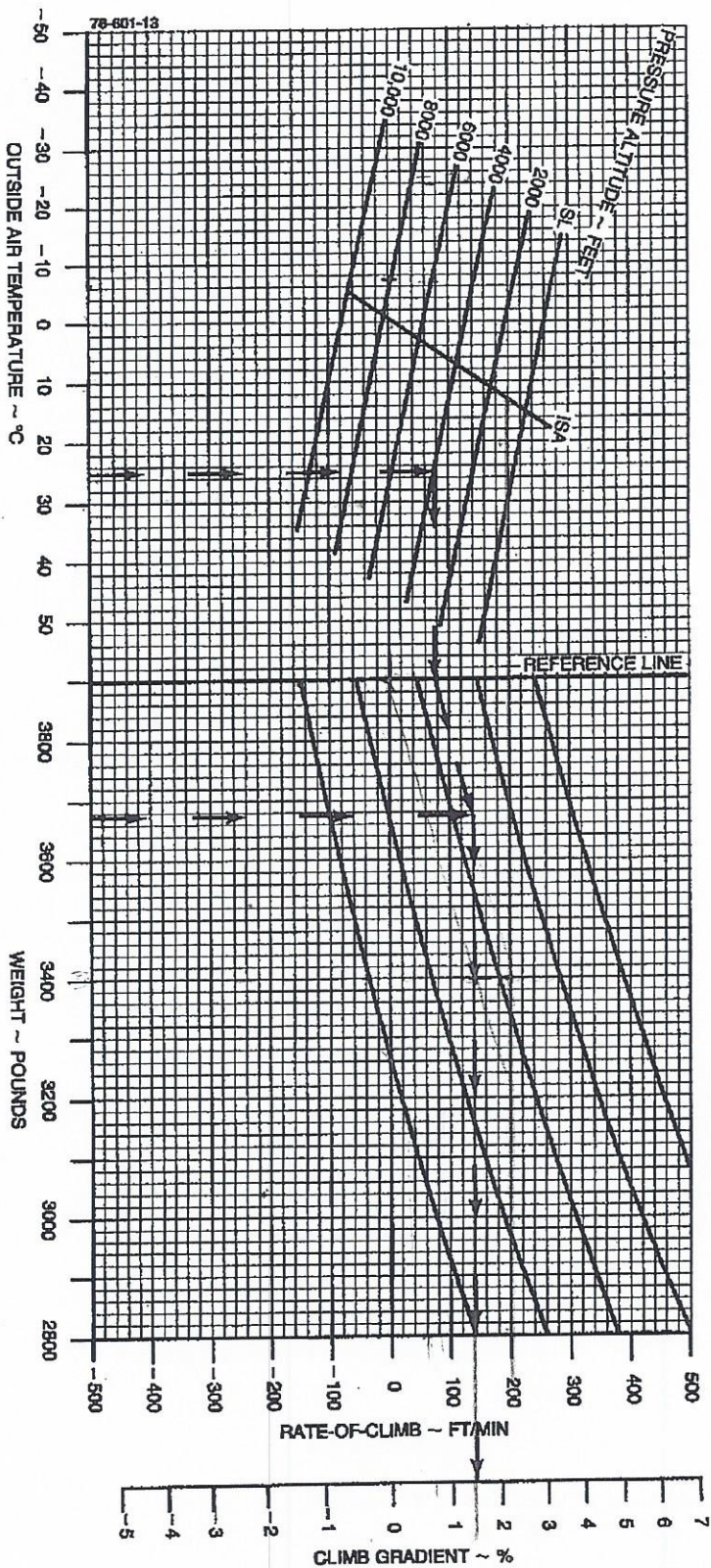
CLIMB SPEED 85 KNOTS (ALL WEIGHTS)

ASSOCIATED CONDITIONS:

POWER..... TAKE-OFF AT 2700 RPM
LANDING GEAR..... UP
FLAPS..... FEATHERED
INOPERATIVE PROPELLER..... OPEN
COWL FLAPS..... FULL RICH (ABOVE 5000 FT LEAN TO 75° - 100°F ON RICH SIDE OF PEAK EGT)
MIXTURE.....

EXAMPLE:

OAT..... 25°C
PRESSURE ALTITUDE..... 3865 FT
WEIGHT..... 3677 LBS
RATE OF CLIMB..... 140 FT/MIN
CLIMB GRADIENT..... 1.5%
CLIMB SPEED..... 85 KTS



Section V Performance

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Duchess 76**

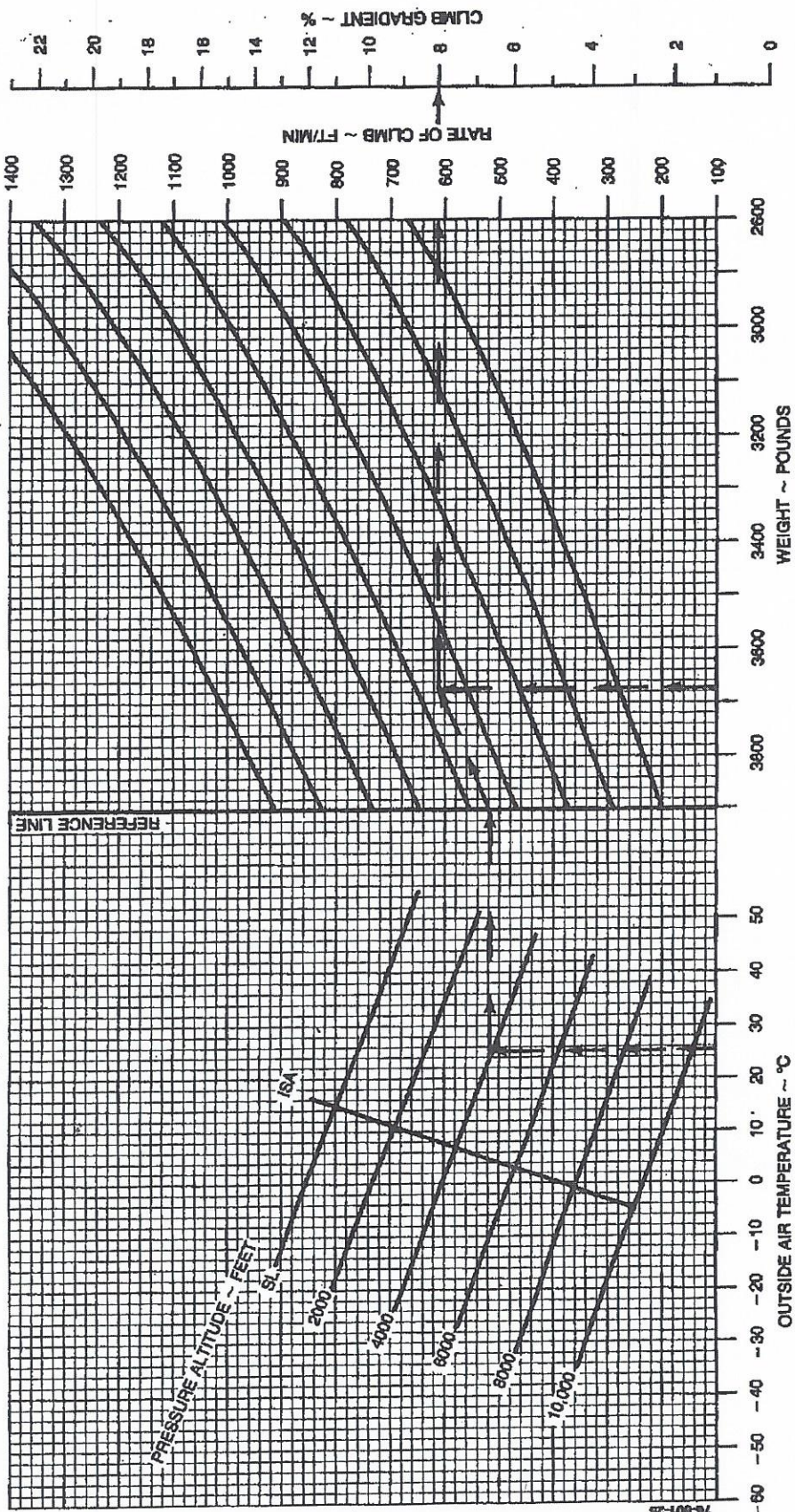
CLIMB - BALKED LANDING CLIMB SPEED 71 KNOTS (ALL WEIGHTS)

ASSOCIATED CONDITIONS:

POWER.....TAKE-OFF AT 2700 RPM
FLAPS.....DOWN (DN)
LANDING GEAR.....DOWN
MIXTURE.....FULL RICH (ABOVE 5000 FT
LEAN TO 75° - 100°F ON RICH
SIDE OF PEAK EGT)

EXAMPLE:

OAT.....25°C
PRESSURE ALTITUDE.....3955 FT
WEIGHT.....3677 LBS
RATE OF CLIMB.....610 FT/MIN
CLIMB GRADIENT.....8%



LANDING DISTANCE - FLAPS DOWN (DN)

APPROACH SPEED 76 KNOTS (ALL WEIGHTS)

ASSOCIATED CONDITIONS:

POWER..... RETARD TO MAINTAIN 800 FT/MIN ON FINAL APPROACH
FLAPS..... DOWN (DN)
LANDING GEAR..... DOWN
RUNWAY..... PAVED, LEVEL, DRY SURFACE
APPROACH SPEED... 76 KNOTS IAS
BRAKING..... MAXIMUM

EXAMPLE:

OAT..... 25°C
PRESSURE ALTITUDE..... 3985 FT
HEADWIND COMPONENT..... 9.6 KTS
GROUND ROLL..... 1050 FT
TOTAL OVER 50 FT OBSTACLE..... 1970 FT
APPROACH SPEED..... 76 KTS

