LOAD DATA SHEET - PAGE 1 OF 3 - AEROPLANE WEIGHT

Aeroplane Type:..... BEECH 76

Registration Marking:..... **VH-WEU** Serial No: ME-146

ISSUE:.... FOUR	DATE:..... 11-Nov-21	EXPIRY:..... INDEFINITE

AEROPLANE WEIGHT AND CENTRE OF GRAVITY DATA:

ITEM	WEIGHT (Kg)	ARM (mm aft of datum)	INDEX (Kg.mm)	CABIN CONFIGURATION
EMPTY	**1193.6** (2631 lb)	**2793.2** (109.97 in)	**3333860** (289366)	FOUR SEATS TOTAL
STANDARD CABIN CONFIGURATION				

NOTE: The above empty weights include:-

EMPTY - unusable fuel and full oil

AeroWeigh Pty. Ltd.
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AUTHORITY NUMBER AN-9
MOBILE: 0412 58 5551

LOAD DATA SHEET - PAGE 2 OF 3 - EQUIPMENT LIST

This list details the items included in the empty weight shown in Page 1.

Aeroplane Type:..... BEECH 76
Registration Marking:..... **VH-WEU** Serial No: ME-146

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ENGINES/PROPELLERS
Lyc. 0/L0-360-A1G6D 2
Hartzell 2 Blade..... 2

COMPASSES
Magnetic..... 1
Remote Indicating..... KCS55A

THERMOMETERS
Engine Temp(Cyl.Head.)... 2
Oil Temp..... 2
Outside Air Temp..... 1

INDICATORS
Airspeed..... 1
Directional Gyro..... 1
Exhaust Gas Temp..... DUAL
Hourmeters..... 2
Fuel Computer..... SHADIN
Gyro Horizon..... 2
Stall Warning..... 1
Tacho Non-recording..... DUAL
Trim Indicator..... 2
Turn Co-ordinator..... 1
Gear Postn. Lights..... 4
Vertical Speed..... 1
Flap Position..... 1
Assigned Altitude..... 1

RADIO EQUIPMENT (TYPE)

ADF.....	KING KR87
A/P-F/D.....	CENTURY III
A/P Cpler.....	EDO IC-388
Speakers.....	1
Int DME.....	0
Headsets.....	1
Nav/Com.....	KING KX155
Converter.....	KING KN72
RMI.....	KING KI229
VHF Com.....	KING KX197A
Audio.....	KING KMA24H
Marker.....	KING KR21
Txponder.....	KING KT74
Encoder.....	TRANSCAL SSD-120
GPS.....	GARMIN GTN625
Annunciat.....	MID-CONT MD-41

INSTRUMENTS
Altimeters..... 2
Ammeters..... 2
Clocks..... 1

GAUGES
Engine Oil Pressure..... 2
Fuel Contents..... 2
Fuel Pressure..... 2
Manifold Pressure..... DUAL
Suction Pressure..... 1

LIGHTS
Anti-collision..... 1
Inst. Full Panel..... 1
Inst. Flood/Spot..... 1
Landing..... 1
Map Reading..... 1
Navigation..... 3
White Strobes(tips)..... 2
Passenger O/head..... 0
Taxi..... 2

RESTRAINT EQUIPMENT
Inertia Reels..... 4
Lap-sash harnesses..... 4

ELECTRICAL EQUIPMENT
Alternators..... 2
Batteries..... 1
Starters..... 2
External Power..... 1

MISCELLANEOUS EQUIPMENT
Dual Controls..... 1
Fire Ext.(Portable)..... 1
Hydraulic Pump..... 1
Land.Gear Warn.Horn..... 1
Cabin Heater..... 1
Vacuum Pumps..... 2
Heated Pitots..... 1
Alternate Static..... 1
Electric Trim..... 1

DISPOSABLE LOAD LIST
Torch..... 1
V.S.Beacon/E.L.T..... Artex ME406

6.3 - LOADING SYSTEM

Aeroplane Type:..... BEECH 76

Registration Marking:..... **VH-WEU** Serial No: ME-146

ISSUE:.... FOUR	DATE:..... 11/11/2021

INSTRUCTIONS FOR LOAD CHART BC/BCH76/1 ISSUE ONE
(8 MARCH 1996)
BEECH 76 DUCHESS

1. Use standard trim sheet procedures.Enter top of chart using current BASIC empty Weight and Arm obtained from the Load Data Sheet.

2. Total load weights in left hand column obtaining Zero Fuel Weight and Take-off Weight.
   Draw horizontal lines on the C.G. Limits Graph at the bottom of the chart.

3. From the Basic Weight Vs Arm point at the top of the chart, draw a line VERTICALLY down until it **intersects one of the oblique lines** on the first load item scale.

4. Move HORIZONTALLY along the load item scale in the direction of the arrow and mark a point appropriate to the load indicated in the left hand column. [e.g. with 50 Kg/Div a 100 Kg load = 2 Div.]

5. Draw a VERTICAL line down to the next load item scale and repeat the above process. (Exercise care in plotting values of segments, noting that occupant & baggage scale segments are 50 Kg)

6. Proceed VERTICALLY down the load item scales, moving to left or right as indicated by the arrows and marking scale divisions as appropriate to each load.

7. From the last cabin load item scale draw a line VERTICALLY down to intersect the Zero Fuel and Take-off lines previously drawn on the limits graph. (Noting that Fuel has NIL scale)

8. The two intersection points above must not exceed the boundaries of the limits graph (heavily lined). If either point does, then the load must be rearranged and loading rechecked with steps 2 to 7.

DO NOT EXCEED MAXIMUM WEIGHTS SHOWN ON THE CHART

LOAD CHART BC/BCH76/1 BEECH 76 DUCHESS

	WEIGHT (Kg)
BASIC WEIGHT	1194
FRONT SEATS/CARGO	150
REAR SEATS/CARGO	150
BAGGAGE/CARGO	50
ZERO FUEL WEIGHT*	1544
FUEL	225
TAKE-OFF WEIGHT*	1769
FLIGHT FUEL	100
LANDING WEIGHT	1669

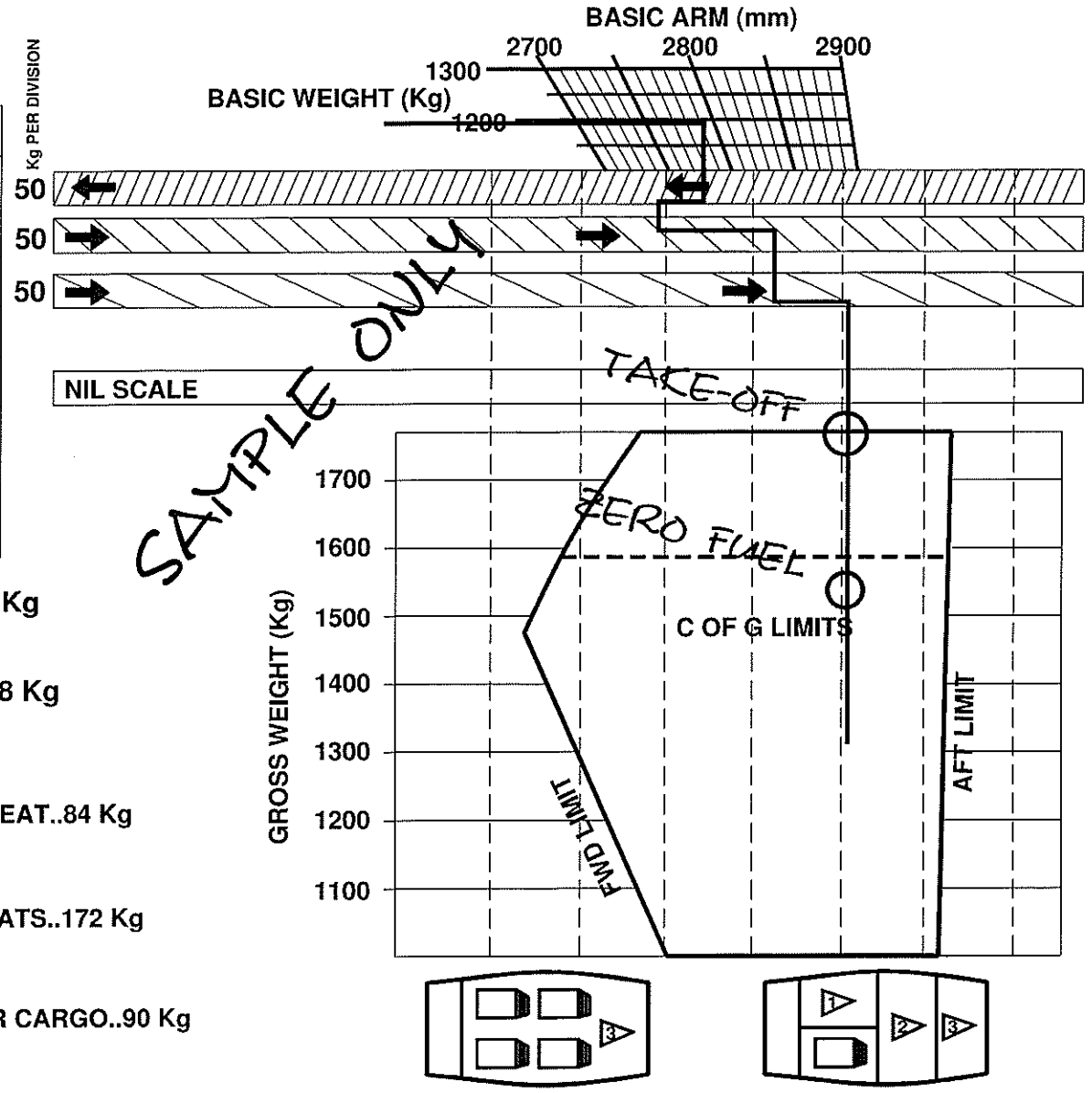
*MAXIMUM TAKE-OFF WEIGHT 1769 Kg

*MAXIMUM ZERO FUEL WEIGHT 1588 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



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	

*MAXIMUM TAKE-OFF WEIGHT 1769 Kg

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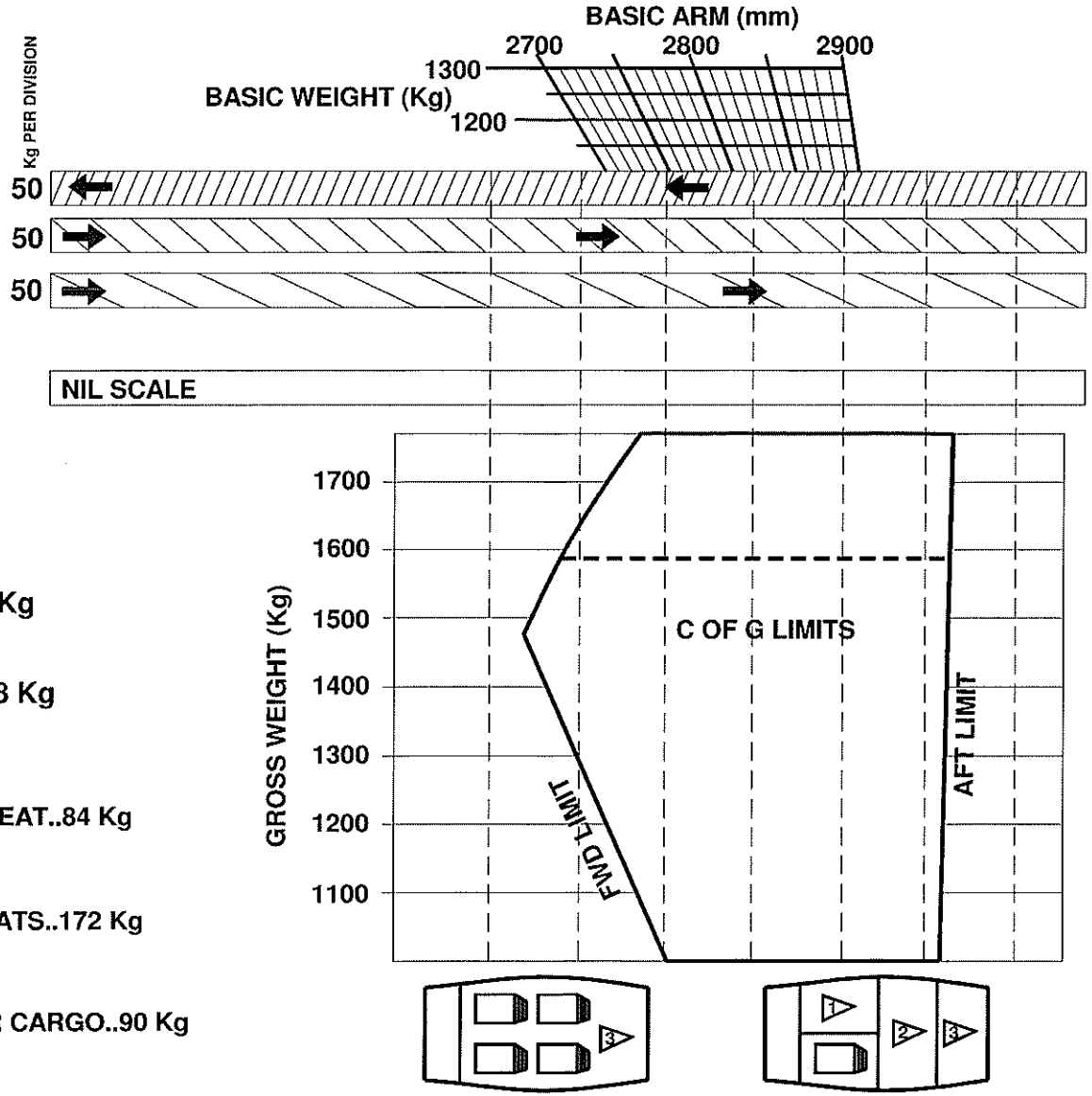


TAKE-OFF DISTANCE

ASSOCIATED CONDITIONS:

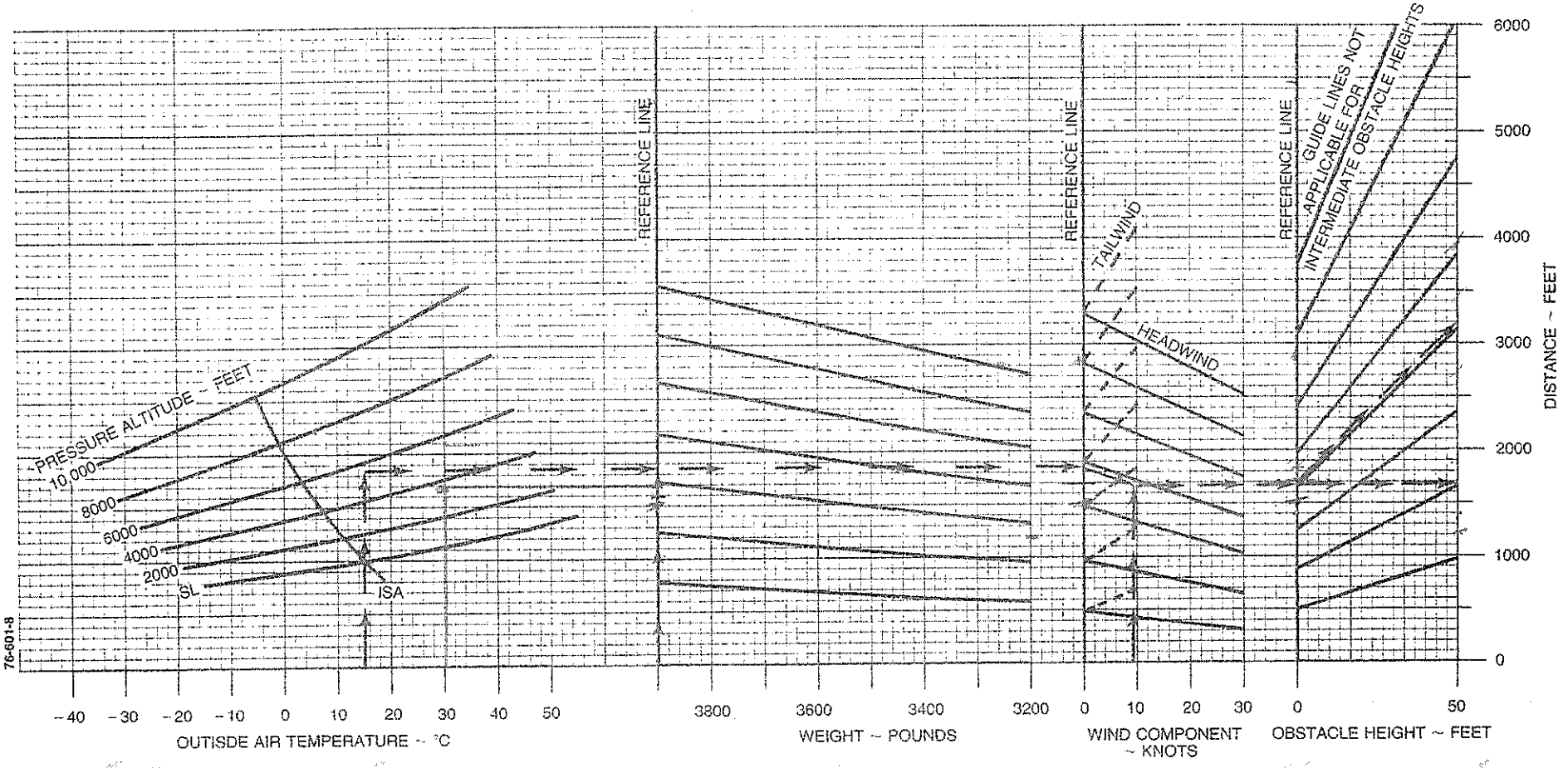
POWER . . . . . TAKE-OFF POWER AT 2700 RPM SET BEFORE BRAKE RELEASE
MIXTURE. . . . . FULL RICH (ABOVE 5000 FT LEAN TO 75° - 100°F ON RICH SIDE OF PEAK EGT)
FLAPS . . . . . UP
LANDING GEAR . . . . RETRACT AFTER POSITIVE CLIMB ESTABLISHED
RUNWAY. . . . . PAVED, LEVEL, DRY SURFACE
COWL FLAPS . . . . . OPEN

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

EXAMPLE:

OAT . . . . . 15°C
PRESSURE ALTITUDE . . . . . 5650 FT
TAKE-OFF WEIGHT. . . . . 3900 LBS
HEADWIND COMPONENT . . . . . 9.5 KTS

GROUND ROLL . . . . . 1680 FT
TOTAL DISTANCE OVER 50 FT OBSTACLE. . . . . 3200 FT
TAKE-OFF SPEED AT
LIFT-OFF . . . . . 71 KTS
50 FT. . . . . 80 KTS



TAKE-OFF DISTANCE - GRASS SURFACE

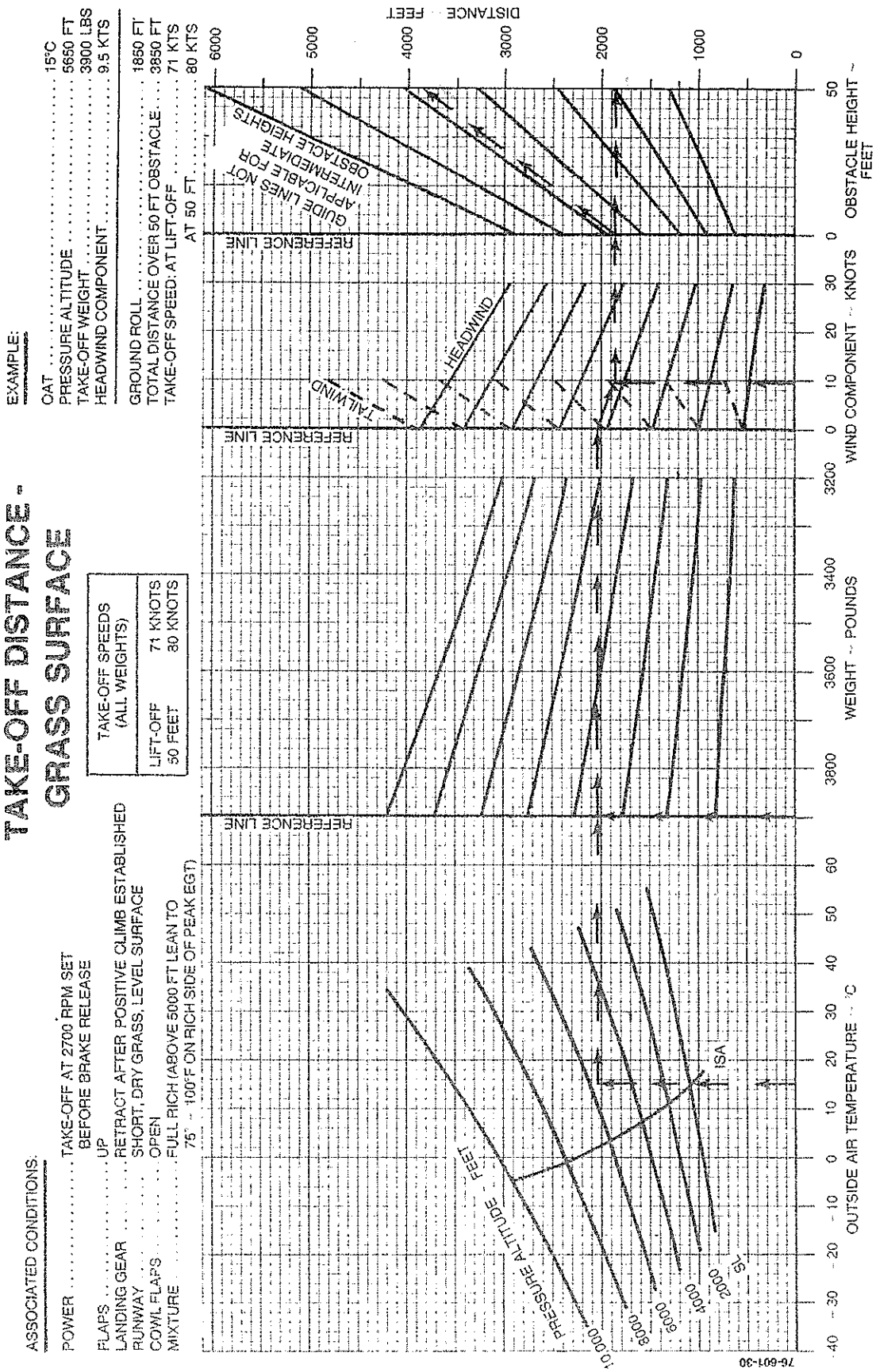
ASSOCIATED CONDITIONS:

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

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

EXAMPLE:

OAT	15°C
PRESSURE ALTITUDE	5650 FT
TAKE-OFF WEIGHT	3900 LBS
HEADWIND COMPONENT	9.5 KTS
GROUND ROLL	1850 FT
TOTAL DISTANCE OVER 50 FT OBSTACLE	3850 FT
TAKE-OFF SPEED: AT LIFT-OFF	71 KTS
AT 50 FT	80 KTS



ACCELERATE - STOP DISTANCE

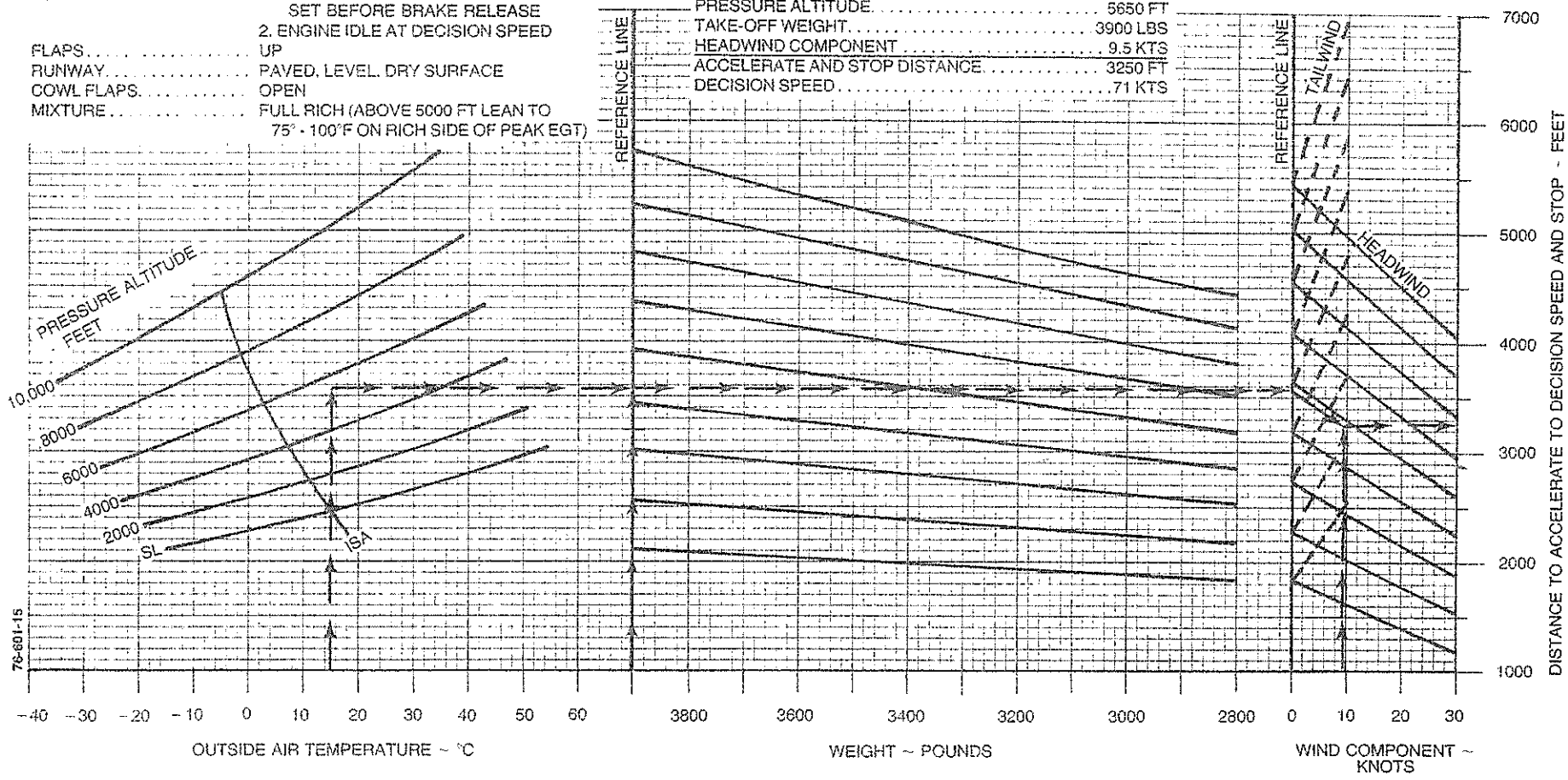
DECISION SPEED 71 KNOTS (ALL WEIGHTS)

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)

EXAMPLE:

OAT	15°C
PRESSURE ALTITUDE	5650 FT
TAKE-OFF WEIGHT	3900 LBS
HEADWIND COMPONENT	9.5 KTS
ACCELERATE AND STOP DISTANCE	3250 FT
DECISION SPEED	71 KTS



ACCELERATE - GO DISTANCE

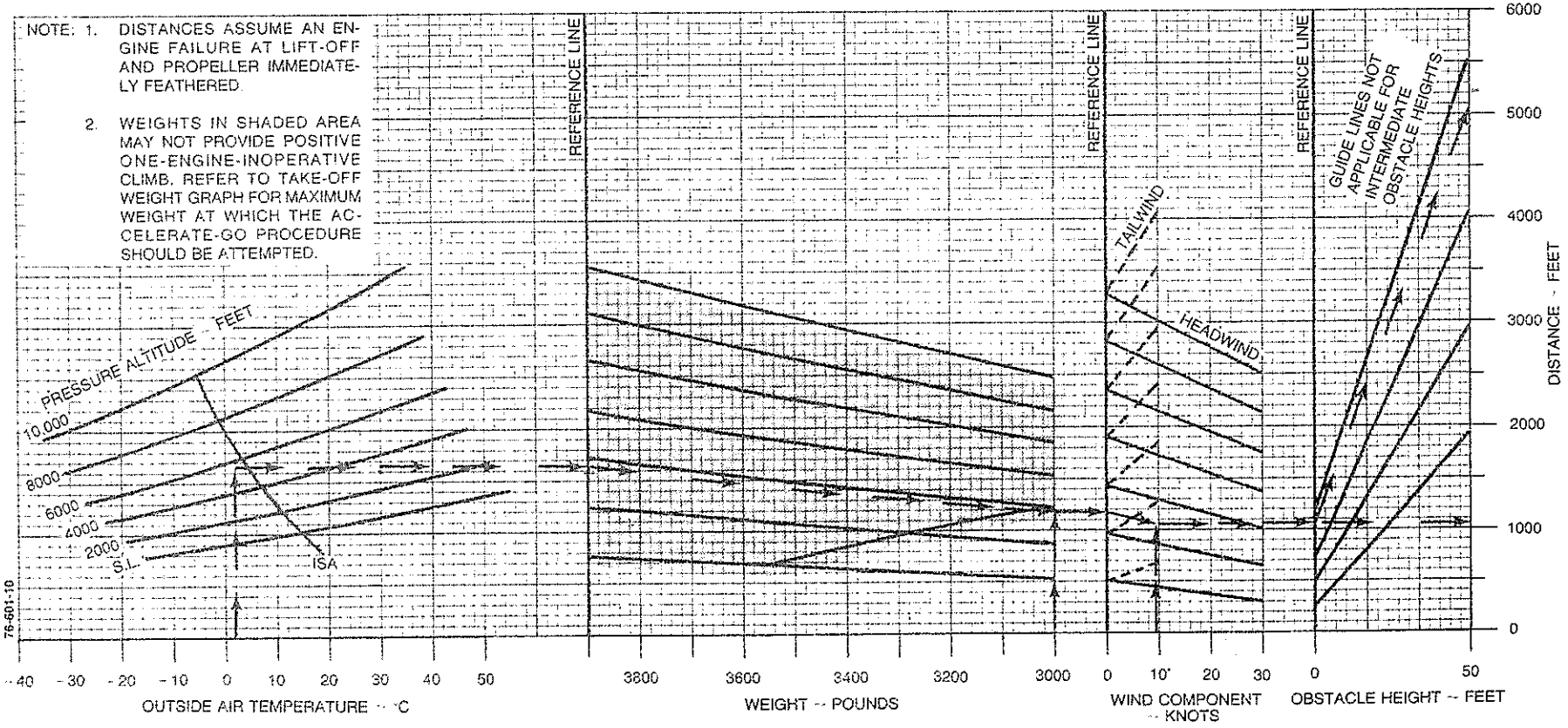
ASSOCIATED CONDITIONS:

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 LEAN TO 75° - 100°F ON RICH SIDE OF PEAK EGT)

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

EXAMPLE:

OAT	2°C
PRESSURE ALTITUDE	5650 FT
TAKE-OFF WEIGHT	3000 LBS
HEADWIND COMPONENT	9.5 KTS
GROUND ROLL	1050 FT
TOTAL DISTANCE OVER 50 FT OBSTACLE	5050 FT



CLIMB - TWO ENGINE

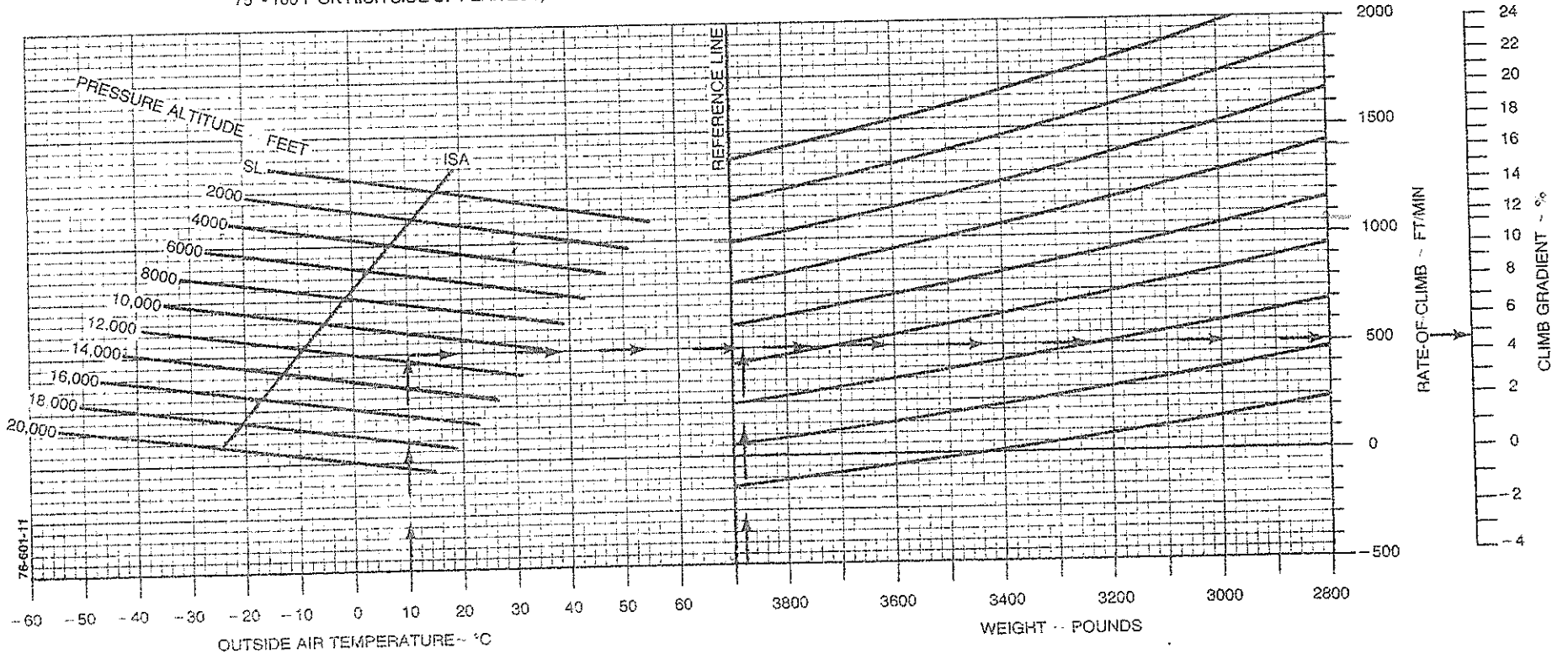
CLIMB SPEED 85 KNOTS (ALL WEIGHTS)

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	3880 LBS
RATE OF CLIMB	500 FT/MIN
CLIMB GRADIENT	4.6%



TAKE-OFF CLIMB GRADIENT – ONE ENGINE INOPERATIVE

CLIMB SPEED 80 KNOTS (ALL WEIGHTS)

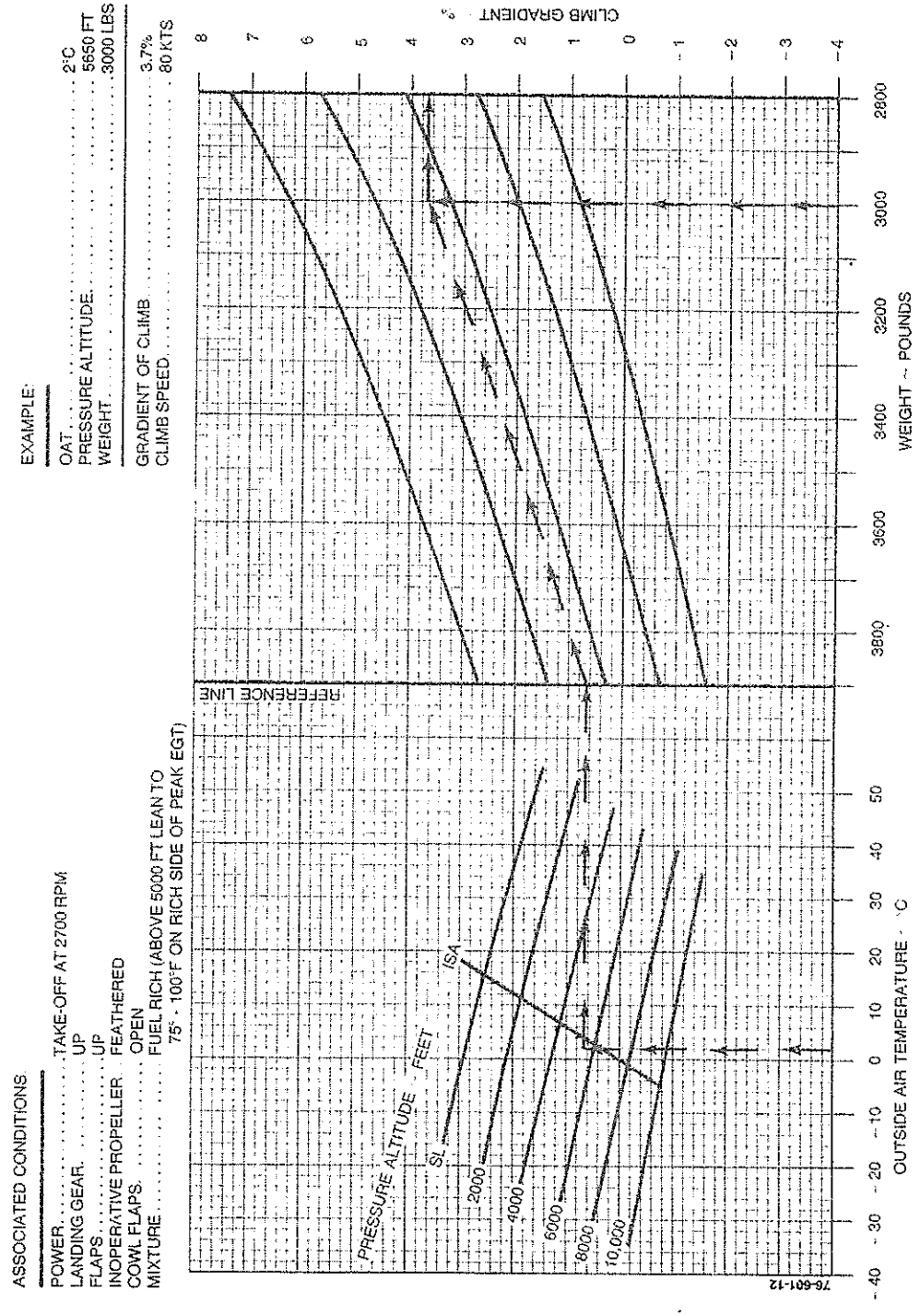
ASSOCIATED CONDITIONS:

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

EXAMPLE:

OAT . . . . . 2°C
PRESSURE ALTITUDE . . . . . 5650 FT
WEIGHT . . . . . 3000 LBS

GRADIENT OF CLIMB 3.7%
CLIMB SPEED . . . . . 80 KTS



CLIMB - ONE ENGINE INOPERATIVE

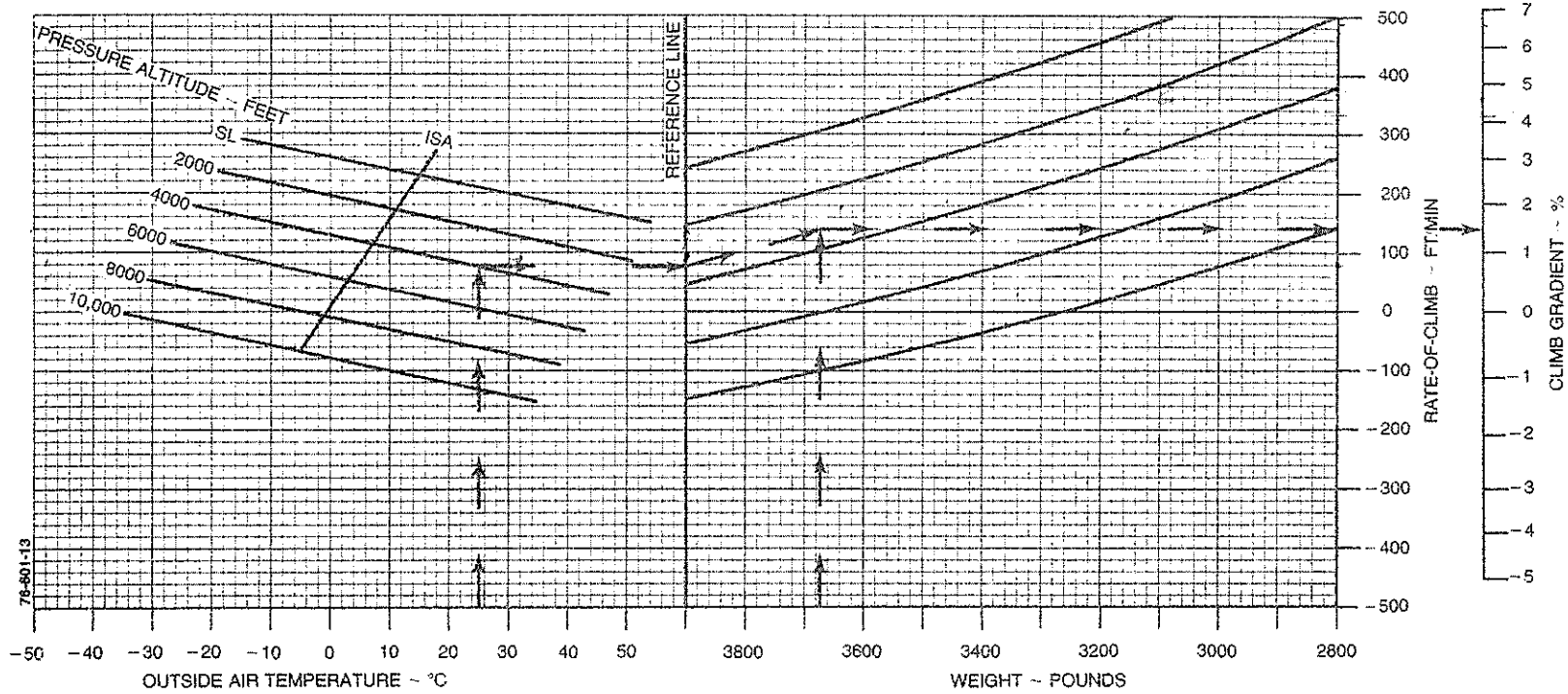
CLIMB SPEED 85 KNOTS (ALL WEIGHTS)

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	25°C
PRESSURE ALTITUDE	3965 FT
WEIGHT	3677 LBS
RATE OF CLIMB	140 FT/MIN
CLIMB GRADIENT	1.5%
CLIMB SPEED	85 KTS



SERVICE CEILING - ONE ENGINE INOPERATIVE

CLIMB SPEED - 85 KNOTS (ALL WEIGHTS)

ASSOCIATED CONDITIONS:

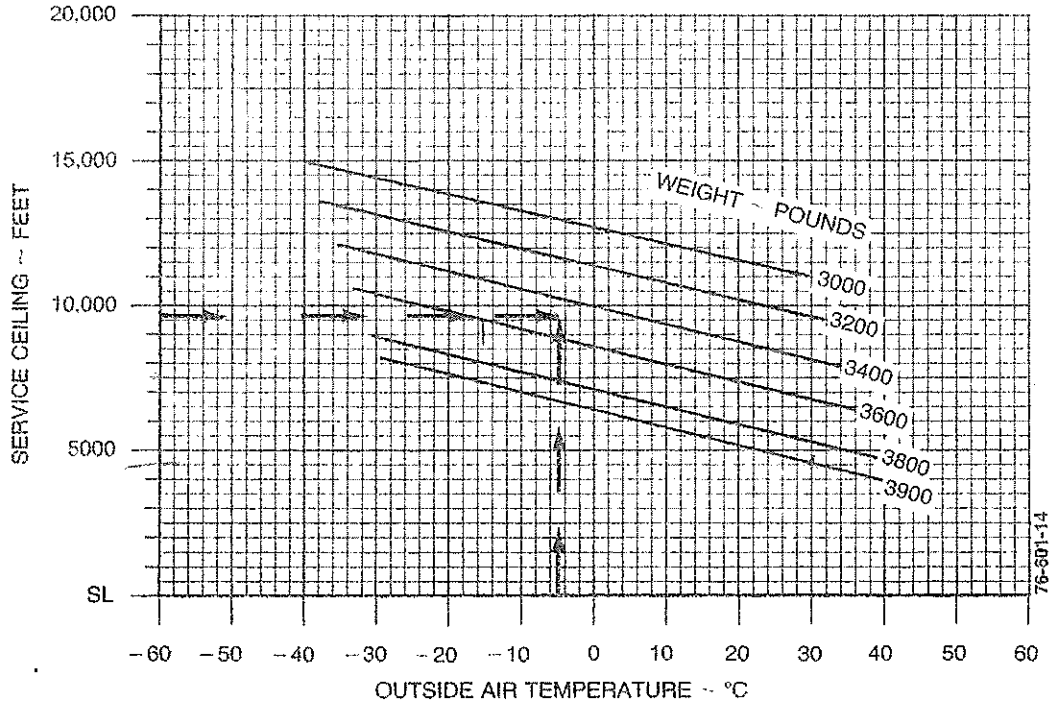
POWER. . . . . MAXIMUM CONTINUOUS AT 2700 RPM
FLAPS. . . . . UP
LANDING GEAR . . . . . UP
INOPERATIVE PROPELLER. . . FEATHERED

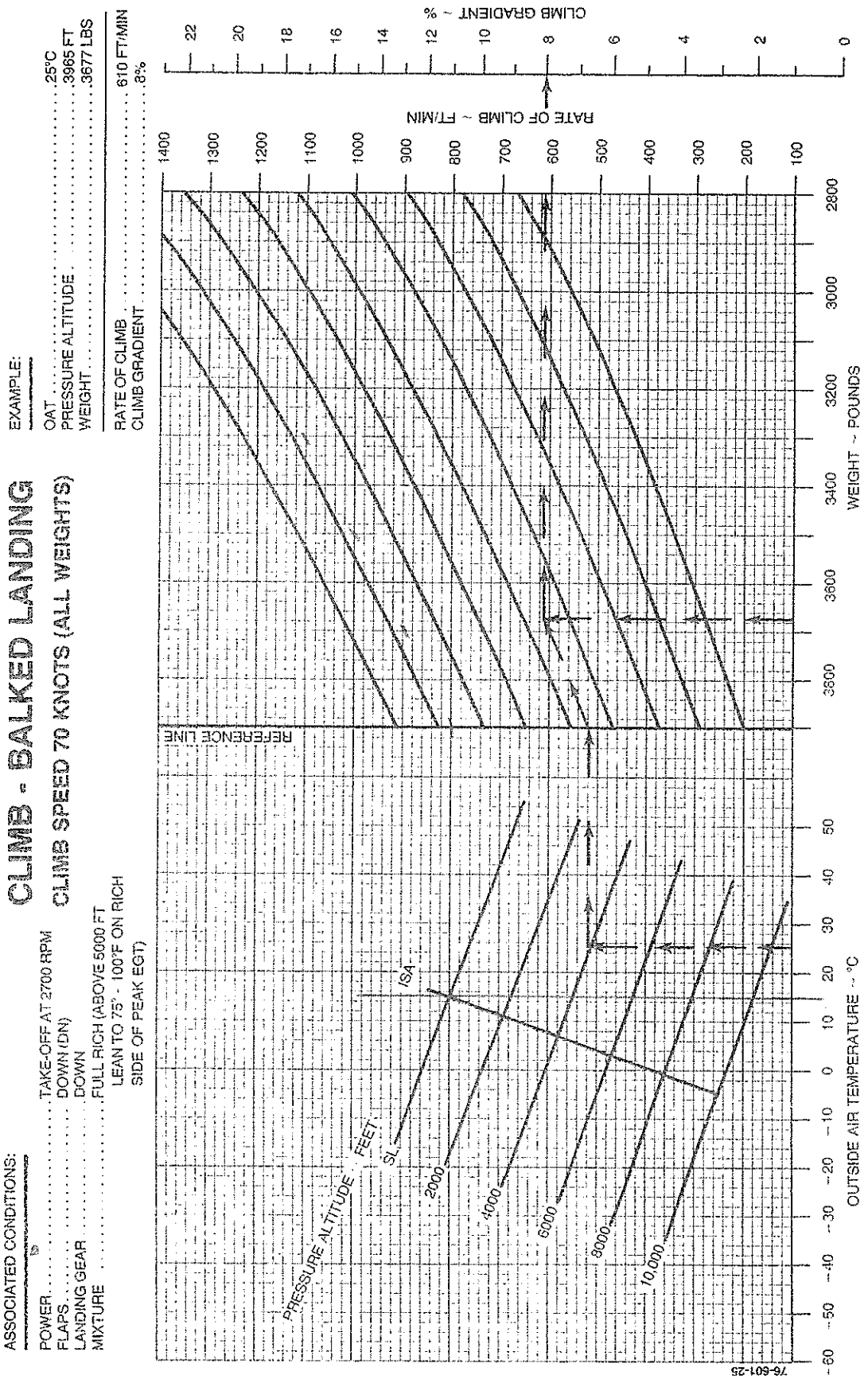
EXAMPLE:

OAT AT MEA . . . . . -5°C
ROUTE SEGMENT MEA. . . . . 9700 FT

WEIGHT FOR SERVICE CEILING AT ROUTE SEGMENT MEA. . . . .3480 LBS

NOTE: SERVICE CEILING IS ALTITUDE WHERE AIRPLANE HAS CAPABILITY OF CLIMBING 50 FT/MIN WITH ONE PROPELLER FEATHERED.




CLIMB - BALKED LANDING
CLIMB SPEED 70 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 ..... 3965 FT
WEIGHT ..... 3677 LBS
RATE OF CLIMB ..... 610 FT/MIN
CLIMB GRADIENT 8%
REFERENCE LINE
PRESSURE ALTITUDE FEET
SL
2000
4000
6000
8000
10,000
ISA
RATE OF CLIMB ~ FT/MIN
CLIMB GRADIENT ~ %
OUTSIDE AIR TEMPERATURE ~ °C
WEIGHT ~ POUNDS
76-601-25

LANDING DISTANCE - FLAPS DOWN (DN)

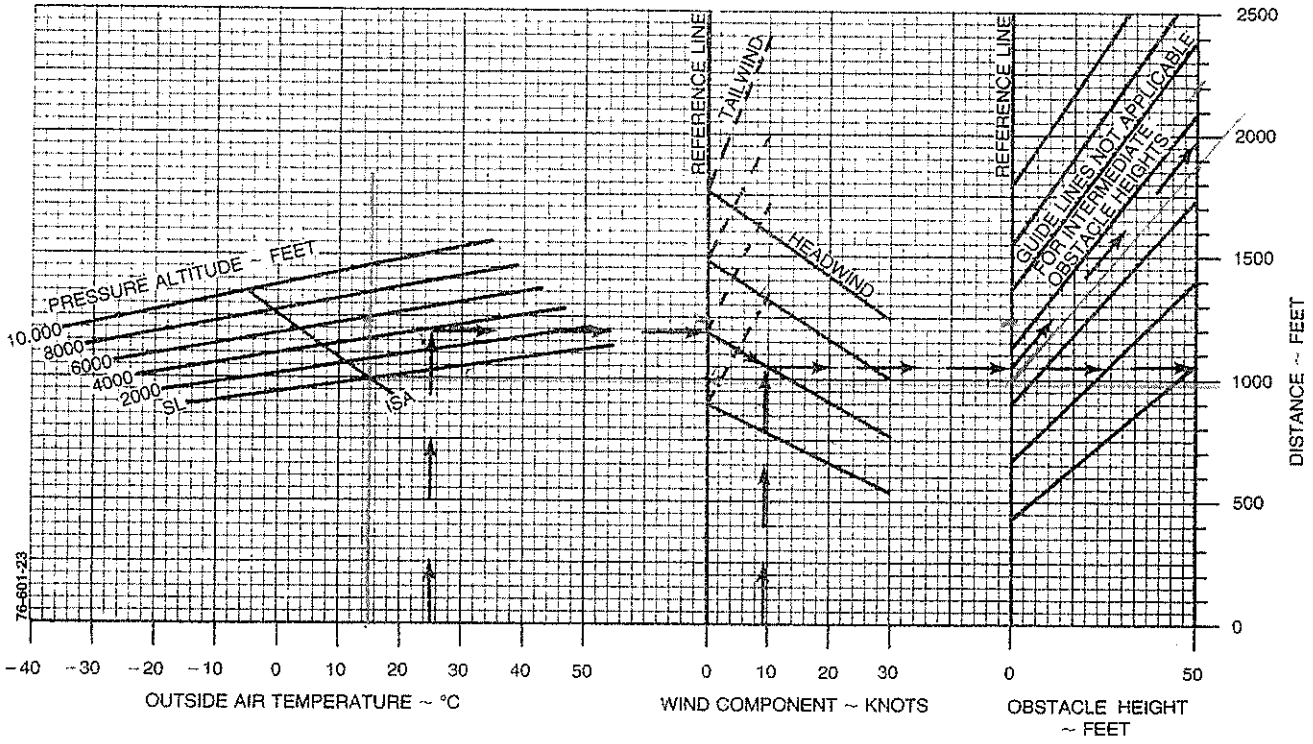
APPROACH SPEED 76 KNOTS (ALL WEIGHTS)

ASSOCIATED CONDITIONS:

POWER	RETARD TO MAINTAIN 600 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	3965 FT
HEADWIND COMPONENT	9.5 KTS
GROUND ROLL	1050 FT
TOTAL OVER 50 FT OBSTACLE	1970 FT
APPROACH SPEED	76 KTS



LANDING DISTANCE - FLAPS UP

APPROACH SPEED 87 KNOTS (ALL WEIGHTS)

ASSOCIATED CONDITIONS:

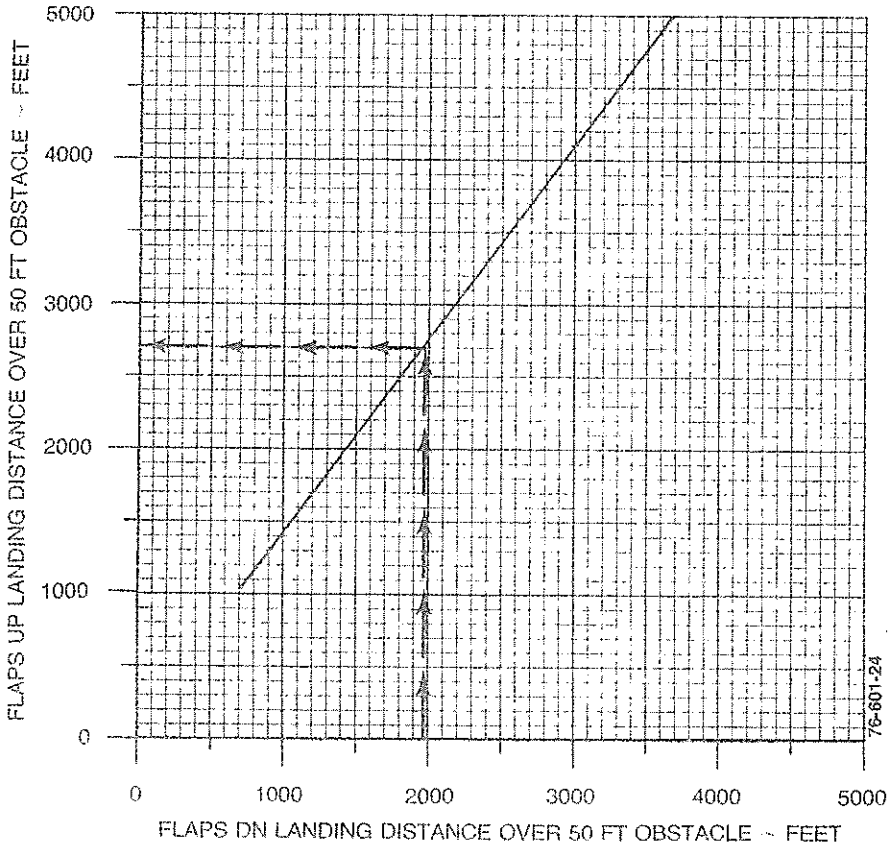
POWER . . . . . RETARD TO MAINTAIN 600 FT/MIN ON FINAL APPROACH
FLAPS . . . . . UP
LANDING GEAR . . . . . DOWN
RUNWAY . . . . . PAVED, LEVEL, DRY SURFACE
APPROACH SPEED . . . . . 87 KNOTS IAS
BRAKING . . . . . MAXIMUM

EXAMPLE:

FLAPS DN LANDING DISTANCE OVER 50 FT OBSTACLE . . . . . 1970 FT

FLAPS UP LANDING DISTANCE OVER 50 FT OBSTACLE . . . . . 2700 FT
APPROACH SPEED . . . . . 87 KTS

NOTE: TO DETERMINE FLAPS UP LANDING DISTANCE, READ FROM THE LANDING DISTANCE - FLAPS DOWN GRAPH, THE LANDING DISTANCE APPROPRIATE TO OAT, ALTITUDE, WIND, AND 50 FT OBSTACLE. ENTER THIS GRAPH WITH DERIVED VALUE AND READ FLAPS UP LANDING DISTANCE.



LANDING DISTANCE - GRASS SURFACE - FLAPS DOWN (DN)

APPROACH SPEED 76 KTS (ALL WEIGHTS)

ASSOCIATED CONDITIONS:

POWER.....RETARD TO MAINTAIN 600 FT/MIN ON FINAL APPROACH
FLAPS.....DOWN (DN)
RUNWAY.....SHORT, DRY, GRASS
APPROACH SPEED.....76 KTS
BRAKING.....MAXIMUM

EXAMPLE:

OAT.....25°C
PRESSURE ALTITUDE.....3965 FT
HEADWIND COMPONENT.....9.5 KTS

GROUND ROLL.....1250 FT
TOTAL OVER 50 FT OBSTACLE.....2150 FT
APPROACH SPEED.....76 KTS