AIRCRAFT PERFORMANCE CHARTS

Pressure Altitude And Density Altitude

Pressure altitude is indicated altitude corrected for non-standard pressure. It is determined by setting 29.92 In the altimeter setting window.

Density altitude is pressure altitude corrected for non-standard temperature. Performance tables for most aircraft are based on density altitude. Find density altitude using the E6B computer.

NOTE CONCERNING GRAPHS

Some graph charts have a sample shown on the chart. Use the sample to review the proper method of entering the chart and reading the data.

Read all notes. if the chart has a note regarding temperature, wind, aircraft configuration variations, percentage of distance, etc., expect a question that will require you to use the note.

Count off the graph scale very closely. The vertical and horizontal scale are usually different.

When you enter a graph, enter with the curves or tangent lines. Once you have found the data mark point, read the answers straight out.

NOTE CONCERNING TABULAR CHARTS

These charts are entered with certain known numbers and the answers are read directly as numbers.

Read all notes. Most test questions will require that all notes be used to get a correct answer.

There are many numbers on these charts. Use a straight edge to ensure you are reading the correct data.

If a question uses numbers that are in-between the numbers given on the chart, be sure to interpolate. Do not round off numbers.

If your interpolation is a midpoint interpolation, you can average the two numbers. If you must Interpolate between four numbers, (between two temperatures and two aircraft weights), if it is a midpoint Interpolation, you can again just average the four numbers.

5234. H317 COM
The performance tables of an aircraft for takeoff and climb are based on

A) pressure/density altitude.
B) cabin altitude.
C) true altitude.

NOTE: CORRECT ANSWER IN BOLD ITALICS

5306. H317 COM
GIVEN:
Pressure altitude 12,000 ft
True air temperature +50 °F

From the conditions given, the approximate density altitude is

A) 11,900 feet.
B) 14,130 feet.
C) 18,150 feet

5307. H317 COM
GIVEN:
Pressure altitude 5,000 ft
True air temperature +30 °C

From the conditions given, the approximate density altitude is

A) 7,800 feet.
B) 8,100 feet.
C) 8,800 feet.

5308. H317 COM
GIVEN:
Pressure altitude 6,000 ft
True air temperature . +30 °F

From the conditions given, the approximate density altitude is

A) 9,000 feet.
B) 5,500 feet.
C) 5,000 feet.

5309. H317 COM
GIVEN:
Pressure altitude 7,000 ft
True air temperature +15 °C

From the conditions given, the approximate density altitude is

A) 5,000 feet.
B) 8,500 feet.
C) 9,500 feet.

5451. (Refer to figure 8.)
GIVEN:
Fuel quantity 47 gal
Power-cruise (lean) 55 percent

Approximately how much flight time would be available with a night VFR fuel reserve remaining?

A) 3 hours 8 minutes
B) 3 hours 22 minutes
C) 3 hours 43 minutes

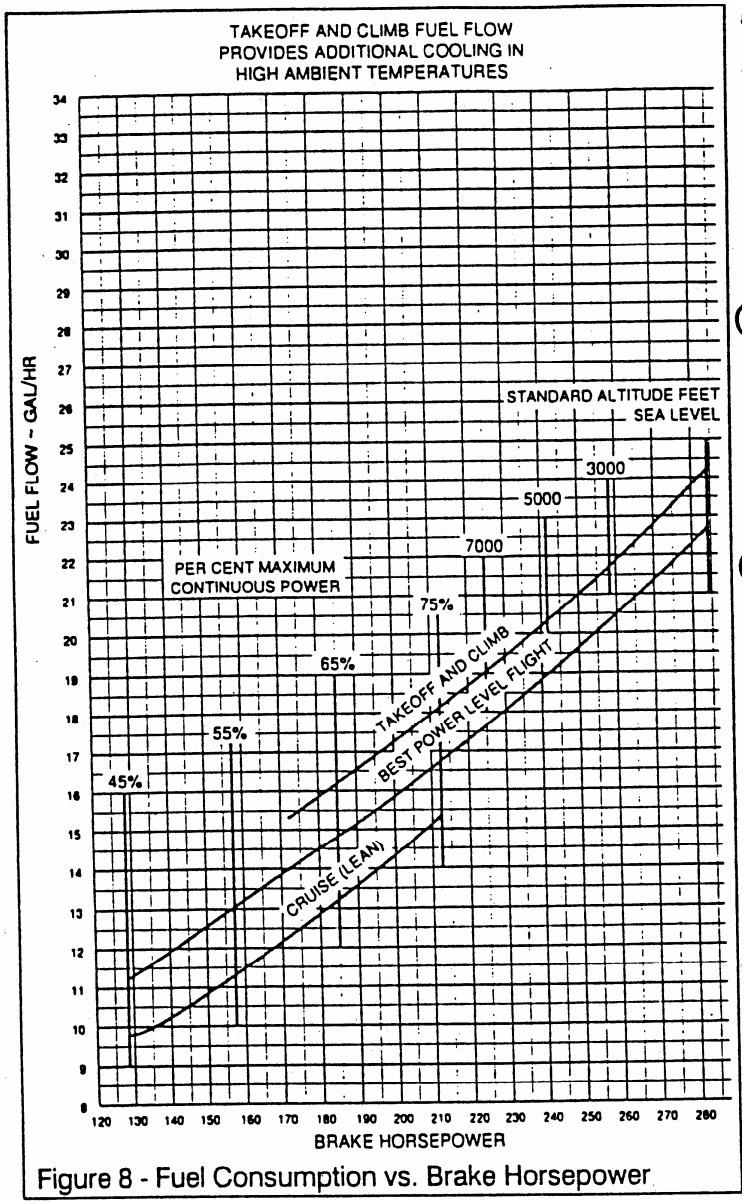


Figure 8 - Fuel Consumption vs. Brake Horsepower

5452. H317 COM
(Refer to figure 8.)
GIVEN:

Fuel quantity 65 gal
Best power (level flight) 55 percent

Approximately how much flight time would be available with a day VFR fuel reserve remaining?

A) 4 hours 17 minutes.
B) 4 hours 30 minutes.
C) 5 hours 4 minutes.

5453.
(Refer to figure 8.) Approximately how much fuel would be consumed when climbing at 75 percent power for 7 minutes?

A) 1.82 gallons.
B) 1.97 gallons.
C) 2.15 gallons.

5454.
(Refer to figure 8.) Determine the amount of fuel consumed during takeoff and climb at 70 percent power for 10 minutes.

A) 2.66 gallons.
B) 2.88 gallons.
C) 3.2 gallons.

5455.
(Refer to figure 8.) With 38 gallons of fuel aboard at cruise power (55 percent), how much flight time is available with night VFR fuel reserve still remaining?

A) 2 hours 34 minutes.
B) 2 hours 49 minutes.
C) 3 hours 18 minutes.

5456. (Refer to figure 9.) H317 COM
(Refer to figure 9.) Using a normal climb, how much fuel would be used from engine start to 12,000 feet pressure altitude?
Aircraft weight 3,800 lb
Airport pressure altitude 4,000 ft
Temperature 26 °C

A) 46 pounds.
B) 51 pounds.
C) 58 pounds.

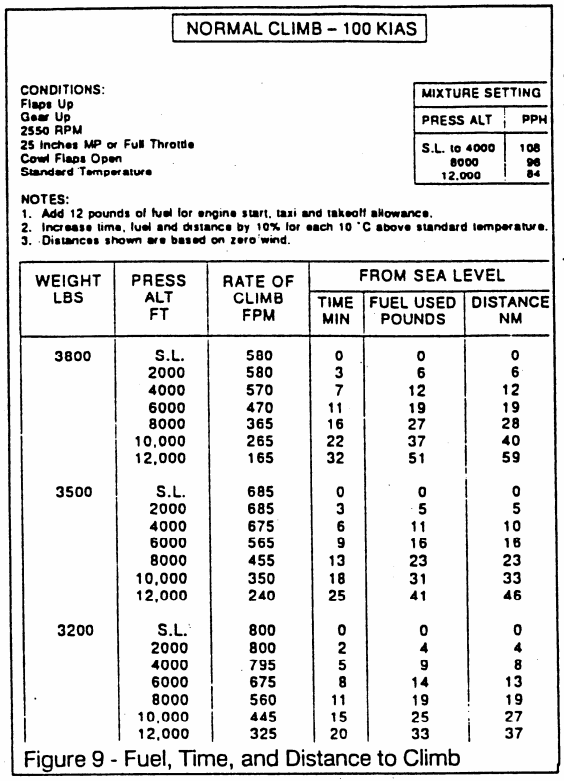
5457. H317 COM
(Refer to figure 9.) Using a normal climb, how much fuel would be used from engine start to 10,000 feet pressure altitude?
Aircraft weight 3,500lb
Airport pressure altitude 4,000 ft
Temperature 21 °C

A) 23pounds.
B) 31 pounds.
C) 35 pounds.

5458. H317 COM
(Refer to figure 10.) Using a maximum rate of climb, how much fuel would be used from engine start to 6,000 feet pressure altitude?
Aircraft weight 3,200lb
Airport pressure altitude 2,000 ft
Temperature 27 °C

A) 10 pounds.
B) 14 pounds.
C) 24 pounds.

NOTE: CORRECT ANSWER IN BOLD ITALICS



NORMAL CLIMB – 100 KIAS

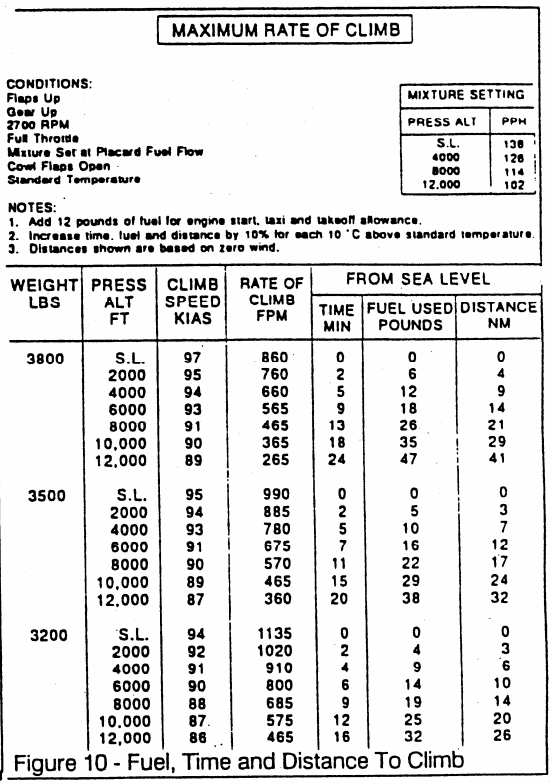
CONDITIONS:
Flaps Up
Gear Up
2550 RPM
25 Inches MP or Full Throttle
Cowl Flaps Open
Standard Temperature

MIXTURE SETTING	
PRESS ALT	PPH
S.L. to 4000	108
8000	96
12,000	84

NOTES:
1. Add 12 pounds of fuel for engine start, taxi and takeoff allowance.
2. Increase time, fuel and distance by 10% for each 10 °C above standard temperature.
3. Distances shown are based on zero wind.

WEIGHT LBS	PRESS ALT FT	RATE OF CLIMB FPM	FROM SEA LEVEL		
			TIME MIN	FUEL USED POUNDS	DISTANCE NM
3800	S.L.	580	0	0	0
	2000	580	3	6	6
	4000	570	7	12	12
	6000	470	11	19	19
	8000	365	16	27	28
	10,000	265	22	37	40
	12,000	165	32	51	59
3500	S.L.	685	0	0	0
	2000	685	3	5	5
	4000	675	6	11	10
	6000	565	9	16	16
	8000	455	13	23	23
	10,000	350	18	31	33
	12,000	240	25	41	46
3200	S.L.	800	0	0	0
	2000	800	2	4	4
	4000	795	5	9	8
	6000	675	8	14	13
	8000	560	11	19	19
	10,000	445	15	25	27
	12,000	325	20	33	37

Figure 9 - Fuel, Time, and Distance to Climb



MAXIMUM RATE OF CLIMB

CONDITIONS:
Flaps Up
Gear Up
2700 RPM
Full Throttle
Mixture Set at Placard Fuel Flow
Cowl Flaps Open
Standard Temperature

MIXTURE SETTING	
PRESS ALT	PPH
S.L.	138
4000	126
8000	114
12,000	102

NOTES:
1. Add 12 pounds of fuel for engine start, taxi and takeoff allowance.
2. Increase time, fuel and distance by 10% for each 10 °C above standard temperature.
3. Distances shown are based on zero wind.

WEIGHT LBS	PRESS ALT FT	CLIMB SPEED KIAS	RATE OF CLIMB FPM	FROM SEA LEVEL		
				TIME MIN	FUEL USED POUNDS	DISTANCE NM
3800	S.L.	97	860	0	0	0
	2000	95	760	2	6	4
	4000	94	660	5	12	9
	6000	93	565	9	18	14
	8000	91	465	13	26	21
	10,000	90	365	18	35	29
	12,000	89	265	24	47	41
3500	S.L.	95	990	0	0	0
	2000	94	885	2	5	3
	4000	93	780	5	10	7
	6000	91	675	7	16	12
	8000	90	570	11	22	17
	10,000	89	465	15	29	24
	12,000	87	360	20	38	32
3200	S.L.	94	1135	0	0	0
	2000	92	1020	2	4	3
	4000	91	910	4	9	6
	6000	90	800	6	14	10
	8000	88	685	9	19	14
	10,000	87	575	12	25	20
	12,000	86	465	16	32	26

Figure 10 - Fuel, Time and Distance To Climb

5459. H317 COM
(Refer to figure 10.) Using a maximum rate of climb, how much fuel would be used from engine start to 10,000 feet pressure altitude?

Aircraft weight 3,800lb
Airport pressure altitude 4,000 ft
Temperature 30 °C

A) 28 pounds.
B) 35 pounds.
C) 40 pounds.

5460. H317 COM
(Refer to figure 11.) If the cruise altitude is 7,500 feet, using 64 percent power at 2,500 RPM, what would be the range with 48 gallons of usable fuel?

A) 635 miles.
B) 645 miles.
C) 810 miles.

5461.
(Refer to figure 11.) What should be the endurance at an altitude of 7,500 feet, using 52 percent power?

NOTE: (With 48 Gallons fuel-no reserve)
A) 6.1 Hours
B) 7.7 Hours
C) 8.0 Hours

5462.
(Refer to figure 11.) What would be the approximate true airspeed and fuel consumption per hour at an altitude of 7,500 feet, using 52 percent power?

A) 103 MPH TAS, 7.7 GPH.
B) 105 MPH TAS, 6.1 GPH.
C) 105 MPH TAS, 6.2 GPH.

5463.
(Refer to figure 12.)
GIVEN:
Pressure altitude 18,000 ft
Temperature -21 °C
Power 2,400 RPM - 28” MP
Recommended lean mixture
usable fuel 425 lb

What is the approximate flight time available under the given conditions? (Allow for VFR day fuel reserve.)

A) 3 hours 46 minutes.
B) 4 hours 1 minute.
C) 4 hours 31 minutes.

NOTE: CORRECT ANSWER IN BOLD ITALICS

Gross Weight- 2300 Lbs.
Standard Conditions
Zero Wind Lean Mixture

NOTE: Maximum cruise is normally limited to 75% power.

ALT.	RPM	% BHP	TAS MPH	GAL / HOUR	38 GAL (NO RESERVE) ENDR. HOURS	38 GAL (NO RESERVE) RANGE MILES	48 GAL (NO RESERVE) ENDR. HOURS	48 GAL (NO RESERVE) RANGE MILES
2500	2700	86	134	9.7	3.9	525	4.9	660
	2600	79	129	8.6	4.4	570	5.6	720
	2500	72	123	7.8	4.9	600	6.2	760
	2400	65	117	7.2	5.3	620	6.7	780
	2300	58	111	6.7	5.7	630	7.2	795
	2200	52	103	6.3	6.1	625	7.7	790
5000	2700	82	134	9.0	4.2	565	5.3	710
	2600	75	128	8.1	4.7	600	5.9	760
	2500	68	122	7.4	5.1	625	6.4	790
	2400	61	116	6.9	5.5	635	6.9	805
	2300	55	108	6.5	5.9	635	7.4	805
	2200	49	100	6.0	6.3	630	7.9	795
7500	2700	78	133	8.4	4.5	600	5.7	755
	2600	71	127	7.7	4.9	625	6.2	790
	2500	64	121	7.1	5.3	645	6.7	810
	2400	58	113	6.7	5.7	645	7.2	820
	2300	52	105	6.2	6.1	640	7.7	810
10,000	2650	70	129	7.6	5.0	640	6.3	810
	2600	67	125	7.3	5.2	650	6.5	820
	2500	61	118	6.9	5.5	655	7.0	830
	2400	55	110	6.4	5.9	650	7.5	825
	2300	49	100	6.0	6.3	635	8.0	800

Figure 11 - Cruise and Range Performance

PRESSURE ALTITUDE 18,000 FEET

CONDITIONS
4000 Pounds
Recommended Lean Mixture
Cowl Flaps Closed

NOTE
For best fuel economy at 70% power or less, operate at 6 PPH leaner than shown in this chart or at peak EGT.

		20 °C BELOW STANDARD TEMP -41 °C			STANDARD TEMPERATURE -21 °C			20 °C ABOVE STANDARD TEMP -1 °C		
RPM	MP	% BHP	KTAS	PPH	% BHP	KTAS	PPH	% BHP	KTAS	PPH
2500	30	---	---	---	81	188	106	76	185	100
	28	80	184	105	76	182	99	71	178	93
	26	75	178	99	71	176	93	67	172	88
	24	70	171	91	66	168	86	62	164	81
	22	63	162	84	60	159	79	56	155	75
2400	30	81	185	107	77	183	101	72	180	94
	28	76	179	100	72	177	94	67	173	88
	26	71	172	93	67	170	88	63	166	83
	24	66	165	87	62	163	82	58	159	77
	22	61	158	80	57	155	76	54	150	72
2300	30	79	182	103	74	180	97	70	176	91
	28	74	176	97	70	174	91	65	170	86
	26	69	170	91	65	167	86	61	163	81
	24	64	162	84	60	159	79	56	155	75
	22	58	154	77	55	150	73	51	145	65
2200	26	66	166	87	62	163	82	58	159	77
	24	61	158	80	57	154	76	54	150	72
	22	55	148	73	51	144	69	48	138	66
	20	49	136	66	46	131	63	43	124	59

Figure 12 - Cruise Performance

5464.
(Refer to figure 12.)
GIVEN:
Pressure altitude 18,000 ft
Temperature -41 °C
Power 2,500 RPM - 26” MP
Recommended lean mixture
Usable fuel 318 lb

What is the approximate flight time available under the given conditions? (Allow for VFR night fuel reserve.)

A) 2 hours 27 minutes.
B) 3 hours 12 minutes.
C) 3 hours 42 minutes.

5465.
(Refer to figure 12.)
GIVEN:
Pressure altitude 18,000 ft
Temperature - 1 °C
Power 2,200 RPM - 20” MP
Best fuel economy
usable fuel 344 lb

What is the approximate flight time available under the given conditions? (Allow for VFR day fuel reserve.)

A) 4 hours 50 minutes.
B) 5 hours 20 minutes.
C) 5 hours 59 minutes.

5482.
Aircraft weight 3,400 lb
Airport pressure altitude 6,000 ft
Temperature at 6,000 feet 10 °C

Using a maximum rate of climb under the given conditions, how much fuel would be used from engine start to a pressure altitude of 16,000 feet?

A) 43 pounds.
B) 45 pounds.
C) 49 pounds.

5483.
(Refer to figure 13.)
Aircraft weight 4,000 lb
Airport pressure altitude 2,000 ft
Temperature. at 2,000 feet 32 °C

Using a maximum rate of climb under the given conditions, how much time would be required to climb to a pressure altitude of 8,000 feet?
A) 7 Minutes
B) 8.4 Minutes
C) 11.2 Minutes

NOTE: CORRECT ANSWER IN BOLD ITALICS

MAXIMUM RATE OF CLIMB

PRESS ALT	MP	PPH
S.L. TO 17,000	35	162
18,000	34	156
20,000	32	144
22,000	30	132
24,000	28	120

CONDITIONS:
Flaps Up
Gear Up
2600 RPM
Cowl Flaps Open
Standard Temperature

NOTES:
1. Add 16 pounds of fuel for engine start, taxi and takeoff allowance.
2. Increase time, fuel and distance by 10% for each 10 °C above standard temperature.
3. Distances shown are based on zero wind.

WEIGHT LBS	PRESS ALT FT	CLIMB SPEED KIAS	RATE OF CLIMB FPM	FROM SEA LEVEL		
				TIME MIN	FUEL USED POUNDS	DISTANCE NM
4000	S.L.	100	930	0	0	0
	4000	100	890	4	12	7
	8000	100	845	9	24	16
	12,000	100	790	14	38	25
	16,000	100	720	19	52	36
	20,000	99	515	26	69	50
	24,000	97	270	37	92	74
3700	S.L.	99	1060	0	0	0
	4000	99	1020	4	10	6
	8000	99	975	8	21	13
	12,000	99	915	12	33	21
	16,000	99	845	17	45	30
	20,000	97	630	22	59	42
	24,000	95	370	30	77	60
3400	S.L.	97	1205	0	0	0
	4000	97	1165	3	9	5
	8000	97	1120	7	19	12
	12,000	97	1060	11	29	18
	16,000	97	985	15	39	26
	20,000	96	760	19	51	36
	24,000	94	485	26	65	50

Figure 13 - Fuel, Time, and Distance to Climb

NORMAL CLIMB – 110 KIAS

CONDITIONS:
Flaps Up
Gear Up
2500 RPM
30 Inches Hg
120 PPH Fuel Flow
Cowl Flaps Open
Standard Temperature

NOTES:
1. Add 16 pounds of fuel for engine start, taxi and takeoff allowance.
2. Increase time, fuel and distance by 10% for each 7 °C above standard temperature.
3. Distances shown are based on zero wind.

WEIGHT LBS	PRESS ALT FT	RATE OF CLIMB FPM	FROM SEA LEVEL		
			TIME MIN	FUEL USED POUNDS	DISTANCE NM
4000	S.L.	605	0	0	0
	4000	570	7	14	13
	8000	530	14	28	27
	12,000	485	22	44	43
	16,000	430	31	62	63
	20,000	365	41	82	87
3700	S.L.	700	0	0	0
	4000	665	6	12	11
	8000	625	12	24	23
	12,000	580	19	37	37
	16,000	525	26	52	53
	20,000	460	34	68	72
3400	S.L.	810	0	0	0
	4000	775	5	10	9
	8000	735	10	21	20
	12,000	690	16	32	31
	16,000	635	22	44	45
	20,000	565	29	57	61

Figure 14 - Fuel, Time and Distance To Climb

5484.
Aircraft weight 3,700 lb
Airport pressure altitude 4,000 ft
Temperature at 4,000 feet 21 “C

Using a normal climb under the given conditions, how much fuel would be used from engine start to a pressure altitude of 12,000 feet?

A) 30 pounds.
B) 37 pounds.
C) 46 pounds.

5485.
(Refer to figure 14.)

GIVEN:
Weight 3,400 lb
Airport pressure altitude 4,000 ft
Temperature at 4,000 feet 14 “C

Using a normal climb under the given conditions, how much time would be required to climb to a pressure altitude of 8,000 feet?

A) 4.8 minutes.
B) 5 minutes.
C) 5.5 minutes.

5486. (Refer to figure 15.)

GIVEN:
Airport pressure altitude 4,000 ft
Airport temperature 12 °C
Cruise pressure altitude 9,000 ft
Cruise temperature -4 °C

What will be the distance required to climb to cruise altitude under the given conditions?

A) 6 miles.
B) 8.5 miles.
C) 11 miles.

5487. (Refer to figure 15.)

Airport pressure altitude 2,000 ft
Airport temperature 20 °C
Cruise pressure altitude 10,000 ft
Cruise temperature 0 °C

What will be the fuel, time, and distance required to climb to cruise altitude under the given conditions?

A) 5 gallons, 9 minutes, 13 NM.
B) 6 gallons, 11 minutes, 16 NM.
C) 7 gallons, 12 minutes, 18 NM.
NOTE: CORRECT ANSWER IN BOLD ITALICS

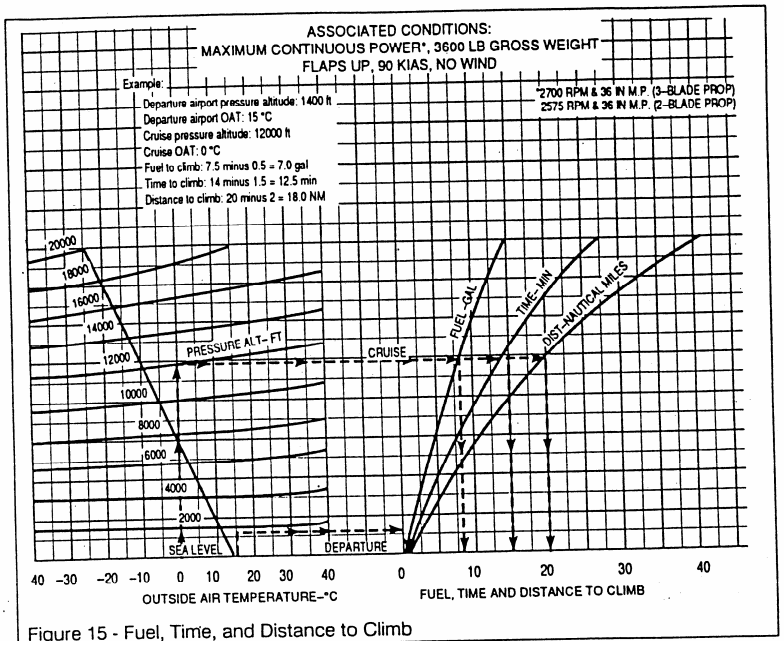


Figure 15 - Fuel, Time, and Distance to Climb

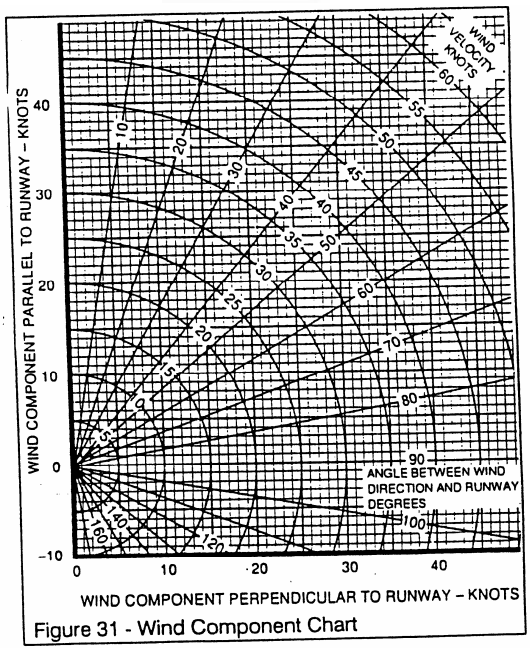


Figure 31 - Wind Component Chart

5614. H317 COM
What effect does an uphill runway slope have on takeoff performance?

A) Increases takeoff speed.
B) Increases takeoff distance.
C) Decreases takeoff distance.

5615. H317 COM
(Refer to figure 31.) Rwy 30 is being used for landing. Which surface wind would exceed the airplane's crosswind capability of 0.2 VSO, if VSO is 60 knots?

A) 260° at 20 knots.
B) 275° at 25 knots.
C) 315° at 35 knots.

5616. H317 COM
(Refer to figure 31.) If the tower-reported surface wind is 010° at 18 knots, what is the crosswind component for a Rwy 08 landing?

A) 7 knots.
B) 15 knots.
C) 17 knots.

5617. H317 COM
(Refer to figure 31.) The surface wind is 180° at 25 knots. What is the crosswind component for a Rwy 13 landing?

A) 19 knots.
B) 21 knots.
C) 23 knots.

5618. H317 COM
(Refer to figure 31.) What is the headwind component for a Rwy 13 takeoff if the surface wind is 190° at 15 knots?

A) 7 knots.
B) 13 knots.
C) 15 knots.

5619. H317 COM
(Refer to figure 32.)
GIVEN:
Temperature 75 °F
Pressure altitude 6,000 ft
Weight 2,900 lb
Headwind 20 kts
To safely take off over a 50-foot obstacle in 1,000 feet, what weight reduction is necessary?

A) 50 pounds.
B) 100 pounds.
C) 300 pounds.

5620. H317 COM
(Refer to figure 32.)
GIVEN:
Temperature 50 °F
Pressure altitude 2,000 feet
Weight 2,700 lb
Wind Calm
What is the total takeoff distance over a 50-foot obstacle?

A) 650 feet.
B) 1050 feet.
C) 800 feet.

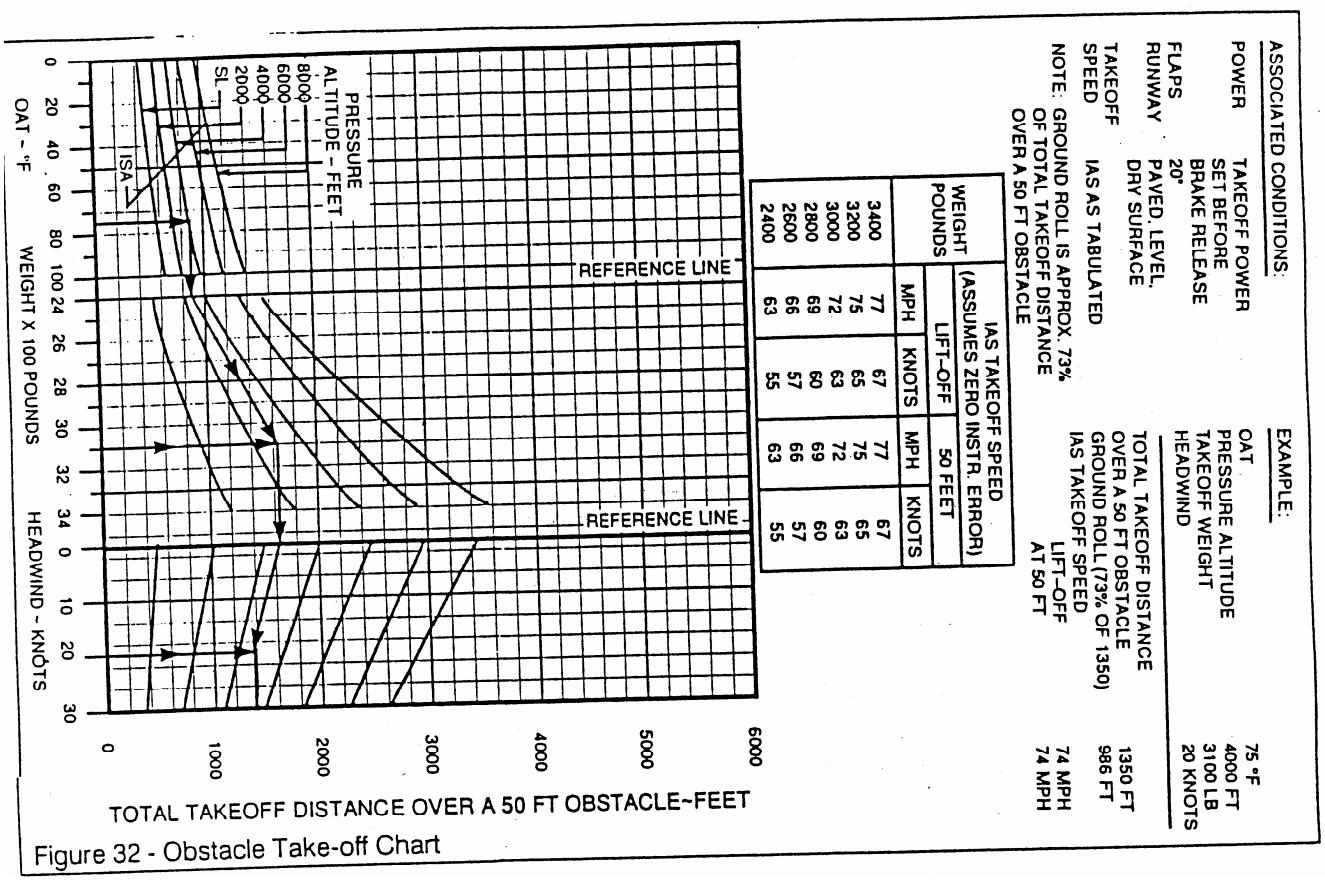


Figure 32 - Obstacle Take-off Chart

5621. H317 COM
(Refer to figure 32.)
GIVEN:
Temperature 100 °F
Pressure altitude 4,000 ft
Weight 3,200 lb
Wind Calm
What is the ground roll required for takeoff over a 50-foot obstacle?

A) 1,180 feet.
B) 1,350 feet.
C) 1,850 feet.

5622. (Refer to figure 32.)
Temperature 30 °F
Pressure altitude 6,000 ft
Weight 3,300 lb
Headwind 20 kts

What is the total takeoff distance over a 50-foot obstacle?

A) 1,100 feet.
B) 1,300 feet.
C) 1,500 feet.

5623. H317 COM
(Refer to figure 33.)
GIVEN:
Weight 4,000 lb
Pressure altitude 5,000 ft
Temperature 30 °C
What is the maximum rate of climb under the given conditions?

A) 655 ft/min.
B) 702 ft/min.
C) 774 ft/min.

5624. H317 COM
(Refer to figure 33.)
GIVEN:
Weight 3,700 lb
Pressure altitude 22,000 ft
Temperature -10 °C
What is the maximum rate of climb under the given conditions?

A) 305 ft/min.
B) 320 ft/min.
C) 384 ft/min.

NOTE: CORRECT ANSWER IN BOLD ITALICS

CONDITIONS:
Flaps Up
Gear Up
2600 RPM
Cowl Flaps Open

PRESS ALT	MP	PPH
S.L. TO 17,000	35	162
18,000	34	156
20,000	32	144
22,000	30	132
24,000	28	120

WEIGHT LBS	PRESS ALT FT	CLIMB SPEED KIAS	RATE OF CLIMB – FPM			
			-20 °C	0 °C	20 °C	40 °C
4000	S.L.	100	1170	1035	895	755
	4000	100	1080	940	800	655
	8000	100	980	840	695	555
	12,000	100	870	730	590	---
	16,000	100	740	605	470	---
	20,000	99	485	355	---	---
	24,000	97	190	70	---	---
3700	S.L.	99	1310	1165	1020	875
	4000	99	1215	1070	925	775
	8000	99	1115	965	815	670
	12,000	99	1000	855	710	---
	16,000	99	865	730	590	---
	20,000	97	600	470	---	---
	24,000	95	295	170	---	---
3400	S.L.	97	1465	1320	1165	1015
	4000	97	1370	1220	1065	910
	8000	97	1265	1110	955	795
	12,000	97	1150	995	845	---
	16,000	97	1010	865	725	---
	20,000	96	730	595	---	---
	24,000	94	405	275	---	---

Figure 33 - Maximum Rate-of-Climb Chart

PRESSURE ALTITUDE 6,000 FEET

CONDITIONS:
Recommended Lean Mixture
3800 Pounds
Cowl Flaps Closed

		20 °C BELOW STANDARD TEMP -17 °C			STANDARD TEMPERATURE 3 °C			36 °C ABOVE STANDARD TEMP 23 °C		
RPM	MP	% BHP	KTAS	PPH	% BHP	KTAS	PPH	% BHP	KTAS	PPH
2550	24	---	---	---	78	173	97	75	174	94
	23	76	167	96	74	169	92	71	171	89
	22	72	164	90	69	166	87	67	167	84
	21	68	160	85	65	162	82	63	163	80
2500	24	78	169	98	75	171	95	73	172	91
	23	74	166	93	71	167	90	69	169	87
	22	70	162	88	67	164	85	65	165	82
	21	66	158	83	63	160	80	61	160	77
2400	24	73	165	91	70	166	88	68	167	85
	23	69	161	87	67	163	84	64	164	81
	22	65	158	82	63	159	79	61	160	77
	21	61	154	77	59	155	75	57	155	73
2300	24	68	161	86	66	162	83	64	163	80
	23	65	158	82	62	159	79	60	159	76
	22	61	154	77	59	155	75	57	155	72
	21	57	150	73	55	150	71	53	150	68
2200	24	63	156	80	61	157	77	59	158	75
	23	60	152	76	58	153	73	56	154	71
	22	57	149	72	54	149	70	53	149	67
	21	53	144	68	51	144	66	49	143	64
	20	50	139	64	48	138	62	46	137	60
	19	46	133	60	44	132	58	43	131	57

Figure 34 - Cruise Performance Chart

5625. H317 COM
(Refer to figure 34.)
GIVEN:
Pressure altitude 6,000 ft
Temperature +3 °C
Power 2,200 RPM - 22 inches MP
Usable fuel available 465 lb
What is the maximum available flight time under the conditions stated?

A) 6 hours 27 minutes.
B) 6 hours 39 minutes.
C) 6 hours 56 minutes.

5626. H317 COM
(Refer to figure 34.)
GIVEN:
Pressure altitude 6,000 ft
Temperature -17 °C
Power 2,300 RPM - 23 inches MP
Usable fuel available 370 lb
What is the maximum available flight time under the conditions stated?
A) 4 hours 20 minutes.
B) 4 hours 30 minutes.
C) 4 hours 50 minutes.

5627. H317 COM
(Refer to figure 34.)
GIVEN:
Pressure altitude 6,000 ft
Temperature .+13 °C
Power 2,500 RPM - 23 inches MP
Usable fuel available 460 lb
What is the maximum available flight time under the conditions stated?

A) 4 hours 58 minutes.
B) 5 hours 7 minutes.
C) 5 hours 12 minutes.

5628. H317 COM
(Refer to figure 35.)
GIVEN:
Temperature 70 °F
Pressure altitude Sea level
Weight. 3,400 lb
Headwind 16 kts
Determine the approximate ground roll.

A) 689 feet.
B) 716 feet.
C) 1,275 feet.

NOTE: CORRECT ANSWER IN BOLD ITALICS

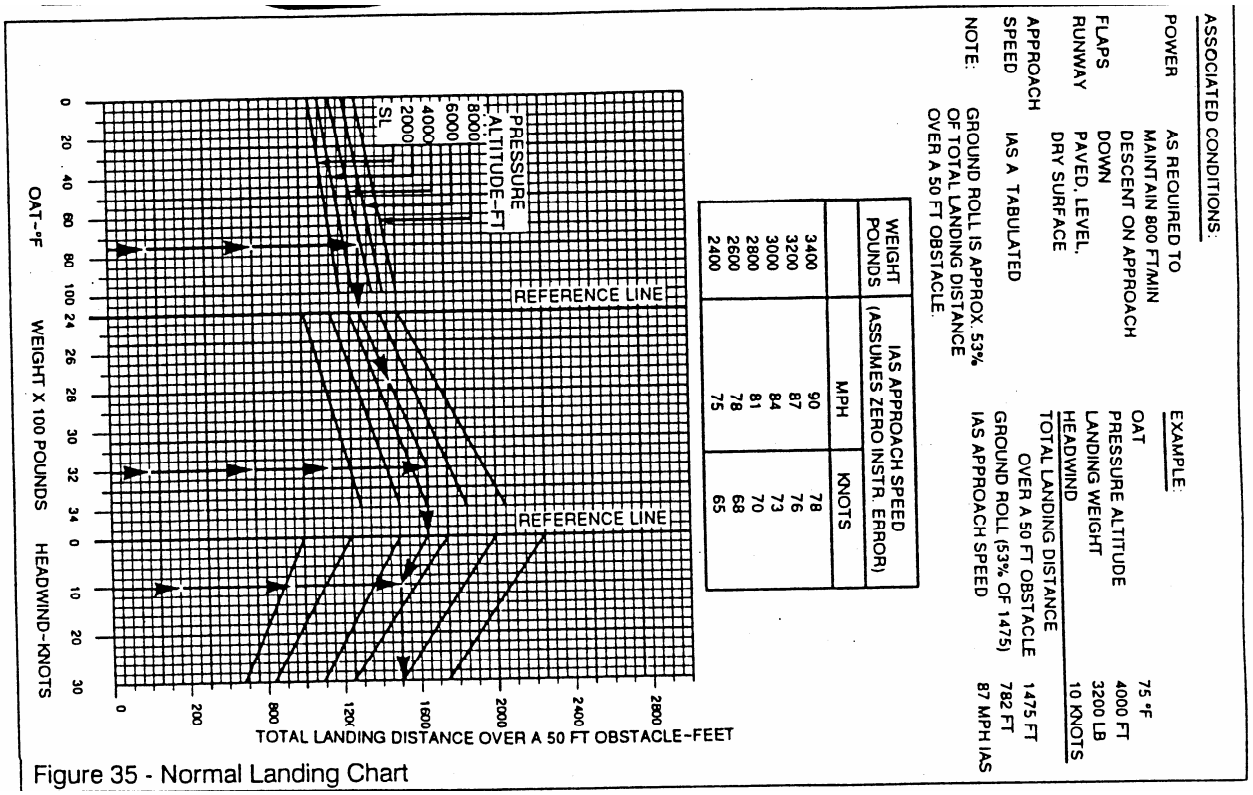


Figure 35 - Normal Landing Chart

5629. H317 COM
(Refer to figure 35.)
GIVEN:
Temperature 85 °F
Pressure altitude 6,000 ft
Weight 2,800 lb
Headwind 14 kts
Determine the approximate ground roll.

A) 742 feet.
B) 1,280 feet.
C) 1,480 feet.

5630. H317 COM
(Refer to figure 35.)
GIVEN:
Temperature 50 °F
Pressure altitude Sea level
Weight 3,000 lb
Headwind 10 kts
Determine the approximate ground roll.

A) 425 feet.
B) 636 feet.
C) 836 feet.

5631. H317 COM
(Refer to figure 35.)
GIVEN:
Temperature 80 °F
Pressure altitude 4,000 ft
Weight 2,800 lb
Headwind 24 kts
What is the total landing distance over a 50-foot obstacle?

A) 1,125 feet.
B) 1,250 feet.
C) 1,325 feet.

5740. I04 COM
To determine pressure altitude prior to takeoff, the altimeter should be set to

A) the current altimeter setting.
B) 29.92 inches Hg and the altimeter indication noted.
C) the field elevation and the pressure reading in the altimeter setting window noted.

NOTE: CORRECT ANSWER IN BOLD ITALICS