Form Approved: OMB No. 2120-0026

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FLIGHT PLAN

(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR ☐ STOPOVER

TIME STARTED | SPECIALIST INITIALS

1 TYPE	2 AIRCRAFT IDENTIFICATION	3 AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4 TRUE AIRSPEED	5 DEPARTURE POINT	6 DEPARTURE TIME		7 CRUISING ALTITUDE
					PROPOSED (Z)	ACTUAL (Z)	
☒ VFR ☐ IFR ☐ DVFR	N32781	B, G, R, S	114 KTS	KTIP	2000		4500

8 ROUTE OF FLIGHT
Direct

9 DESTINATION (Name of airport and city)	10 EST. TIME ENROUTE		11 REMARKS
	HOURS	MINUTES	
KPIA		51	

12 FUEL ON BOARD		13 ALTERNATE AIRPORT(S)	14 PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE	15 NUMBER ABOARD
HOURS	MINUTES			
5	0	KBMI	Brian Arends 1905 Golf Dr Mahomet, IL 61853	3
			17 DESTINATION CONTACT/TELEPHONE (OPTIONAL)	

16 COLOR OF AIRCRAFT	
White w/ Blue Trim	CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82)

CLOSE VFR FLIGHT PLAN WITH _____ FSS ON ARRIVAL

WEIGHT AND BALANCE WORKSHEET

ITEM	WEIGHT	ARM	MOMENT
Empty Weight	1466 lb	84.30	123,584
Fuel (gals x 6 lbs)	48 gal x 6lb => 288lb		26,000 *2
Left front seat	150lbs		12,500
Right front seat	170lbs		14,000
Rear seat	40lbs		5,000
Baggage Area	40lbs		7,000
TOTAL	2154	87.31	188084

Center of Gravity (CG) = 87.31

3. In weight limits: (YES) NO

3. In CG limits: (YES) NO

1. Empty weight, arm, moment are obtained from the weight and balance report

2. All moments are calculated from the loading graph on page 6-13

3. Weight and CG limits are shown and the CG Range and Weight chart

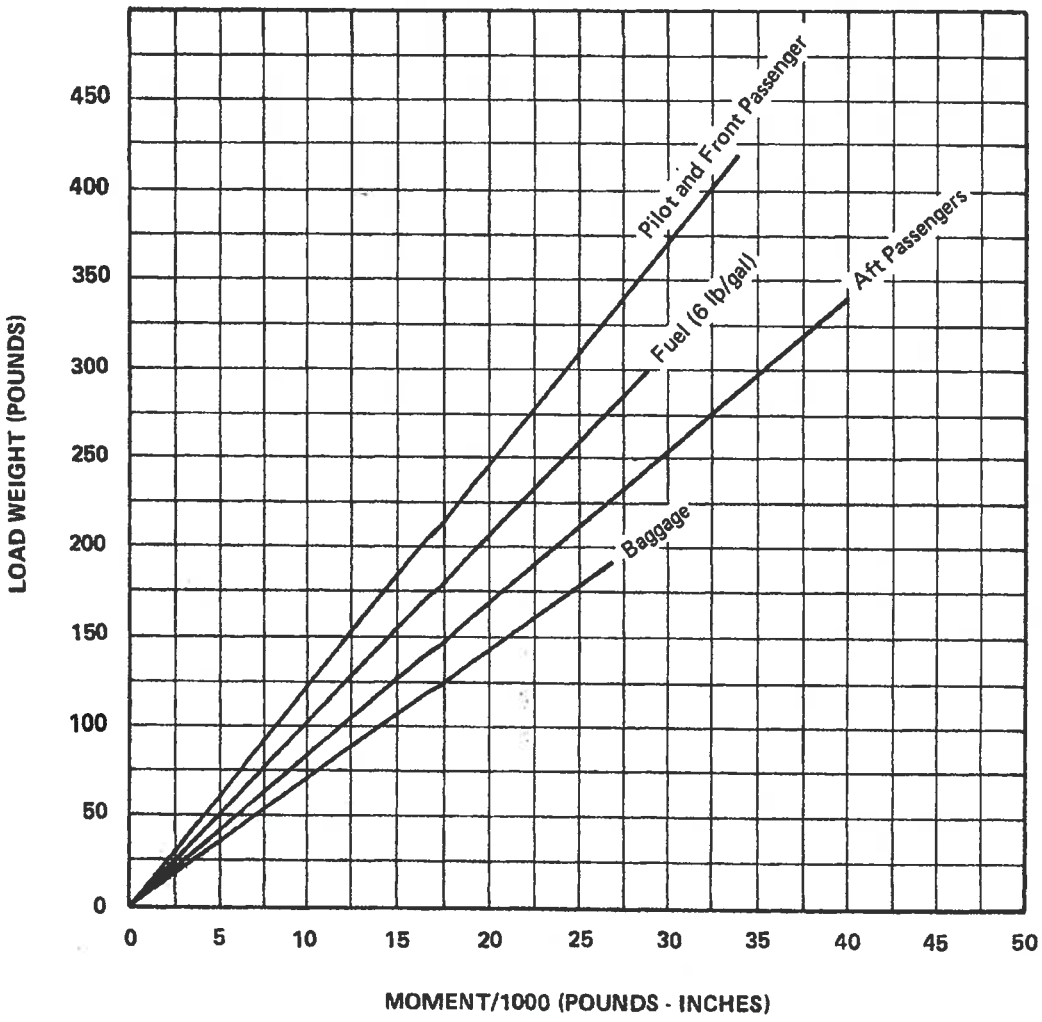
Steps

(1) Add all weight to get total weight

(2) Add all moments to get total moments

(3) Use the equation below to get the arm

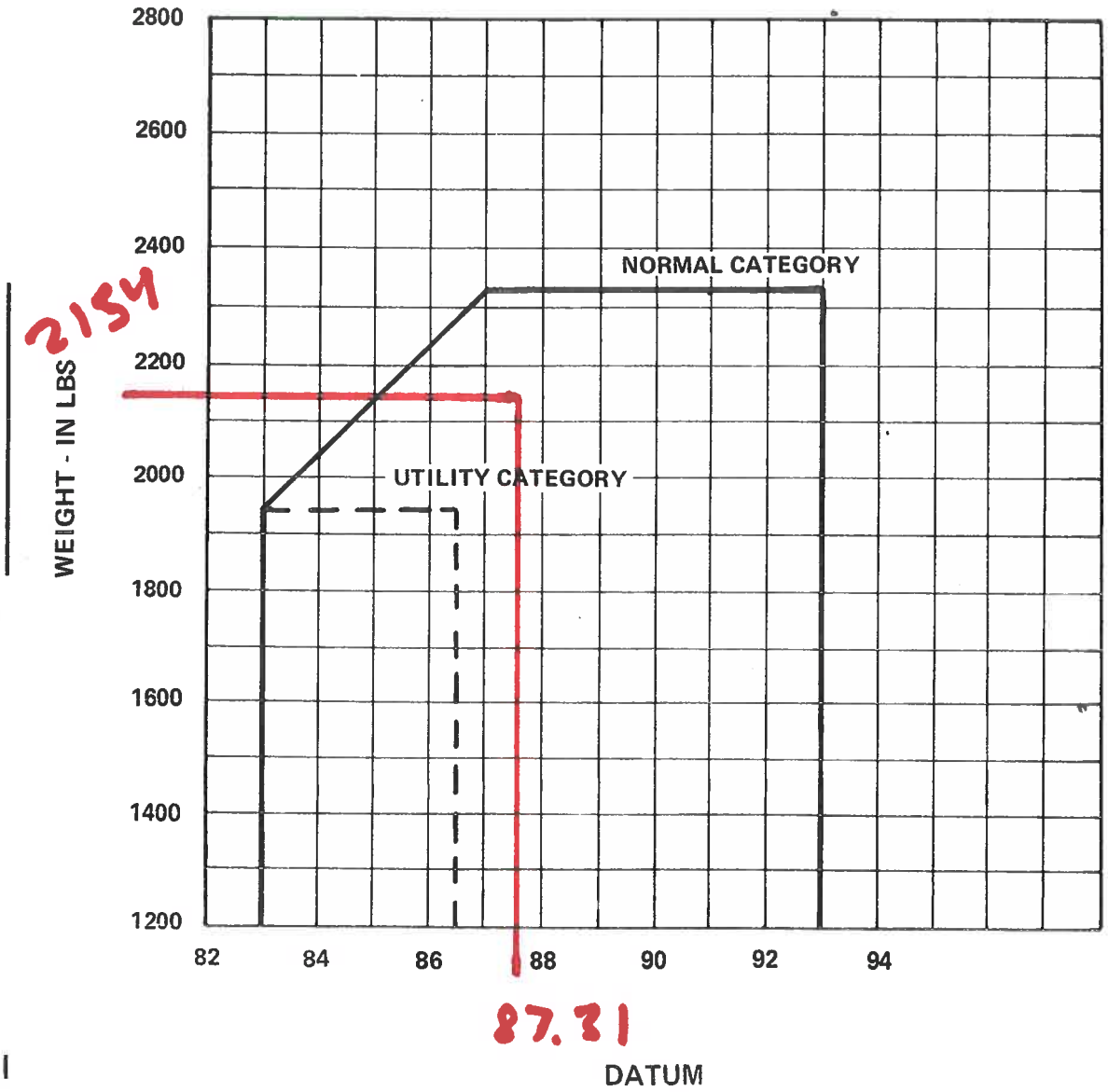
$\frac{\text{Total moments}}{\text{Total weight}} \Rightarrow \text{Arm}$ $\qquad \frac{188,084}{2154} \Rightarrow 87.31$



LOADING GRAPH

Figure 6-13

C. G. RANGE AND WEIGHT



Weather briefing KTIP to KPIA on 7/26/2025 at 2:17 pm:

https://plan.foreflight.com/flightdata/api/trips/view-trip-document?doc_link=https://cloudfront.foreflight.com/external-prod-briefings/CEF54235C314302C231F014D97ED7FF3/2025-07-26/586801ea-5610-29e3-c94f-3e3c4da57233.html

Weather briefing KPIA to KTIP on 7/26/2025 at 4:49 pm:

https://plan.foreflight.com/flightdata/api/trips/view-trip-document?doc_link=https://cloudfront.foreflight.com/external-prod-briefings/CEF54235C314302C231F014D97ED7FF3/2025-07-26/fda1a6e5-7f03-8c71-1f53-389b503cf179.html

Weather Briefing

Are there any CONVECTIVE SIGMETs, SIGMETs, AIRMETs or Center Weather Advisories?

Yes, there are several convective sigmets in the area. One sigmet does affect the first part of the route and is valid until 2055Z. There does seem to be general instability in the atmosphere most likely due to the heat and moisture in the air. I am going to expect some turbulence and possible severe weather along the route.

Icing airmets and airmets for turbulence also exist in the area, however these effect altitudes way above my cruising altitude.

Synopsis

There are no fronts in the area, however there is a low pressure centered above my route of flight. I will expect some rain showers and possible thunderstorms because of this.

METAR (for general area or route of flight)

METARs along of the route of flight agree with the synopsis above. METARs are showing VFR conditions with light rain at KTIP and lightening around the KPNT airport. Winds are 10 knots or less and out of the south. Temperatures are around the 30 degrees Celsius mark. I will have to note this when calculating aircraft performance.

TAF (for general area or route of flight)

TAFs are forecasting MVFR conditions for the current time period. This will continue into the evening hours and into the next day. This is due to the possibility of pop up thunderstorms associated with the heat, humidity, and low pressure in the area.

En Route Forecast

Clouds forecast shows some clouds in the vicinity, but mostly few clouds or clear skies. The Vis, Sfc Winds & Precip chart shows the possibility of thunderstorms.

Winds and Temps Aloft

Shows winds out of the south and temperature around 20° C at 4,500 MSL.

Special Use Airspace / Other Notes

There is no special use airspace along my route of flight. I have Class D airspace above KBMI, which I will be above. I have Class C airspace at KPIA, once I get near the Class C airspace, I will contact approach control and advise them of my intentions.

Summary

Light winds out of the south on the ground and at altitude. VFR conditions at present along most of my route of flight. However, I am keeping in mind the possibility of thunderstorms in the area. I will visually avoid all thunderstorms by at least 20 nm. If I have to deviate from my route of flight, I will deviate back to KTIP. If the weather at KTIP is not satisfactory I will visually deviate to either KCMI, KBMI, or KSPI.

NWKRAFT

NOTAMs (Taken from the end of the weather briefing)

KTIP- There are no runway or taxiway closures. It should be noted that some lighting is out of service. This should not be a problem because this flight is taking place during the day. The PAPI system is out on Runway 27, so there is not going to be any visual glideslope indication on this runway. There are no obstruction NOTAMs at KTIP.

KPIA- There is WIP on the GA ramp at KPIA. There are several obstruction NOTAMs for KPIA. All obstructions are more than 5 nm away from the airport and below 500 ft AGL. There are two cranes at KPIA to be on the lookout for, they are at 70 ft AGL.

Weather

This information is on the weather summary page.

Known ATC Delays

I accessed the following website: https://nasstatus.faa.gov/

There are no known ATC delays for my route of flight.

Runway lengths

Runway lengths are all greater than 5,000 feet, and per the performance calculations that I have made, are sufficient for this flight.

Alternate airport plan

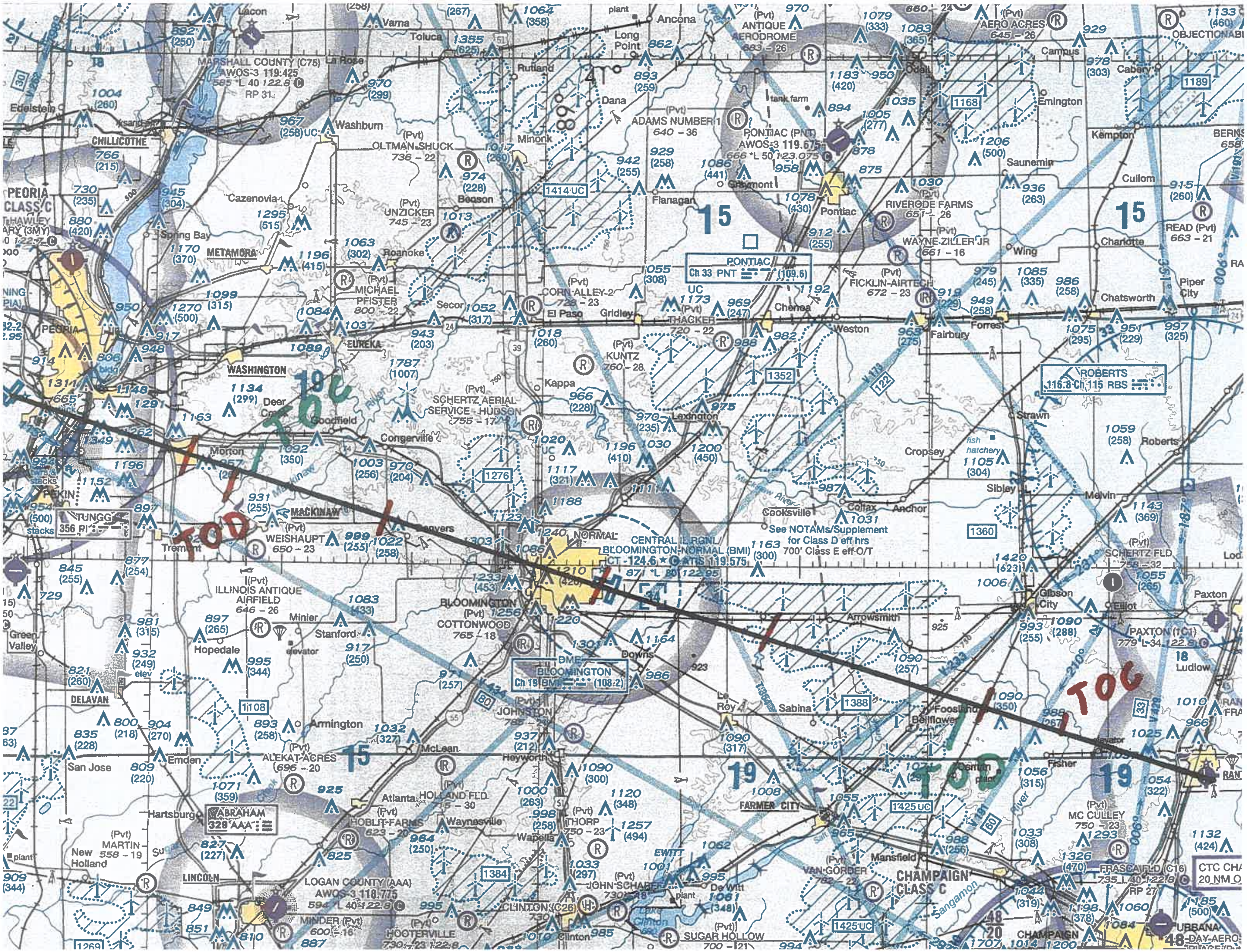
Alternate airport at KTIP is KCMI or KBMI. Alternate airport at KPIA is KSPI or KBMI

Fuel requirements

Exact fuel requirements are shown on the navigation log. I will be taking off with 48 gallons of usable fuel. That is more than sufficient for the flight and also for VFR, daytime, alternate airport fuel requirements.

Takeoff and Landing distances

Exact takeoff and landing distances are shown on the distances performance charts. In general all takeoff and landing distances are under 3,000 feet.


PEORIA
CLASS C
CHILLICOTHE
METAMORA
WASHINGTON
EUREKA
MACKINAW
BLOOMINGTON
NORMAL
CENTRAL IL RGNL/BLOOMINGTON-NORMAL (BMI)
See NOTAMs/Supplement for Class D eff hrs
700' Class E eff O/T
PONTIAC
DELAVAN
LINCOLN
LOGAN COUNTY (AAA)
FARMER CITY
CHAMPAIGN
CLASS C
URBANA
PAXTON
ROBERTS
MARSHALL COUNTY (C75)
ADAMS NUMBER 1
OLTMAN-SHUCK
UNZICKER
MICHAEL PFISTER
CORN ALLEY-2
KUNTZ
SCHERTZ AERIAL SERVICE - HUDSON
WEISHAUPT
ILLINOIS ANTIQUE AIRFIELD
ALEKAT-ACRES
HOBLIT-FARMS
HOLLAND FLD
THORP
JOHN SCHAFER
MINDER
HOOTERVILLE
SUGAR HOLLOW
VAN GORDER
MC CULLEY
FRASCA FLD (C16)
SCHERTZ FLD
RIVERODE FARMS
WAYNE-ZILLER JR
FICKLIN-AIRTECH
THACKER
ANTIQUE AERODROME
AERO ACRES
TOD
TOC
TOD
TOC

Depart

use chart 5:11
to convert TAS to CAS

NAVIGATION LOG

Aircraft Number	N	Notes
Climb		Descent TAS: 114
Time: 8min		Time: 8min
Distance: 9.5nm		Distance: 13.5nm Takeoff Distance
Fuel: 2gal		Fuel: 2gal Landing Distance

Check Points (Fixes)	VOR Ident / Freq.	Course (Route)	Altitude	Wind Dir. / Vel. / Temp	CAS / TAS	TC	-L +R W	TH	-E +W Var	MH	+/- Dev	CH	Dist Leg / Rem	GS EST / Act	Time Off ETE / ATE	ETA / ATA	GPH Fuel / Rem.
KTIP		287	738	219 / 14 / 20°C	75	-10	+3				+1	282	10 / 76	68 /	8 /	/	48 / 1
TOC		287	4500	219 / 14 / 20°C	114	-8	+3				+1	282	5 / 71	97 /	3 /	/	47 / 1
Railroad Gibson City		287	4500	219 / 14 / 20°C	114	-8	+3				+1	282	15 / 56	97 /	8 /	/	46 / 1
Lake and dam		287	4500	219 / 14 / 20°C	114	-8	+3				+1	282	12 / 44	97 /	7 /	/	45 / 1
KBMI		287	4500	226 / 18 / 20°C	114	-8	+3				+1	282	15 / 29	97 /	8 /	/	44 / 1
BDF 155° radial	114.7	287	4500	226 / 18 / 20°C	114	-8	+3				+1	282	10 / 19	97 /	6 /	/	43 / 1
TOD		287	4500	226 / 18 / 20°C	100	-9	+3				+1	282	14 / 5	93 /	8 /	/	42 / 1
Morton		287	661	226 / 18 / 20°C	100	-9	+3				+1	282	5 / 0	93 /	3 /	/	41 / 1
KPIA	115.2												Totals > 86		51		8

500fpm 75kts

500fpm 100kts

Airport & ATIS Advisories

	Departure		Destination
ATIS	119.02	ATIS	126.1
Ceiling / Visability	BRK 043/10	Ceiling / Visability	CLR/10
Winds	220/6	Winds	220/6
Altimiter	2995	Altimiter	2997
Approach		Approach	
Runway	27	Runway	22
		Time Check	

Airport Frequencies

Departure		Destination	
KTIP		KPIA	
ATIS	119.02	ATIS	126.1
GRND	121.0	Apch	125.8
Tower		Tower	124.0
Dep	121.35	GRND	121.85
CTAF		CTAF	124.0
FSS		FSS	
UNICOM	123.0	UNICOM	122.95
Field Elev	738	Field Elev	661
Block In			Log Time
Block Out			

Flight Plan and Weather Log on Reverse Side

Course ⇒ wind correction ⇒ TH ⇒ Variation ⇒ MH ⇒ Deviation ⇒ CH

Return

NAVIGATION LOG

Aircraft Number	N	Notes
Climb		Descent TAS: 114
Time: 9min		Time: 9min
Distance: 15nm		Distance: 15nm
Fuel: 2gal		Fuel: 2gal

Check Points (Fixes)	VOR Ident / Freq.	Course (Route)	Altitude	Wind Dir. / Vel. / Temp	CAS / TAS	TC / -L +R W	TH / -E +W Var	MH / +/- Dev	CH	Dist Leg Rem	GS EST Act	Time Off ETE ATE	Time Off ETA ATA	GPH Fuel Rem.
					114 /									8.5
KPIA	115.2	107	661	236 / 23 / 19°C	/ 75	12	+3	-2	210	11 / 75	88 /	8 /	/	40 / 1
Morton		107	5500	236 / 23 / 19°C	/ 114	8	+3	-2	116	15 / 60	128 /	8 /	/	39 / 1
500fpm 75kts TOC		107	5500	236 / 23 / 19°C	/ 114	8	+3	-2	116	8 / 52	128 /	4 /	/	38 / 1
BDF 155° radial	114.7	107	5500	236 / 23 / 19°C	/ 114	8	+3	-2	116	13 / 39	128 /	7 /	/	37 / 1
KBMI		107	5500	243 / 18 / 19°C	/ 114	8	+3	-2	116	11 / 28	124 /	7 /	/	36 / 1
Lakeland Dam		107	5500	243 / 18 / 19°C	/ 114	8	+3	-2	116	13 / 15	124 /	7 /	/	35 / 1
500fpm 100kts TOD		107	5500	243 / 18 / 19°C	/ 100	10	+3	-2	118	1 / 14	110 /	1 /	/	34 / 1
Railroad Gibson City		107	738	243 / 18 / 19°C	/ 100	10	+3	-2	118	14 / 0	110 /	7 /	/	33 / 1
KTIP					Totals >					86		49		32

Flight Plan and Weather Log on Reverse Side

Airport & ATIS Advisories			
Departure			Destination
126.1	ATIS		119.02
CLR/10	Ceiling / Visability		BRK055/10
190/7	Winds		190/8
29.95	Altimiter		2997
	Approach		
22	Runway		27
	Time Check		

Airport Frequencies			
Departure		Destination	
KPIA		KTIP	
ATIS	126.1	ATIS	119.0
GRND	121.85	Apch	121.35
Tower	124.0	Tower	
Dep	125.8	GRND	123.0
CTAF	124.0	CTAF	
FSS		FSS	
UNICOM	122.95	UNICOM	123.0
Field Elev	661	Field Elev	738
Block In		Log Time	
Block Out			

Density Altitude KTIP

VFR	KTIP	261855Z	METAR KTIP 261855Z AUTO 22006KT 10SM -RA SCT031 BKN043 BKN060 29/25 A2999 RMK AO2 T02870252

Field elevation- 738 ft

Pressure altitude = 738 + [(29.92 – 29.99) * 1000] = 668 ft

Temperature = 29° C or 84° F

Use Altitude Conversion chart on page 9-1 for Density Altitude

Density altitude = Approx. 2,100 ft

Density Altitude KPIA

VFR	KPIA	261854Z	METAR KPIA 261854Z 22006KT 10SM CLR 28/24 A2997 RMK AO2 SLP144 T02780239

Field elevation- 661 ft

Pressure altitude = 661 + [(29.92 – 29.97) * 1000] = 611 ft

Temperature = 28° C or 82° F

Use Altitude Conversion chart on page 9-1 for Density Altitude

Density altitude = Approx. 2,100 ft

Density Altitude at a cruising altitude of 4,500 feet MSL

Winds Aloft Table

	500 -4000 FT	2500 -2000 FT	3000 -1500 FT	4500 Filed
KTIP	211° 9kts 30°C	211° 13kts 24°C	213° 14kts 22°C	219° 14kts 20°C
KPIA	210° 8kts 29°C	218° 16kts 24°C	221° 17kts 22°C	226° 18kts 20°C

Temperature = 20° C or 68° F

Use Altitude Conversion chart on page 9-1 for Density Altitude

Density altitude = Approx. 6,800 ft

NOTES:

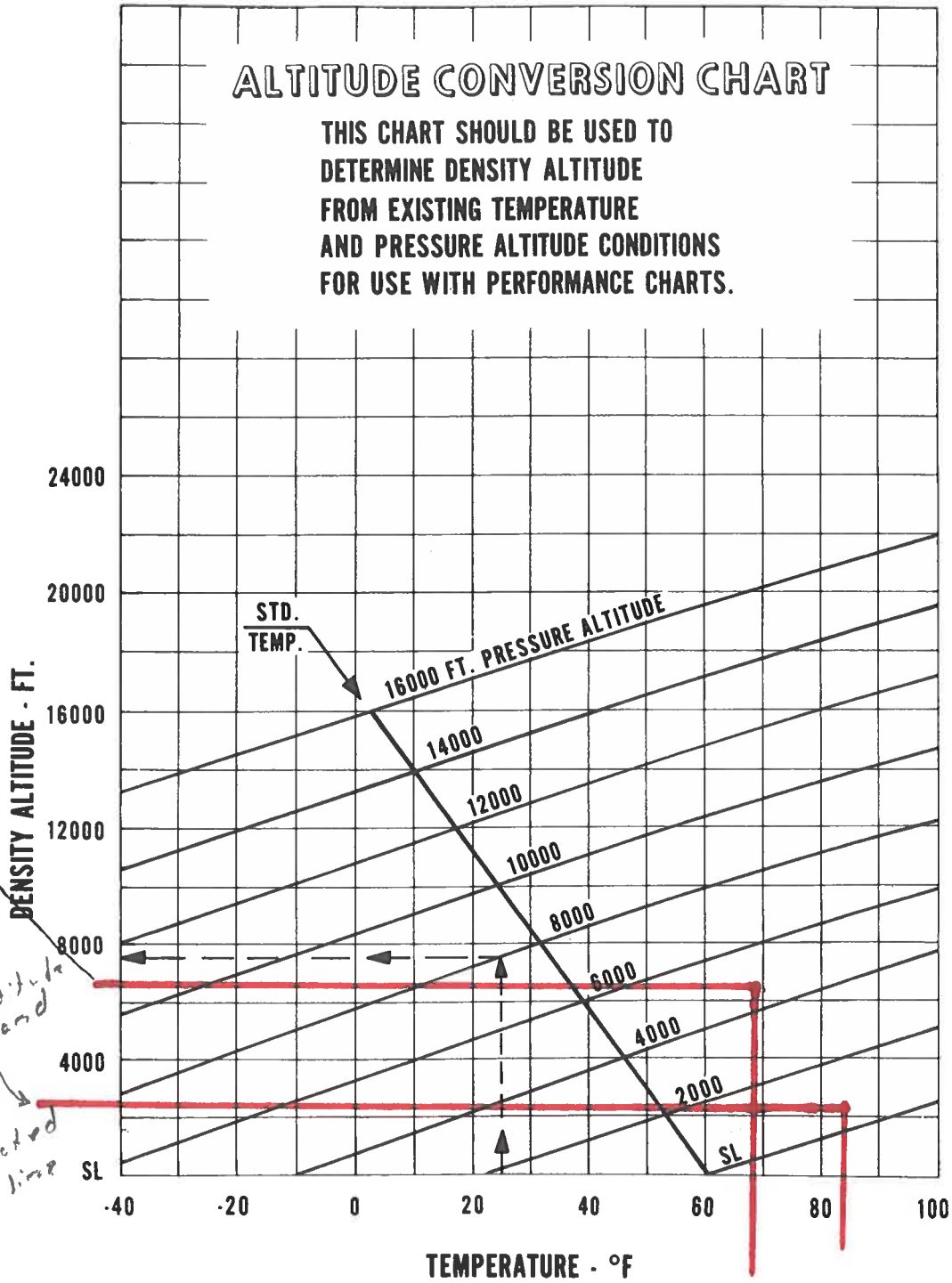
Definition: Density altitude is pressure altitude corrected for nonstandard temperature.

1st step to calculating density altitude is calculating pressure altitude.

Pressure altitude = Indicated altitude +[(29.92 – Altimeter Setting) * 1000]

For a more precise calculation of Density Altitude you can use an electronic E6B instead of chart 9-1

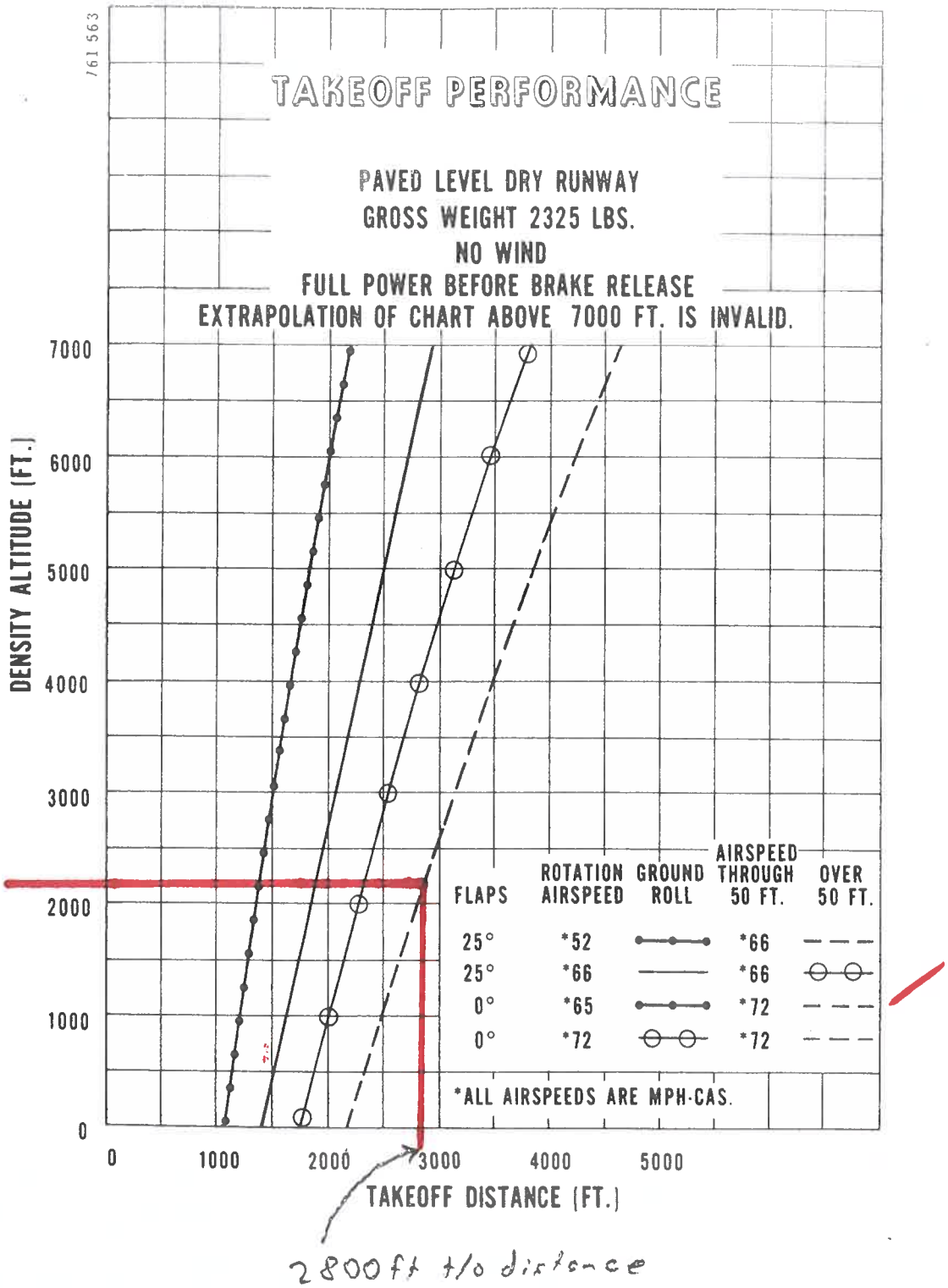
PA-28-151
CHEROKEE



Density altitude at cruise 26,800ft

Density altitude at KTAS and KPIA can be approximated by this line

PA-28-151
CHEROKEE



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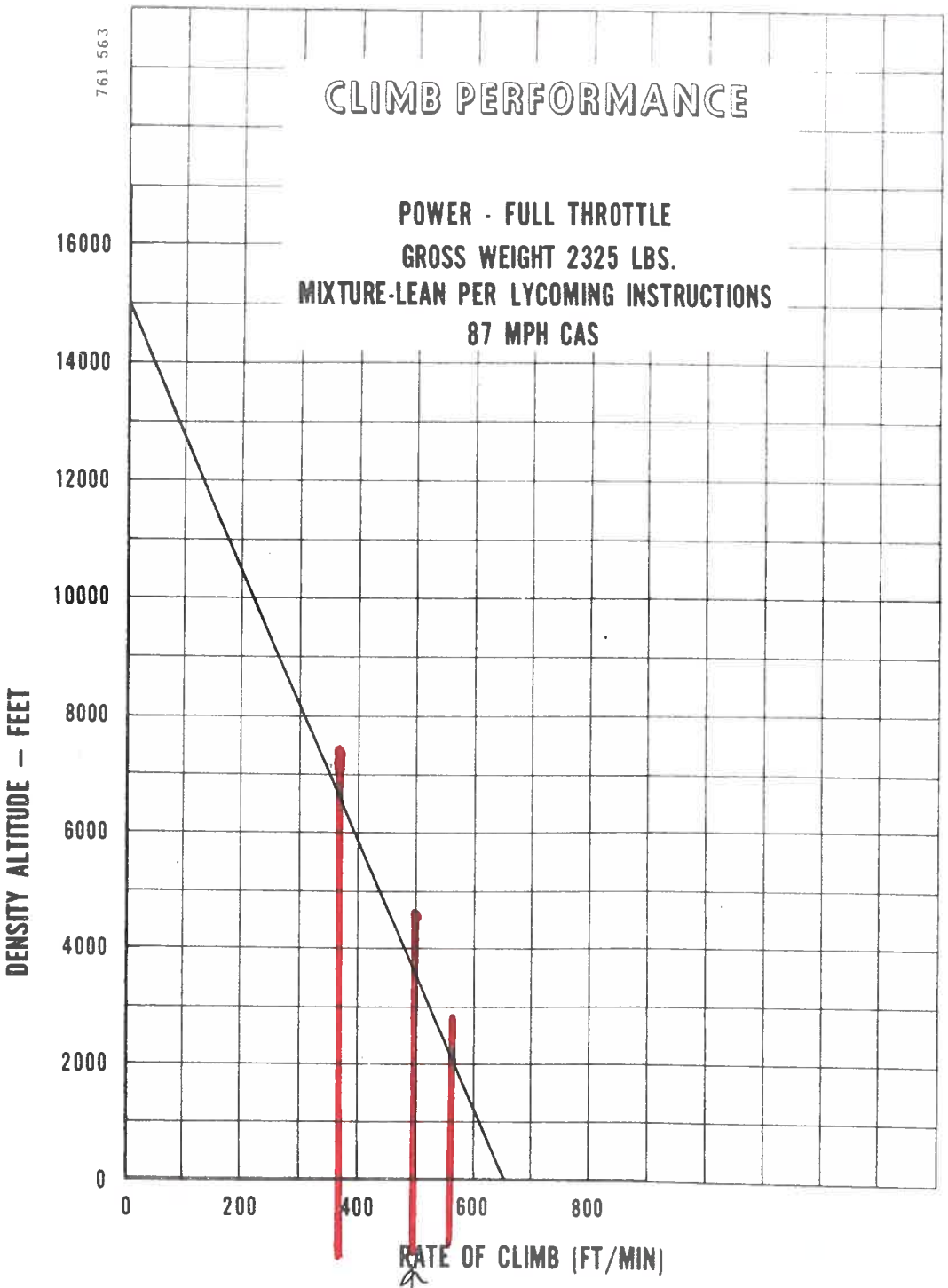
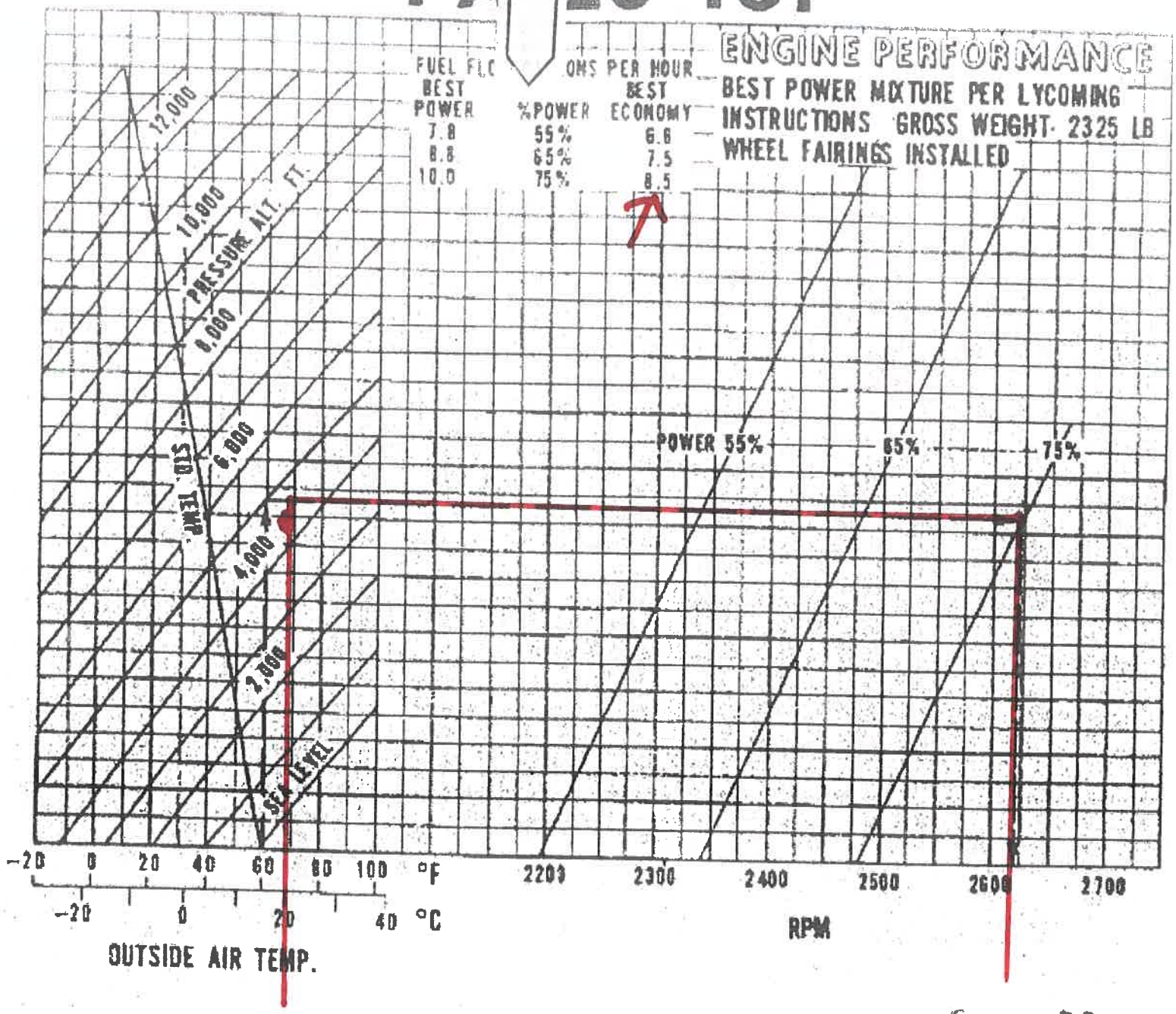


A good average climb performance in this situation is 500 fpm at 75 Knots



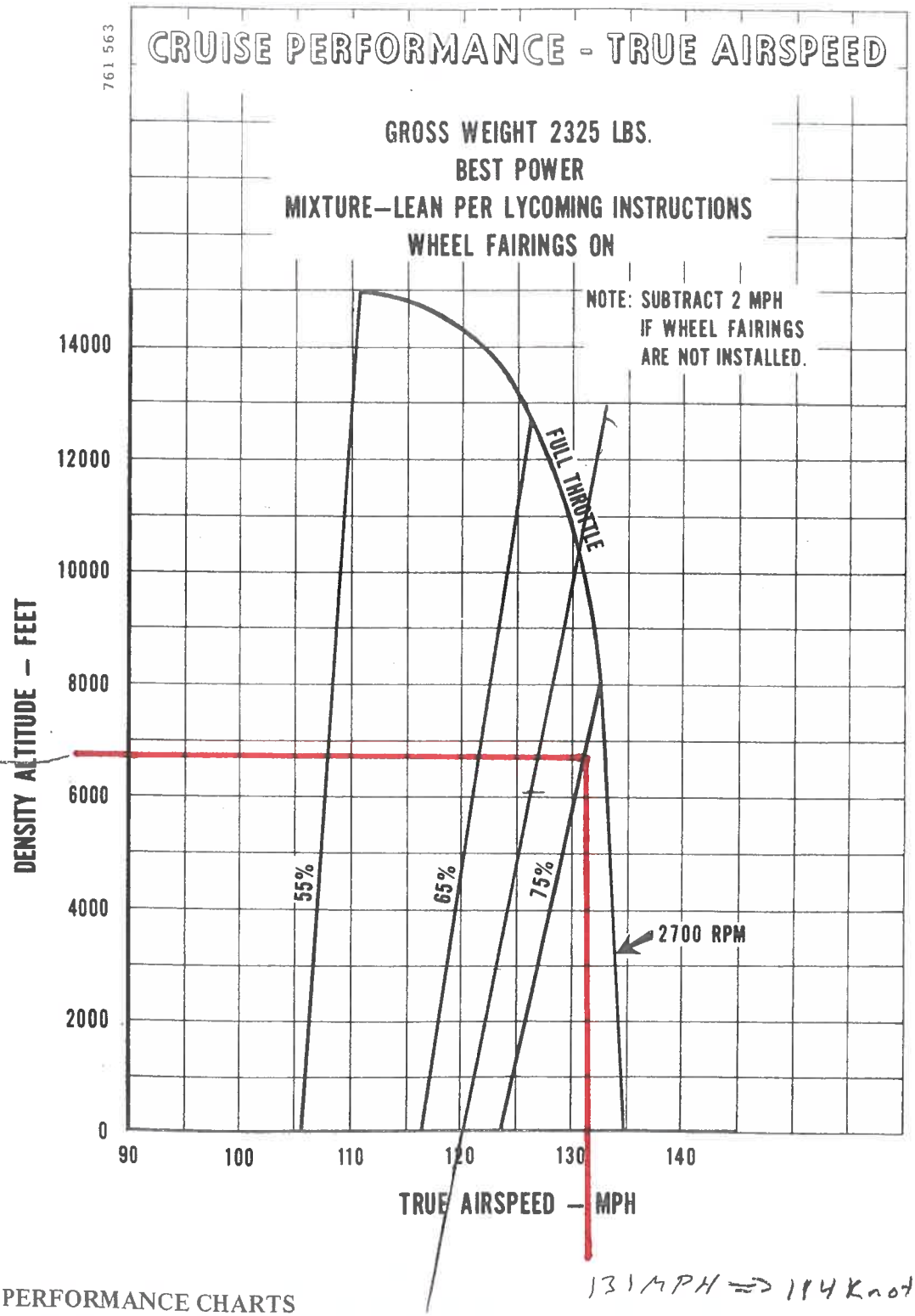
Example:

Cruise pressure altitude: 5000 ft.
Cruise OAT: 60°F
Cruise power: 75%
Engine RPM: 2620

Engine RPM
2620

Best economy
8.5 gph fuel
burn

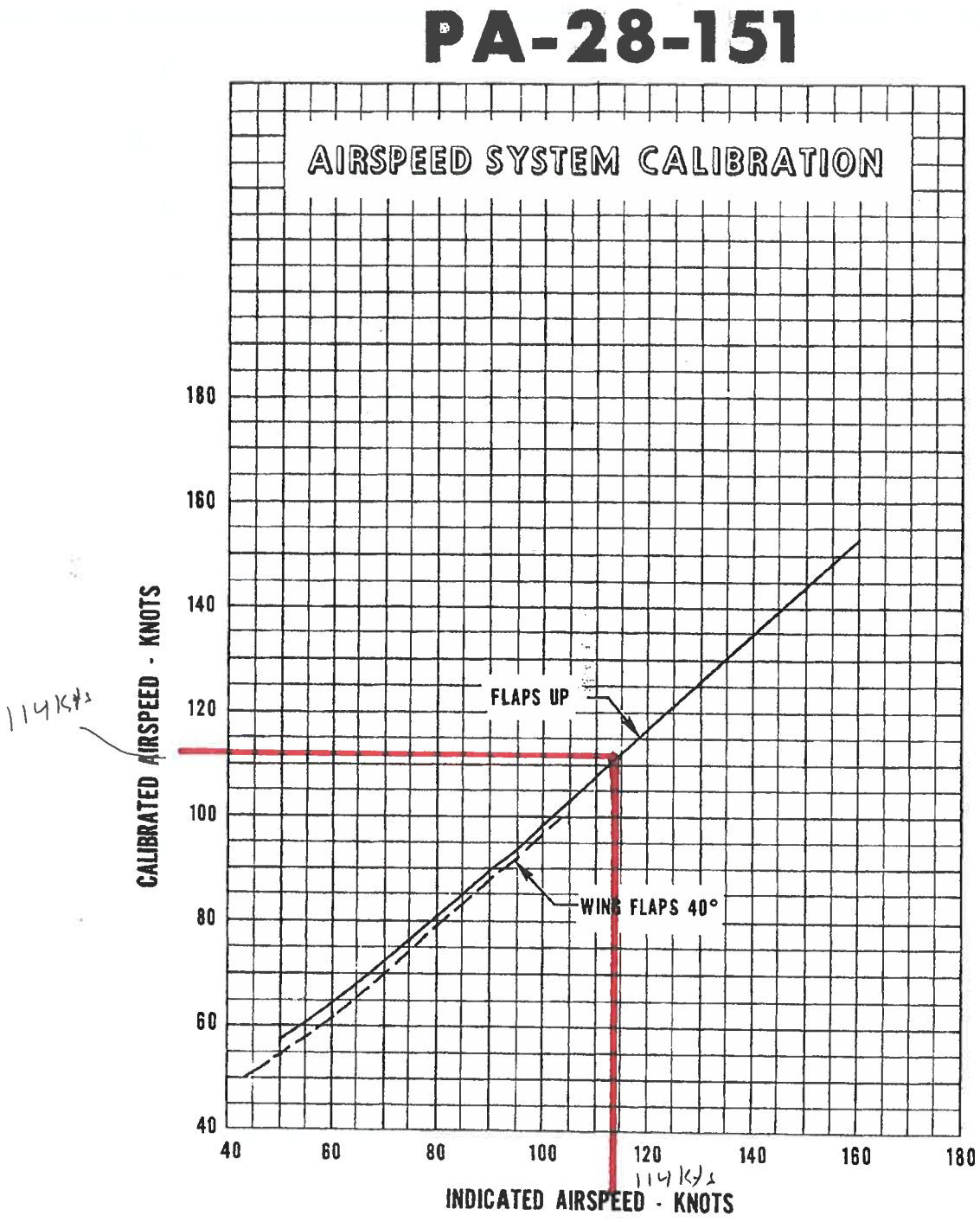
PA-28-151
CHEROKEE



6,800 ft

131 MPH ⇒ 114 Knots

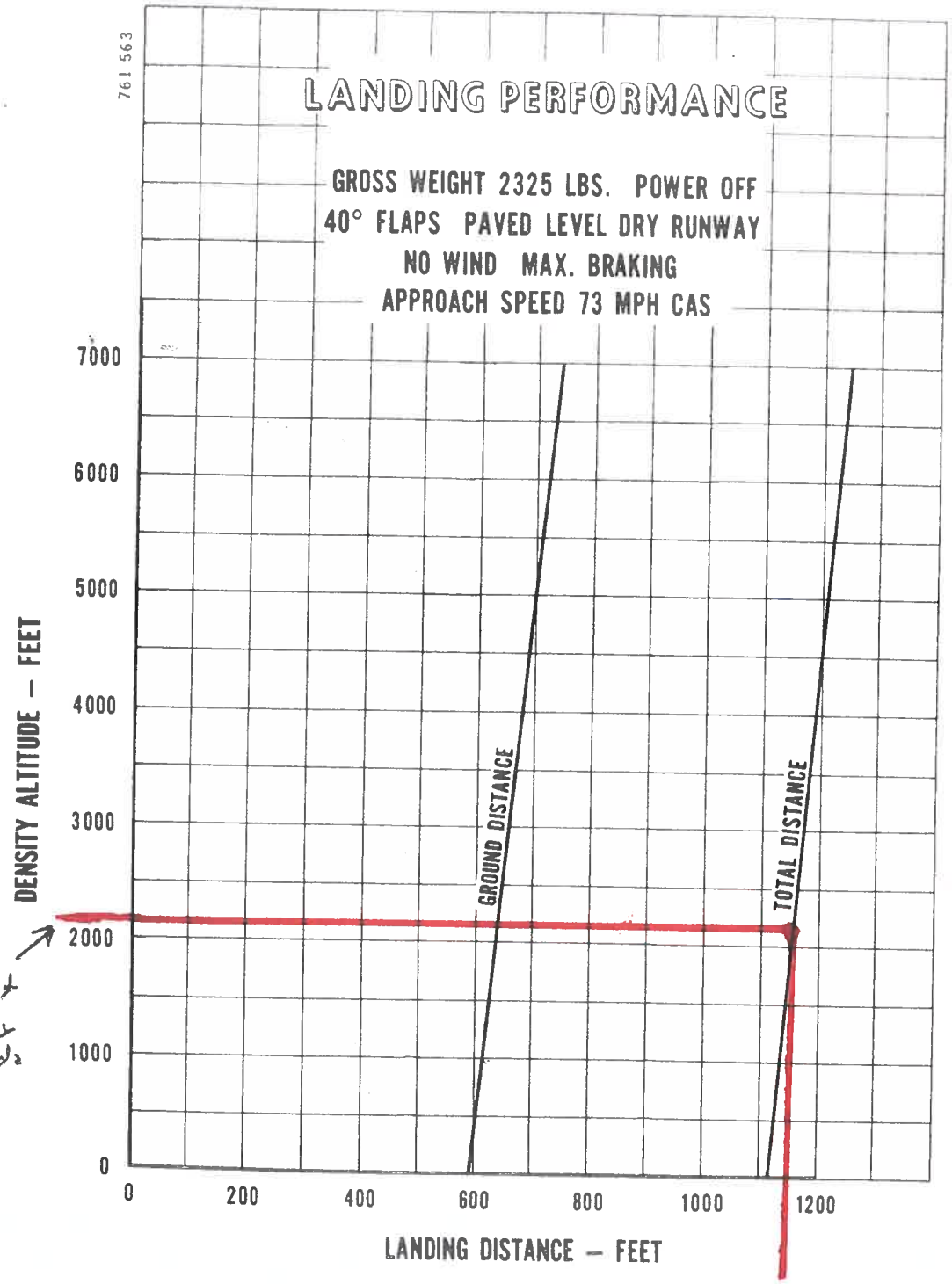
70%



AIRSPEED SYSTEM CALIBRATION

Figure 5-1

PA-28-151
CHEROKEE



2100 ft Density altitude

1150 ft landing distance