

Today is Friday, November 18, 2011. Your school's flight team has recently qualified for the National SAFECON. You have a couple days off from school and decide to return to your hometown of Rhinelander, WI. As a celebratory trip, you are preparing your new-to-you Cirrus SR-22, which was an early college graduation present from your parents, for a camping and rafting trip to Northern Michigan with your younger brother, Bryan, and college buddy, Marty. You and Bryan will depart KRHI with your gear and fly to KIMT to pick up Marty and his gear before continuing to KCMX. You plan to depart KRHI at 07:15 AM. The information for the flight is as follows:

Aircraft Information:

- Annual Inspection: January 16, 2011
- 100 Hour: 722.3
- ELT Inspection: October 13, 2010
- Transponder Inspection: October 13, 2010
- Pitot-Static Inspection: June 28, 2009
- Current Tach Time: 863.4
- Current Hobbs Time: 990.9
- Equipped with air conditioning, wheel pants, fairings, and a 310 H.P. engine.
- Air Conditioning will be turned off for all phases of flight.

Pilot Records:

- D.O.B.: April 16, 1990
- Private Pilot Certificate: June 13, 2008
- Instrument Rating: September 20, 2009
- Medical Certificate: Class III October 9, 2007
- High Performance Endorsement: October 16, 2009

<i>Date</i>	<i>Time</i>	<i>ASEL</i>	<i>AMEL</i>	<i>Day/Night</i>	<i>Landings</i>	<i>Remarks</i>
8/4/2011	1.2	1.2		Day	2	Training for Commercial Cert.
8/13/2011	.9	.9		Night	1	Training for Commercial Cert.
8/27/2011	1.7	1.7		Day	2	Commercial Checkride Passed
10/1/2011	.8		.8	Day	3	Multi-engine training flight
10/21/2011	1.2	1.2		Day	1	Cirrus Delivery Flight

Weight and Balance Information:

- Basic Empty Weight and Moment: 2343.75 lbs at 325,805.9 lb-ins.
- Fuel: 36 gals per wing tank at the start of the trip
- You: 185 lbs. plus 43 lbs. of gear in the baggage compartment.
- Bryan: 163 lbs. plus 36 lbs. of gear in the baggage compartment.
- Marty: 186 lbs. plus 43 lbs. of gear in the baggage compartment. Any weight exceeding baggage compartment limit will be secured next to the aft passenger.

Performance Information:

- Use *Takeoff Climb Gradient* chart, *Maximum Power Fuel Flow* chart, and local METAR to determine climb information. Use takeoff weight at beginning of the leg for calculations. Assume calm winds. Use climb gradient and fuel flow values for departure airport pressure altitude. Assume KIAS=KTAS for climb calculations.
- Use *Cruise Performance* chart and winds aloft forecast for all cruise information. Interpolate on the chart for your appropriate cruise altitude and temperature. Disregard temperatures on FD. Assume a standard temperature lapse rate from departure airport to cruising altitude. You will cruise at 80% power or the charts' maximum, whichever is lower.
- All descents will be at 760 fpm, cruise KTAS +15 knots, and 68% cruise fuel flow. Use arrival airport METAR for descent calculations.
- For takeoff and landing distance calculations, interpolate as necessary for pressure altitude, temperature, and winds using the local METAR.
- Assume no additional time for traffic pattern. All climbs will be from airport surface to cruising altitude on course. All descents will be from cruise altitude to field elevation unless otherwise noted.

Route of Flight:

Leg 1: KRHI – KIMT 5,500' MSL. Use GRB winds aloft for cruise calculations.

Leg 2: KIMT – KCMX 5,500' or 6,500' MSL, whichever is appropriate. Use MQT winds aloft for cruise calculations.

Leg 3 & Leg 4: Fly the route in reverse, adding 1,000' to the cruise altitude, using the MQT winds aloft for cruise calculations.

Sunrise is 7:00 AM and Sunset is 2225Z.

Weather and NOTAM Package:**Legs 1 & 2**

***** Surface Observations *****

METAR KRHI 181253Z 18012KT 10SM BKN100 06/M04 A2964 RMK A02 SNE35

METAR KEGV 181253Z 19006G16KT 10SM SCT110 02/M04 A2965 T00191037

METAR KIMT 181353Z 19013KT 8SM BKN047 OVC055 01/M03 A2967 RMK A02 SNB0945E45

METAR 50D 181353Z 18012KT 9SM BKN048 01/M04 A2967

SPECI KOGM 181411Z 17008KT 1 3/4SM -SN BR FEW013 BKN035 OVC065 00/M02 A2958 RMK A02

METAR KCMX 181453Z 20009KT 9SM SCT014 OVC100 01/M06 A2960 RMK A02

***** Terminal Forecasts *****

TAF AMD KRHI 181028Z 1810/1910 20011G17 P6SM SCT020 BKN070

TEMPO 1810/1812 4SM -SHSN BKN012 BKN040

FM181500 22007KT P6SM BKN100

FM181700 20006KT P6SM SCT090 SCT200

TAF AMD CMX 181111Z 1811/1910 21010G17KT P6SM BKN080

TEMPO 1811/1813 2SM -SHSN SCT015 BKN030

FM181400 22008KT P6SM VCSH BKN070

FM182000 27008KT P6SM SCT050 BKN120

***** FD Winds Aloft Forecast *****

VALID 181400Z FOR USE 1300-0100Z

FT 3000 6000 9000

GRB 2345 2535-01 2833-06

MQT 2246 2737+00 2834-08

***** FA Synopsis and VFR Clouds/Weather *****

CHIC FA 181146 AMD

SYNOPSIS VALID UNTIL 190900

CLDS/WX VALID UNTIL 182000...OTLK VALID 182000-190900

ND SD NE KS MN IA MO WI LM LS MI LH IL IN KY

SYNOPSIS...WM FNT WRN LS-WRN WI-NRN IL MOV EAST OF FA AREA BY 19Z

WI

NWRN...SCT100. 16Z SKC. 19Z SCT080. OTLK...VFR

NERN...BKN080 TOP 150. ISOL -SHRA. 14Z SCT080. OTLK...VFR

LS UPR MI

BKNO80 TOP 130. ISOL -SHSN. 16Z SCT120. OTLK...VFR

Legs 3 & 4

***** Surface Observations *****

SPECI KOGM 201911Z 34008KT 5SM HZ FEW033 BKN075 07/M02 A2986 RMK A02
 METAR KCMX 201853Z 33009KT 9SM SCT014 OVC100 05/M03 A2984 RMK A02
 METAR KIMT 201853Z 01013KT 8SM OVC095 06/00 A2987 RMK A02
 METAR 50D 202184Z 36012KT 7SM OVC090 06/01 A2987
 METAR KEGV 201953Z 03006G09KT 10SM SCT110 05/M04 A2985 T00191037
 METAR KRHI 201953Z 36012KT 10SM CLR 06/M04 A2984 RMK A02 PNO

***** Terminal Forecasts *****

TAF KCMX 201828Z 2019/2119 32008KT 6SM HZ SCT080
 TEMPO 2019/2020 PROB30 1SM SHRA OVC005 BKN040
 FM202400 32007KT P6SM BKN100
 FM210200 30006KT 4SM BR SCT090 SCT200
 TAF RHI 201821Z 2019/2119 36010KT P6SM SKC

***** FD Winds Aloft Forecast *****

VALID 201600Z	FOR USE 1300-0100Z		
FT 3000	6000	9000	
MQT 3425	0237+06	3528-01	
GRB 3023	2737+02	2934-04	

***** FA Synopsis and VFR Clouds/Weather *****

CHIC FA 201945
 SYNOPSIS VALID UNTIL 211400
 CLDS/WX VALID UNTIL 210800...OTLK VALID 210800-211400
 ND SD NE KS MN IA MO WI LM LS MI LH IL IN KY

SYNOPSIS...RDG OVR FA RGN THRU PD WITH CNTR MOVG FM S CNTRL MO AT 10Z TO LS BY 18Z.

LS UPR MI
 SCT070. 00Z BKN-OVC070. OTLK...VFR

WI
 NWRN...SCT110...OTLK...VFR
 NERN...OVC050 TOP 120. 21Z OVC100. 05Z SCT100. OTLK...VFR

***** PIREPs *****

RHI UA /OV RHI07033 /TM 2235 /FL030 /TP PA28R /TB OCCNL MOD CHOP /RM SMOOTH ABV FL050

**** USE THE FOLLOWING FOR ALL LEGS ****

***** NOTAMs *****

!IMT 11/008 IMT OBST TOWER 1348 (420 AGL) 21.41 ESE LGTS OTS (ASR 1258011) TIL 1111251840
 !IMT 04/002 IMT RWY 31 GUIDANCE SIGN UNLGTD
 !CMX 11/006 CMX RWY 13/31 CLSD EXC 15 MIN PPR 122.7
 !CMX 11/005 CMX RWY 7/25 CLSD
 !CMX 07/007 CMX RWY 7/25 RWY LGTS OTS EXC 1 HR PPR 122.7 OR 906-487-5975
 !CMX 03/002 CMX RWY 13 PAPI UNUSBL BYD 8 DEGREES RIGHT OF CRS
 !CMX 11/011 CMX AD PATCHY THN SLUSH WEF 1111171805-1111181205

RHINELANDER—ONEIDA CO

(RHI) 2 SW UTC-6(-5DT) N45°37.85' W89°28.00'

GREEN BAY

1624 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE RHI

H-2K, L-14J

RWY 09-27: H6799X150 (CONC-GRVD) S-95, D-150, 2D-235 HIRL 0.4% up W

IAP

RWY 09: MALSR. PAPI(P4L)—GA 3.0° TCH 53'.

RWY 27: REIL. VASI(V4L)—GA 3.0° TCH 49'. Trees.

RWY 15-33: H5201X100 (ASPH) S-55, D-95, 2D-160 HIRL
0.3% up SE

RWY 15: REIL. VASI(V4L)—GA 3.75° TCH 50'. Tree.

RWY 33: REIL. PAPI(P4L)—GA 3.0° TCH 25'.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 09: TORA-6800 TODA-6800 ASDA-6800 LDA-6800

RWY 15: TORA-5201 TODA-5201 ASDA-5201 LDA-5201

RWY 27: TORA-6800 TODA-6800 ASDA-6800 LDA-6800

RWY 33: TORA-5201 TODA-5201 ASDA-5201 LDA-5201

AIRPORT REMARKS: Attended 1200-0100Z†. Birds and coyote on and in/ovf arpt. PPR for unscheduled air carrier ops with more than 9 passenger seats ctc arpt manager 715-365-3416 or 715-365-3419. HIRL Rwy 09-27 preset on low ints; to increase ints and ACTIVATE MALSR Rwy 09, REIL Rwy 27, PAPI Rwy 09, VASI Rwy 27, HIRL Rwy 09-27, REIL Rwy 15 and Rwy 33, VASI Rwy 15, PAPI Rwy 33, HIRL Rwy 15-33—CTAF.

WEATHER DATA SOURCES: ASOS 126.825 (715) 362-7980. HIWAS 109.2 RHI.

COMMUNICATIONS: CTAF/UNICOM 123.0

RCO 122.1R 109.2T (GREEN BAY RADIO)

Ⓜ MINNEAPOLIS CENTER APP/DEP CON 133.65

AIRSPACE: CLASS E svc Mon-Fri 1200-0400Z†, Sat 1200-0130Z†, Sun 1600-0400Z† other times CLASS G.

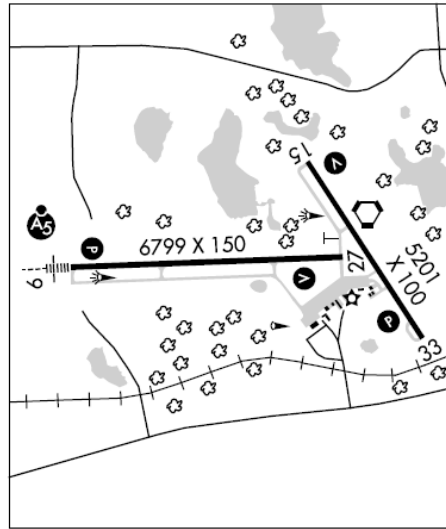
RADIO AIDS TO NAVIGATION: NOTAM FILE RHI.

(L) VORTAC 109.2 RHI Chan 29 N45°38.03' W89°27.47' at fld. 1599/2E. HIWAS.

VOR portion unusable 171°-228° byd 10 NM, 310°-340° byd 20 NM blo 5000'. DME unusable byd 35 NM blo 3500'.

ARSHA NDB (LOM) 272 RH N45°37.69' W89°37.13' 087° 6.4 NM to fld.

ILS 111.3 I-RHI Rwy 09. Class IE. ILS unmonitored.



CRYSTAL FALLS

IRON CO (50D) 6 SE UTC-6(-5DT) N46°00.54' W88°16.44'

GREEN BAY

1340 B TPA-2340(1000) NOTAM FILE GRB

L-31A

RWY 12-30: H3690X50 (ASPH) MIRL (NSTD)

RWY 12: Trees RWY 30: Trees

RWY 02-20: 2700X145 (TURF)

RWY 02: Trees RWY 20: Trees

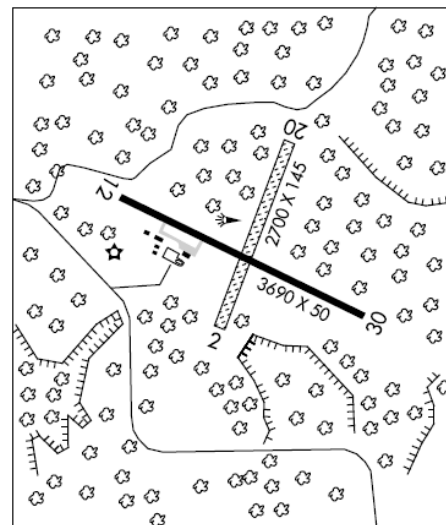
AIRPORT REMARKS: Unattended. No snow removal. Deer on and in/ovf arpt. Rwy 12-30 has crumbled, has numerous cracks and vegetation in pavement. All pavement areas, both rwy and twy and ramp areas are in poor condition. Rwy 02-20 MIRL NSTD; 36' from rwy edge. Rwy 02 also 92' tree; 2300' distance; apch ratio 25:1, based on straight out. Rwy 02-20 marked with 3' yellow cones. ACTIVATE NSTD MIRL Rwy 12-30—121.7.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE IMT.

IRON MOUNTAIN (L) VOR/DME 111.2 IMT Chan 49 N45°48.96'

W88°06.73' 332° 13.4 NM to fld. 1128/2W.



IRON MOUNTAIN/KINGSFORD

FORD (IMT) 3 W UTC-6(-5DT) N45°49.10' W88°06.87' **GREEN BAY**
H-2K, L-31A
IAP
1182 B S4 FUEL 100LL, JET A OX 4 TPA—See Remarks Class I, ARFF Index A

NOTAM FILE IMT
RWY 01-19: H6501X150 (ASPH-PFC) S-100, D-100, 2S-127, 2D-190 HIRL 0.8% up N

RWY 01: MALS. Trees.
RWY 19: REIL. VASI(V4L)—GA 3.0° TCH 42'.

RWY 13-31: H3809X75 (ASPH) S-30, D-50, 2D-80 MIRL

RWY 13: Trees.
RWY 31: REIL. VASI(V4L)—GA 4.0° TCH 40'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 01: TORA-6501 TODA-6501 ASDA-6501 LDA-6501
RWY 13: TORA-3809 TODA-3809 ASDA-3809 LDA-3809
RWY 19: TORA-6501 TODA-6501 ASDA-6501 LDA-6501
RWY 31: TORA-3809 TODA-3809 ASDA-3809 LDA-3809

AIRPORT REMARKS: Attended 1130-0530Z. Ldg fee. Deer; coyotes and birds on and invof arpt. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats call 906-774-4830. Air carrier ops involving acft with more than 9 passenger seats are not authorized in excess of 15 minutes before or after scheduled arrival/dep times without prior coordination with arpt manager and confirmation that ARFF is avbl prior to tkf or landing. ARFF crews will be monitoring UNICOM/CTAF during all air carrier ops. Snow removal crew will be monitoring CTAF/UNICOM during all air carrier ops to pass along updated sfc condition reports. ACTIVATE HIRL Rwy 01-19, MIRL Rwy 13-31, VASI Rwy 19 and 31; REIL Rwy 19 and 31; MALS. Rwy 01—CTAF. TPA—1982(800) Jet/Turbo-Jet/Prop over 12,500 lbs 2682(1500).

WEATHER DATA SOURCES: ASOS 119.025 (906) 774-1999.

COMMUNICATIONS: CTAF/UNICOM 122.8

IRON MOUNTAIN RCO 122.1R 111.2T (GREEN BAY RADIO)

MINNEAPOLIS CENTER APP/DEP CON 121.25

AIRSPACE: CLASS E svc Mon-Fri 1200-0400Z, Sat 1500-0100Z, Sun 1500-0400Z other times CLASS G.

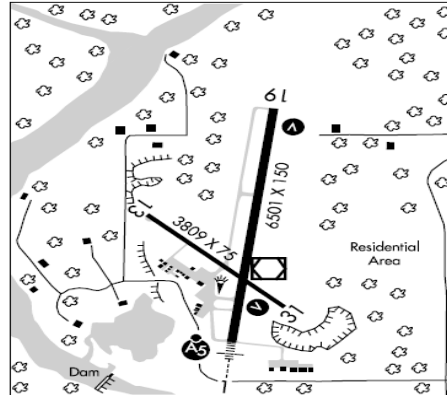
RADIO AIDS TO NAVIGATION: NOTAM FILE IMT.

IRON MOUNTAIN (L) VOR/DME 111.2 IMT Chan 49 N45°48.96' W88°06.73' at fld. 1128/2W.

KORDS NDB (LOM) 255 IM N45°43.63' W088°07.96' 010° 5.5 NM to fld.

ILS 111.5 I-IMT Rwy 01. Class IC. LOM KORDS NDB. ILS unmonitored.

COMM/NAV/WEATHER REMARKS: UNICOM monitored part-time.



HANCOCK

HOUGHTON CO MEM (CMX) 4 NE UTC-5(-4DT) N47°10.11' W88°29.34' **GREEN BAY**
H-2K, L-14J
IAP
1095 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE CMX

RWY 13-31: H6501X150 (ASPH-GRVD) S-70, D-100, 2S-127, 2D-185 HIRL 0.5% up NW

RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 44'. Trees.
RWY 31: MALS. PAPI(P4L)—GA 3.0° TCH 45'.

RWY 07-25: H5196X100 (ASPH-GRVD) S-35, D-50 MIRL
0.3% up NE

RWY 07: REIL. PAPI(P2L)—GA 3.0° TCH 30'. Trees.
RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 41'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 07: TORA-5196 TODA-5196 ASDA-5196 LDA-5196
RWY 13: TORA-6501 TODA-6501 ASDA-6501 LDA-6501
RWY 25: TORA-5196 TODA-5196 ASDA-5196 LDA-5196
RWY 31: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

AIRPORT REMARKS: Attended 0900-0500Z. PAEW on arpt monitor CTAF. Frequent snow removal ops in progress various times Nov-Apr monitor CTAF. Airframe and power plant repairs avbl Apr 15 thru Nov 15. Arpt CLOSED to unscheduled air carrier ops with more than 30 passenger seats except PPR call arpt manager 906-482-3970. Deer and gulls on and invof arpt. General aviation acft parking permitted in front of air carrier terminal building. Contact Unicom for permission to park in front of terminal. General aviation acft parking on aprons lctd N and S of terminal building. Arpt has dual PCL. ACTIVATE HIRL Rwy 13-31, MIRL Rwy 07-25, PAPI Rwy 13, Rwy 31, Rwy 07, and Rwy 25, REIL Rwy 13, Rwy 07, and Rwy 25, MALS. Rwy 31 and Twy B—CTAF. Airfield guidance signs snow covered in winter. Ldg fee waived with fuel purchase for multi-engine acft only.

WEATHER DATA SOURCES: ASOS 125.675 (906) 482-4248. HIWAS 112.8 CMX.

COMMUNICATIONS: CTAF/UNICOM 122.7

HANCOCK RCO 123.65 122.525 (GREEN BAY RADIO)

MINNEAPOLIS CENTER APP/DEP CON 127.2

AIRSPACE: CLASS E svc continuous.

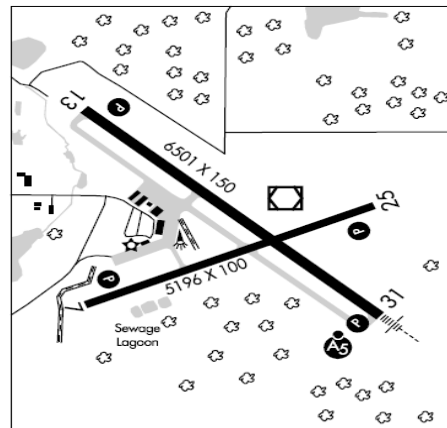
RADIO AIDS TO NAVIGATION: NOTAM FILE CMX.

(L) VOR/DME 112.8 CMX Chan 75 N47°10.22' W88°29.12' at fld. 1072/2W. HIWAS.

DME unusable 315°-035° byd 30 NM blo 3500'.

GALEY NDB (MHW/LOM) 275 CM N47°06.94' W88°24.07' 313° 4.8 NM to fld. Unmonitored.

ILS/DME 110.3 I-CMX Chan 40 Rwy 31. Class IT. LOM GALEY NDB. LOC BC unusable byd 13° left and right of course. LOC BC and BC DME unusable byd 10 NM blo 2600'.



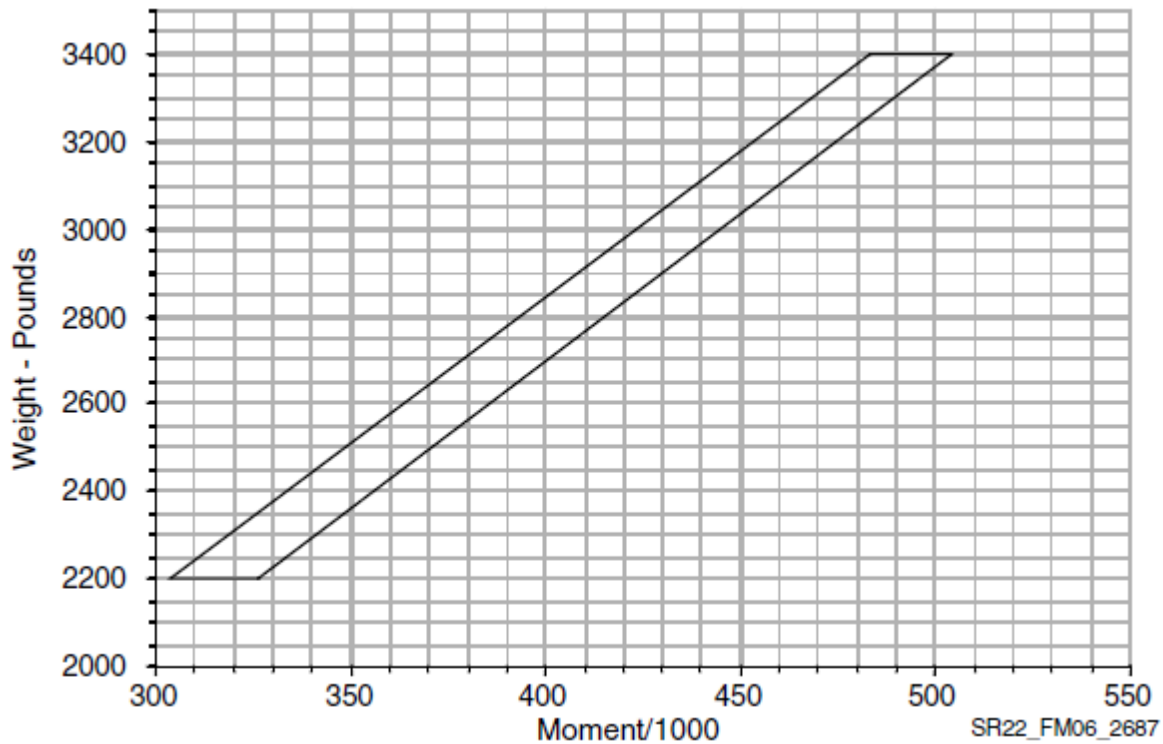
Loading Data:

Weight LB	Fwd Pass FS 143.5	Aft Pass FS 180.0	Baggage FS 208.0	Fuel FS 154.9	Weight LB	Fwd Pass FS 143.5	Aft Pass FS 180.0	Fuel FS 154.9
20	2.9	3.6	4.2	3.1	300	43.1	54.0	46.5
40	5.7	7.2	8.3	6.2	320	45.9	57.6	49.6
60	8.6	10.8	12.5	9.3	340	48.8	61.2	52.7
80	11.5	14.4	16.6	12.4	360	51.7	64.8	55.8
100	14.4	18.0	20.8	15.5	380	54.5	68.4	58.9
120	17.2	21.6	25.0	18.6	400	57.4	72.0	62.0
140	20.1	25.2	27.04*	21.7	420	60.3	75.6	65.1
160	23.0	28.8		24.8	440	63.1	79.2	68.2
180	25.8	32.4		27.9	460			71.3
200	28.7	36.0		31.0	480			74.4
220	31.6	39.6		34.1	500			77.5
240	34.4	43.2		37.2	520			80.5
260	37.3	46.8		40.3	552**			85.5
280	40.2	50.4		43.4				

*130 lb Maximum

**92 U.S. Gallons Usable

Moment Limits:



Takeoff Distance – 2900 LB:

Weight: 2900 LB Speed at Liftoff: 70 KIAS Speed over 50 Ft. Obstacle: 74 KIAS Flaps: 50% Power: Takeoff Runway: Dry, Paved, Level		Headwind: Subtract 10% for each 12 knots headwind. Tailwind: Add 10% for each 2 knots tailwind up to 10 knots. Runway Slope: Reference Notes. Dry Grass: Add 20% to Ground Roll. Wet Grass: Add 30% to Ground Roll. Air Conditioner: Add 100' to ground roll and 150' to distance over 50' obstacle if Air Conditioner if ON during takeoff.					
PRESS ALT FT	DISTANCE FT	TEMPERATURE ~°C					ISA
		0	10	20	30	40	
SL	Grnd Roll	610	659	710	763	818	684
	50 ft	971	1043	1118	1195	1275	1080
1000	Grnd Roll	673	727	783	841	902	743
	50 ft	1066	1146	1228	1313	1401	1170
2000	Grnd Roll	743	802	864	929	995	809
	50 ft	1173	1260	1351	1444	1541	1269
3000	Grnd Roll	821	887	955	1026	1100	880
	50 ft	1292	1388	1487	1590	1697	1378

Takeoff Distance – 3400 LB:

Weight: 3400 LB Speed at Liftoff: 73 KIAS Speed over 50 Ft. Obstacle: 78 KIAS Flaps: 50% Power: Takeoff Runway: Dry, Paved, Level		Headwind: Subtract 10% for each 12 knots headwind. Tailwind: Add 10% for each 2 knots tailwind up to 10 knots. Runway Slope: Reference Notes. Dry Grass: Add 20% to Ground Roll. Wet Grass: Add 30% to Ground Roll. Air Conditioner: Add 100' to ground roll and 150' to distance over 50' obstacle if Air Conditioner if ON during takeoff.					
PRESS ALT FT	DISTANCE FT	TEMPERATURE ~°C					ISA
		0	10	20	30	40	
SL	Grnd Roll	917	990	1067	1146	1229	1028
	50 ft	1432	1539	1650	1764	1883	1594
1000	Grnd Roll	1011	1092	1176	1264	1355	1117
	50 ft	1574	1691	1813	1939	2069	1728
2000	Grnd Roll	1116	1206	1299	1395	1496	1215
	50 ft	1732	1861	1995	2133	2276	1874
3000	Grnd Roll	1234	1332	1435	1542	1653	1323
	50 ft	1907	2049	2196	2349	2507	2035

Climb Information Charts:

Maximum Power Fuel Flow in gph:

Pressure Altitude	Target Fuel Flow
0	27.1
1000	26.2
2000	25.1
3000	24.3
4000	23.6
5000	22.8
6000	22.1

Takeoff Climb Gradient:

Weight	Press Altitude	Climb Speed	CLIMB GRADIENT - Feet per Nautical Mile				
			Temperature - °C				ISA
LB	FT	KIAS	-20	0	20	40	
3400	SL	91	939	896	853	811	864
	2000	90	834	793	752	711	770
	4000	89	734	694	654	615	680
2900	SL	91	1172	1122	1070	1019	1083
	2000	90	1049	1000	950	902	972
	4000	89	931	884	836	790	867

Cruise Performance:

- Subtract 10 KTAS if nose wheel pant and fairing are removed. Lower KTAS by 10% if nose and main wheel pants and fairings are removed.
- Aircraft equipped with optional Air Conditioning System – Cruise performance is reduced by 2 knots.

Press Alt	RPM	MAP	ISA - 30°C			ISA			ISA + 30°C		
			PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
2000	2700	27.4	103%	186	24.6	98%	186	23.3	93%	181	22.0
	2600	27.4	99%	183	23.5	94%	183	22.2	89%	178	21.5
	2500	27.4	93%	179	22.1	88%	179	20.9	84%	174	20.8
	2500	26.4	89%	176	21.1	84%	176	19.9	80%	171	20.2
	2500	25.4	84%	173	20.0	80%	173	19.0	76%	168	19.5
	2500	24.4	80%	170	19.0	76%	170	18.0	72%	165	18.8
	2500	23.4	76%	167	18.0	72%	167	17.0	68%	162	18.1
4000	2700	25.4	96%	185	22.9	91%	185	21.6	87%	180	20.8
	2600	25.4	92%	182	21.9	87%	182	20.7	83%	177	20.6
	2500	25.4	87%	178	20.6	82%	178	19.5	78%	173	19.9
	2500	24.4	82%	175	19.5	78%	175	18.5	74%	170	19.2
	2500	23.4	78%	172	18.5	74%	172	17.5	70%	167	18.5
	2500	22.4	73%	169	17.4	69%	169	16.5	66%	163	17.7
	2500	21.4	69%	165	16.4	65%	165	15.5	62%	159	16.9
6000	2700	23.5	89%	184	21.2	85%	184	20.1	81%	179	19.6
	2600	23.5	85%	181	20.3	81%	181	19.2	77%	176	19.1
	2500	23.5	80%	177	19.1	76%	177	18.1	72%	172	18.3
	2500	22.5	76%	174	18.1	72%	174	17.1	68%	169	17.6
	2500	21.5	72%	170	17.0	68%	170	16.1	64%	165	16.9
	2500	20.5	67%	166	15.9	64%	166	15.1	60%	161	16.1
	2500	19.5	63%	162	14.9	59%	162	14.1	56%	157	15.3
8000	2700	21.7	83%	183	19.7	78%	183	18.6	75%	178	17.7
	2600	21.7	79%	180	18.8	75%	180	17.8	71%	175	17.0
	2500	21.7	75%	176	17.7	71%	176	16.8	67%	171	16.0
	2500	20.7	70%	172	16.7	66%	172	15.8	63%	167	15.0
	2500	19.7	66%	168	15.6	62%	168	14.8	59%	163	14.0
	2500	18.7	61%	163	14.5	58%	163	13.8	55%	158	13.1
	2500	17.7	57%	159	13.5	54%	159	12.8	51%	153	12.1

Landing Distance:

WEIGHT: 3400 LB Speed over 50 Ft Obstacle: 77 KIAS Flaps: 100% Power: Idle Runway: Dry, Paved, Level		Headwind: Subtract 10% for each 13 knots headwind. Tailwind: Add 10% for each 2 knots tailwind up to 10 knots. Runway Slope: Reference Notes Dry Grass: Add 20% to Ground Roll Wet Grass: Add 60% to Ground Roll					
PRESS ALT FT	DISTANCE FT	TEMPERATURE ~°C					ISA
		0	10	20	30	40	
SL	Grnd Roll	1082	1121	1161	1200	1240	1141
	Total	2262	2316	2372	2428	2485	2344
1000	Grnd Roll	1122	1163	1204	1245	1286	1175
	Total	2317	2374	2433	2492	2551	2391
2000	Grnd Roll	1163	1206	1248	1291	1334	1210
	Total	2375	2436	2497	2559	2621	2441
3000	Grnd Roll	1207	1251	1295	1339	1384	1247
	Total	2437	2501	2565	2630	2696	2493