

It is Sunday, March 9, 2008 and a beautiful day in your home town of Raton, NM. Waking up early that morning, you decide that it's a good day to take out your Cirrus SR20 for a quick VFR cross country around the area. Your friends Ron and Jody are early risers, also, and decide to go with you. After a quick look at the chart, you decide to depart your home airport of Raton (KRTN,) fly to Alamosa, CO (KALS), down to Taos, NM (KSKX,) and finally back to Raton. Your information is as follows:

Aircraft Records:

Annual Inspection: 07/21/2007
 ELT Inspection: 07/21/2007
 Transponder Inspection: 05/23/2006
 Pitot-Static Inspection: 05/23/2006
 Basic Empty Weight: 2162 pounds with a moment/1000 of 304.842

Personal Records:

Commercial Pilot Certificate: 03/11/1996
 Instrument Rating: 05/24/1992
 Multi-Engine Rating: 05/17/2000
 Biennial Flight Review: 11/15/2006
 Class I Medical: 08/17/2007 (you weigh 193 pounds.)
 Logbook as below:

Date	Hours	ASEL	AMEL	Day/Night	Landings	Remarks
12/1/2007	1.2	1.2		Day	1	Trip to DEN
12/9/2007	1.4	1.4		Day	2	Trip from DEN
12/10/2007	1.3	1.3		Day	2	Local flight

Passenger Information:

Ron Davis: Weight 150 pounds, will sit in back.
 Jody Davis: Weight 140 pounds, will sit in front.
 Baggage: 25 pound cooler, placed in baggage area.

Performance Information:

Climb (All legs)

TAS: 104 knots
 Fuel Flow: 11.6 GPH (Note: Each leg will use 1.0 gallons for taxi and run-up.
 Rate of Climb: 371 feet per minute

Cruise (Legs 1 and 2)

TAS: 146 knots
 Fuel Flow: 9.85 GPH

Cruise (Leg 3)

TAS: 143 knots
 Fuel Flow: 9.43 GPH

Descent

TAS: Same as your cruise TAS.
 Fuel Flow: 75% of your cruise fuel flow.
 Rate of Descent: 1000 feet per minute

Takeoff and Landing Distances:

In the interest of being safe, round your pressure altitude up to the next higher altitude on the chart. Do not interpolate.

Note: Use ALS winds and temperatures at 12000 feet for all legs and phases of flight.

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

CO

SCT-BKN CI. OCNL SCT160 BKN CI. OTLK...VFR.

NM

SCT CI. SRN PTNS OCNL SCT170. OTLK...VFR THRUT.

....

***** AIRMETs *****

SLCT WA 090245

AIRMET TANGO FOR TURB VALID UNTIL 091900

.

AIRMET TURB...ID MT WY UT CO

FROM 50WSW YXC TO 60NE GGW TO TBE TO ALS TO 40NW DNJ TO 50WSW YXC

MOD TURB BLW FL200. CONDS CONTG BYD 19Z THRU 03Z.

.

AIRMET TURB...ID MT WY NV UT CO AZ NM

FROM 50WSW YXC TO 50NNW ISN TO BFF TO TBE TO EED TO 40SSW FMG TO

40SE LKV TO 50SE REO TO 50WSW YXC

MOD TURB BTN FL260 AND FL410. CONDS CONTG BYD 19Z THRU 23Z.

....

SLCZ WA 090245

AIRMET ZULU FOR ICE AND FRZLVL VALID UNTIL 121900

.

FRZLVL...RANGING FROM 015-120 ACRS AREA

SFC ALG 50SW BOI-30WNW JNC-40SSE FMN-30NE ABQ-20NE LVS-20E

CIM-20SSE PUB-30N CYS-40WNW HVR-30SSW YXH

040 ALG 40ESE LWT-30NE GGW-30NNW ISN

080 ALG 30NNW FMG-80WSW FMN-60ESE SJN-40NNE TCS-80SE ABQ-

60ESE CIM-40NNE PUB-20SSE BFF

....

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

METAR KRTN 091253Z AUTO 03007KT 10SM CLR 01/M11 A3008 RMK AO2

SLP174 T00111106 FZRANO TSNO

METAR KVTP 091259Z AUTO 23009G20KT 10SM CLR M03/M09 A3019 RMK AO2

METAR KALS 091252Z AUTO 01006KT 10SM CLR M02/M08 A3020 RMK AO2

SLP247 T10221078 TSNO

METAR KSKX 091355Z AUTO 01003KT 10SM CLR M04/M06 A3017 RMK AO1

METAR KAXX 091350Z AUTO 00000KT 10SM CLR M08/M11 A3018 RMK AO2

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

TAF KALS 082320Z 090024 VRB04KT P6SM SCT200

FM1500 24007KT P6SM SCT120 BKN200

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

DATA BASED ON 090000Z

REQUESTED

VALID 091200Z FOR USE 0900-1800Z. TEMPS NEG ABV 24000

ALTITUDE

FT 3000 6000 9000 12000 18000 24000 30000 34000 39000

ALS 3116-03 2823-18 2731-31 254247 255855 284353

***** NOTAMs *****

!RTN 02/002 RTN AD ELK VCNTY AP 0100-1300 DLY

!ALS 10/003 ALS 2 ILS OM DCMSND

ALAMOSA

SAN LUIS VALLEY RGNL/BERGMAN FLD (ALS) 2 S UTC-7(-6DT)

N37°26.10' W105°51.99'

7539 B S4 FUEL 100LL, JET A OX 3, 4 ARFF Index A

RWY 02-20: H8519X100 (ASPH-GRVD) S-52, D-70 HIRL

RWY 02: MALSR. PAPI(P4L)—GA 3.0° TCH 48'.

RWY 20: REIL. VASI(V4L)—GA 3.0° TCH 52'. Tree.

RWY 06-24: 3200X100 (DIRT)

AIRPORT REMARKS: Attended daylight hours. PPR for air carrier operations with more than 30 passenger seats call arpt manager 719-580-6444. Rwy 06-24 for light acft only. 893' paved blastpad Rwy 02. ACTIVATE HIRL Rwy 02-20, MALSR Rwy 02, PAPI Rwy 20, REIL Rwy 20 and VASI Rwy 20—CTAF.

WEATHER DATA SOURCES: ASOS 135.175 (719) 589-5669.

COMMUNICATIONS: CTAF/UNICOM 122.8

DENVER FSS (DEN) TF 1-800-WX-BRIEF. NOTAM FILE ALS.

ALAMOSA RCD 122.15 (DENVER FSS)

DENVER CENTER APP/DEP CON 128.375

AIRSPACE: CLASS E svc Mon-Fri 1245-0200Z, Sat and Sun 1430-0200Z other times CLASS G.

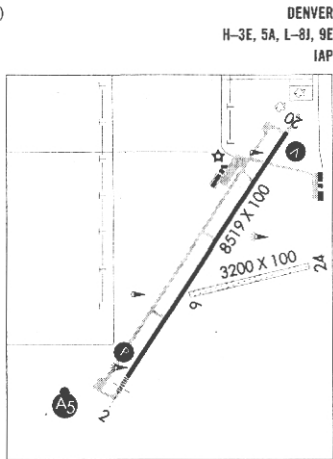
RADIO AIDS TO NAVIGATION: NOTAM FILE ALS.

ALAMOSA (H) VORTACW 113.9 ALS Chan 86 N37°20.95'

W105°48.93' 322° 5.7 NM to fld. 7535/13E.

BESAQ NDB (LOM) 400 VQ N37°21.27' W105°55.86' 021° 5.7 NM to fld. LOM unusable 240°-270° byd 13 NM. OTS indef. NDB unmonitored.

ILS 111.9 I-VQR Rwy 02. Class IE. LOM BESAQ NDB. LOM unusable 240°-270° byd 13 NM. OM OTS indef. ILS unmonitored.



DENVER
H-3E, 5A, L-8J, 9E
IAP

LA VETA

CUCHARA VALLEY AT LA VETA (Ø7V) 1 N UTC-7(-6DT) N37°31.43' W105°00.56'

7153 B FUEL 100LL, JET A

RWY 06-24: H5798X60 (ASPH) MIRL (NSTD)

RWY 06: Thld dsplcd 250'.

RWY 24: Thld dsplcd 198'. Fence.

AIRPORT REMARKS: Attended on call. For attendant call 719-742-3291 or 3747. Wildlife on and invof Rwy 06-24, higher occurrence during Jun-Oct. Rwy 06-24 has severe cracking on ramp and rwy. NSTD MIRL, Rwy 06 first 96' unlighted, Rwy 24 first 92' unlighted. ACTIVATE MIRL Rwy 06-24—122.7.

COMMUNICATIONS: CTAF/UNICOM 122.8

DENVER FSS (DEN) TF 1-800-WX-BRIEF. NOTAM FILE DEN.

RADIO AIDS TO NAVIGATION: NOTAM FILE ALS.

ALAMOSA (H) VORTACW 113.9 ALS Chan 86 N37°20.95' W105°48.93' 062° 39.9 NM to fld. 7535/13E.

DENVER
H-5A, L-10F, 15A

LA VETA PASS (VTP) N37°30.72' W105°10.23'/10216.

AWOS-3 119.925 (719) 587-3120

DENVER
L-10F, 15A

LEACH (See CENTER)

LEADVILLE

LAKE CO (LXV) 2 SW UTC-7(-6DT) N39°13.22' W106°19.00'

9927 B FUEL 100LL, JET A

RWY 16-34: H6400X75 (ASPH) S-20, D-20 MIRL

RWY 16: PAPI(P2L)—GA 3.0° TCH 45'. Rgt ttc.

RWY 34: PAPI(P2L)—GA 3.0° TCH 45'.

AIRPORT REMARKS: Attended May-Oct 1430-0100Z, Nov-Apr 1500-0000Z. For svc after hrs call sheriff dispatch 719-486-1249. Rwy 34 has +50' power lines 750' from right of threshold. Deer on and invof rwy. All taxiways and new ramp area marked with blue and white reflectors. Twy turnoff have lgts and blue reflectors. PPR for svc after hours call 719-486-2627. ACTIVATE MIRL Rwy 16-34 and PAPI Rwy 16 and Rwy 34—CTAF.

WEATHER DATA SOURCES: ASOS 118.375 (719) 486-2735.

COMMUNICATIONS: CTAF/UNICOM 122.8

DENVER FSS (DEN) TF 1-800-WX-BRIEF. NOTAM FILE LXV.

DENVER CENTER APP/DEP CON 119.85

RADIO AIDS TO NAVIGATION: NOTAM FILE DEN.

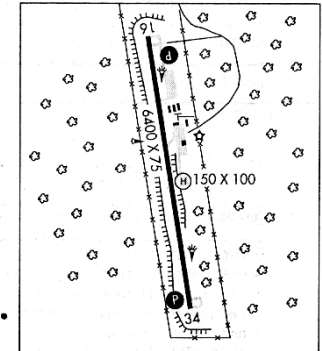
RED TABLE (H) VORW/DME 113.0 DBL Chan 77 N39°26.36'

W106°53.68' 104° 29.9 NM to fld. 11758/12E.

• • • • •

HELIPAD H1: H150X100 (CONC)

HELIPORT REMARKS: Rwy H1 has 6-8 inch lip all around edges, concrete has longitudinal and corner cracking. Edge falling apart. Rwy H1 has 20' to 30' trees 90° east of pad.



DENVER
H-3E, 5A, L-9E
IAP

LIMON MUNI (LIC) 1 NE UTC-7(-6DT) N39°16.49' W103°39.95'

5374 B S2 FUEL 100LL

RWY 16-34: H4700X60 (CONC) S-12.5 MIRL

RWY 16: PAPI(P2L) Trees.

RWY 34: PAPI(P2L)—GA 3.0° TCH 40'. Trees.

AIRPORT REMARKS: Unattended. For fuel svc call Limon Police Dept at 719-775-2346/9211. Deer on and invof arpt. Uncontrolled vehicle access to fld. Rwy 16 has 3000' twy leading into the South end. Twy marked with blue reflectors. ACTIVATE MIRL Rwy 16-34 and PAPI Rwy 16 and Rwy 34—CTAF.

WEATHER DATA SOURCES: ASOS 121.125 (719) 775-0515.

COMMUNICATIONS: CTAF 122.9

DENVER FSS (DEN) TF 1-800-WX-BRIEF. NOTAM FILE LIC.

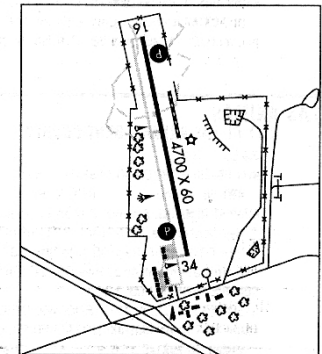
RCD 122.475 (DENVER FSS)

RADIO AIDS TO NAVIGATION: NOTAM FILE DEN.

HUGO (H) VORTACW 112.1 HGO Chan 58 N38°49.05'

W103°37.28' 344° 27.5 NM to fld. 5233/12E.

WICHITA
L-10F



RATON MUNI/CREWS FLD (RTN) 10 SW UTC-7(-6DT) N36°44.49' W104°30.13'

DENVER

6352 B S2 FUEL 100LL, JET A1 +

H-6F, L-15A

RWY 02-20: H6328X75 (ASPH-PFC) S-18 MIRL 0.3% up NE

IAP

RWY 02: PVASI(PSIL)—GA 3.0° TCH 25'.

RWY 07-25: H4404X75 (ASPH-PFC) S-12 MIRL 0.7% W

AIRPORT REMARKS: Attended 1400-0000Z†. Elk on and invof arpt. Rwy 02-20 porous friction courses on S 5295'. MIRL Rwy 02-20 and 07-25 preset low intensity dusk-0600Z†, to increase intensity ACTIVATE—CTAF. After 0600Z† ACTIVATE—CTAF.

WEATHER DATA SOURCES: ASOS 118.375 (505) 445-9207.

COMMUNICATIONS: CTAF/UNICOM 122.8

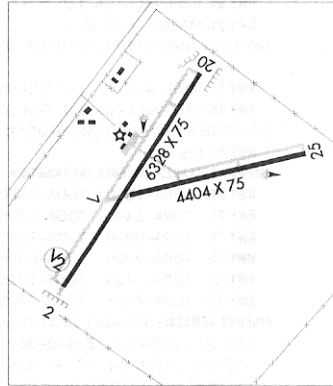
ALBUQUERQUE FSS (ABQ) TF 1-800-WX-BRIEF. NOTAM FILE RTN.

Ⓡ ALBUQUERQUE CENTER APP/DEP CON 132.8

RADIO AIDS TO NAVIGATION: NOTAM FILE RTN.

CIMARRON (H) VORTAC 116.4 CIM Chan 111 N36°29.48' W104°52.32' 037° 23.3 NM to fld. 6550/13E. HIWAS.

MAXWELL NDB (MHW) 284 MXR N36°42.04' W104°32.38' 026° 3.1 NM to fld. Unmonitored 0000-1400Z†.



RATTLESNAKE N36°44.90' W108°05.93' NOTAM FILE FMN.

DENVER

(H) VORTACW 115.3 RSK Chan 100 252° 6.3 NM to Four Corners Rgnl. 5823/14E. HIWAS.

H-4J, L-8I

RESERVE (T16) 5 SW UTC-7(-6DT) N33°41.65' W108°50.97'

ALBUQUERQUE

6360 B

L-5D

RWY 06-24: H4800X50 (ASPH) S-12.5 MIRL

RWY 06: Tree. RWY 24: PVASI(PSIL)—GA 4.0° TCH 40'. Trees.

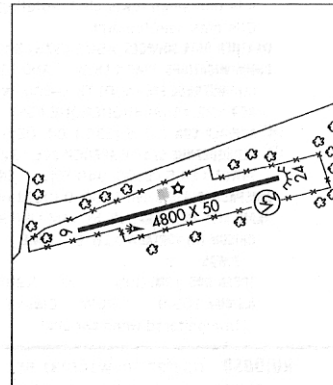
AIRPORT REMARKS: Unattended. Elk on and invof arpt. Rwy 06-24 gradient 2% up W. Obstruction lgts located on mountain peaks opr dusk-dawn. Obstruction lgts on mountain peaks OTS indef. ACTIVATE MIRL Rwy 06-24—CTAF.

COMMUNICATIONS: CTAF 122.9

ALBUQUERQUE FSS (ABQ) TF 1-800-WX-BRIEF. NOTAM FILE ABQ.

RADIO AIDS TO NAVIGATION: NOTAM FILE SJN.

ST. JOHNS (H) VORTAC 112.3 SJN Chan 70 N34°25.44' W109°08.61' 149° 45.8 NM to fld. 6840/12E.



TAOS RGNL (SKX) 8 NW UTC-7(-6DT) N36°27.49' W105°40.35'

DENVER

7095 B FUEL 100LL, JET A1 +

H-4K, 6F, L-8J

RWY 04-22: H5803X75 (ASPH-PFC) S-24 MIRL 0.8% up NE

IAP

RWY 04: REIL. PAPI(P2L).

RWY 22: PAPI(P2L)—GA 3.5° TCH 30'.

AIRPORT REMARKS: Attended 1500-0000Z†. For fuel after hrs call 575-737-9320. Avoid overflight of Taos Pueblo World Heritage site 5 NM E of arpt. Rwy 04-22 parallel twy has retro-reflectors. ACTIVATE MIRL Rwy 04-22—CTAF.

WEATHER DATA SOURCES: AWOS-3 132.975 (575) 758-5663.

COMMUNICATIONS: CTAF/UNICOM 122.8

ALBUQUERQUE FSS (ABQ) TF 1-800-WX-BRIEF. NOTAM FILE SKX.

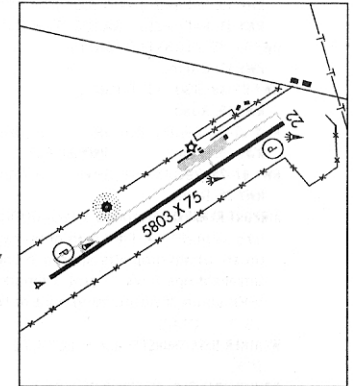
RCO 122.25 (ALBUQUERQUE FSS)

RCO 122.1R 117.6T (ALBUQUERQUE FSS)

RADIO AIDS TO NAVIGATION: NOTAM FILE SKX.

(L) VORTAC 117.6 TAS Chan 123 N36°36.53' W105°54.38' 116° 14.5 NM to fld. 7860/13E.

SKI NDB (MHW) 414 SKX N36°27.46' W105°40.60' at fld.



TATUM (EØ7) 3 E UTC-7(-6DT) N33°15.67' W103°16.61'

ALBUQUERQUE

3986

RWY 05-23: H2990X75 (ASPH)

RWY 05: P-line.

RWY 12-30: H2920X60 (ASPH) S-10

RWY 12: ODALS(NSTD). Fence. RWY 30: ODALS(NSTD). Road.

AIRPORT REMARKS: Unattended. Rwy 05-23 CLOSED indef. Cattle on invof rwy. Gate always locked combination set to field elevation. Phone near hangers, call Tatum Police Dept for ride into town. Rwy 05-23 edge lgtg retro-reflective. Rwy 12 NSTD ODALS-3 NSTD lgts on extended rwy centerline on less than standard spacing. Rwy 30 NSTD ODALS-3 NSTD lgts on extended rwy centerline on less than standard spacing.

COMMUNICATIONS: CTAF 122.9

ALBUQUERQUE FSS (ABQ) TF 1-800-WX-BRIEF. NOTAM FILE ABQ.

TOPAN N33°21.92' W104°26.53' NOTAM FILE ROW.

ALBUQUERQUE

NDB (LOM) 305 RO 219° 5.9 NM to Roswell Intl Air Center.

L-6G

General Limitations

Weight Limits

Maximum Takeoff Weight 3000 lb. (1361 kg)

• Note •

All weights in excess of 2900 pounds (1315 kg) must consist of wing fuel.

Maximum Landing Weight 2900 lb. (1315 kg)

Weight in Baggage Compartment 130 lb. (59 kg)

Instrument Procedures

Due to the possibility of CDI needle oscillation, in aircraft configured with a 2 blade propeller, while conducting instrument procedures that use a localizer or Simplified Directional Facility (SDF) navaid, engine speed above 2600 rpm is prohibited.

Center of Gravity Limits

Reference Datum 100 inches forward of firewall

Forward *Refer to Figure 2-4*

Aft *Refer to Figure 2-4*

Takeoff Distance

Conditions:

- Winds..... Zero
- Runway..... Dry, Level, Paved
- Flaps..... 50%
- Power..... Maximum set before brake release

Example:

- Outside Air Temp 25°C
- Weight..... 3000 LB
- Pressure Altitude..... 2000 FT
- Headwind 12 Knots
- Runway Dry, Paved

- Liftoff Speed..... 69 KIAS
- Obstacle Speed 75 KIAS
- Takeoff Ground Roll 1685 FT
- Dist. over 50' Obstacle 2380 FT

Factors:

The following factors are to be applied to the computed takeoff distance for the noted condition:

- Headwind - Subtract 10% from computed distance for each 12 knots headwind.
- Tailwind - Add 10% for each 2 knots tailwind up to 10 knots.
- Grass Runway - Add 15% to ground roll distance.
- Sloped Runway - Increase table distances by 22% of the ground roll distance at Sea Level, 30% of the ground roll distance at 5000 ft, 43% of the ground roll distance at 10,000 ft for each 1% of upslope. Decrease table distances by 7% of the ground roll distance at Sea Level, 10% of the ground roll distance at 5000 ft, and 14% of the ground roll distance at 10,000 ft for each 1% of downslope.

• Caution •

The above corrections for runway slope are required to be included herein. These corrections should be used with caution since published runway slope data is usually the net slope from one end of the runway to the other. Many runways will have portions of their length at greater or lesser slopes than the published slope, lengthening (or shortening) takeoff ground roll estimated from the table.

- If brakes are not held while applying power, distances apply from point where full throttle and mixture setting is complete.
- For operation in outside air temperatures colder than this table provides, use coldest data shown.
- For operation in outside air temperatures warmer than this table provides, use extreme caution.

Takeoff Distance

WEIGHT = 3000 LB
Speed at Liftoff = 68 KIAS
Speed over 50 Ft. Obstacle = 75 KIAS
 Flaps - 50% · Takeoff Pwr · Dry Paved

Headwind: Subtract 10% for each 12 knots headwind.
Tailwind: Add 10% for each 2 knots tailwind up to 10 knots.
Runway Slope: Ref. Factors.
Dry Grass: Add 15% to Ground Roll

PRESS ALT FT	DISTANCE FT	TEMPERATURE - °C					
		0	10	20	30	40	ISA
SL	Grnd Roll	1287	1390	1497	1608	1724	1446
	50 ft	1848	1988	2132	2282	2437	2064
1000	Grnd Roll	1412	1526	1643	1766	1893	1564
	50 ft	2022	2175	2333	2497	2666	2226
2000	Grnd Roll	1552	1676	1805	1940	2079	1692
	50 ft	2214	2381	2555	2734	2920	2402
3000	Grnd Roll	1706	1842	1985	2132	2286	1831
	50 ft	2426	2609	2799	2996	3200	2593
4000	Grnd Roll	1877	2027	2183	2346		1983
	50 ft	2660	2861	3069	3285		2802
5000	Grnd Roll	2066	2231	2404	2583		2149
	50 ft	2919	3139	3368	3605		3029
6000	Grnd Roll	2276	2458	2648	2845		2329
	50 ft	3205	3447	3698	3959		3276
7000	Grnd Roll	2509	2710	2919			2528
	50 ft	3522	3788	4064			3547
8000	Grnd Roll	2768	2990	3221			2744
	50 ft	3872	4165	4469			3841
9000	Grnd Roll	3056	3301	3555			2980
	50 ft	4261	4583	4917			4160
10000	Grnd Roll	3376	3646				3241
	50 ft	4691	5046				4514

Figure 5-9
Sheet 1 of 2

Landing Distance

Conditions:

- Technique Normal
- Winds..... Zero
- Runway..... Paved
- Flaps..... 100%
- Power..... 3° Power Approach to 50 FT obstacle, then Power - IDLE

Example:

- Outside Air Temp 10°C
- Weight..... 2900 LB
- Pressure Altitude..... 2000 FT
- Headwind..... Zero
- Landing Ground Roll 1072 FT
- Dist. over 50' Obstacle..... 2116 FT

Factors:

The following factors are to be applied to the computed landing distance for the noted condition:

- Power for 3° glideslope across obstacle; then reduce to idle.
- Headwind - Subtract 10% from table distances for each 13 knots headwind
- Tailwind - Add 10% to table distances for each 2 knots tailwind up to 10 knots.
- Sloped Runway - Increase table distances by 27% of the ground roll distance for each 1% of downslope. Decrease table distances by 9% of the ground roll distance for each 1% of upslope.

• Caution •

The above corrections for runway slope are required to be included herein. These corrections should be used with caution since published runway slope data is usually the net slope from one end of the runway to the other. Many runways will have portions of their length at greater or lesser slopes than the published slope, lengthening (or shortening) landing ground roll estimated from the table.

- Dry Grass Runway - Add 40% to computed ground roll distance.
- For operation in outside air temperatures colder than this table provides, use coldest data shown.
- For operation in outside air temperatures warmer than this table provides, use extreme caution.

Landing Distance

WEIGHT = 2900 LB
Speed over 50 Ft Obstacle = 75 KIAS
 Flaps - 100% · Idle · Dry, Level Paved Surface

Headwind: Subtract 10% per each 13 knots headwind.
 Tailwind: Add 10% for each 2 knots tailwind up to 10 knots.
 Runway Slope: Ref. Factors.
 Dry Grass: Add 40% to Ground Roll

PRESS ALT FT	DISTANCE FT	TEMPERATURE ~ °C					
		0	10	20	30	40	ISA
SL	Grnd Roll	962	997	1032	1067	1102	1014
	50 ft	1972	2017	2063	2109	2156	2040
1000	Grnd Roll	997	1034	1070	1067	1143	1045
	50 ft	2018	2065	2113	2161	2210	2079
2000	Grnd Roll	1034	1072	1110	1148	1186	1076
	50 ft	2066	2116	2166	2217	2268	2121
3000	Grnd Roll	1073	1112	1151	1191	1230	1108
	50 ft	2117	2169	2222	2275	2329	2164
4000	Grnd Roll	1113	1154	1195	1236		1142
	50 ft	2170	2225	2281	2337		2209
5000	Grnd Roll	1156	1198	1240	1283		1177
	50 ft	2227	2285	2343	2402		2256
6000	Grnd Roll	1200	1244	1288	1332		1214
	50 ft	2287	2348	2409	2471		2306
7000	Grnd Roll	1246	1292	1337			1251
	50 ft	2351	2415	2479			2358
8000	Grnd Roll	1295	1342	1389			1291
	50 ft	2418	2485	2553			2412
9000	Grnd Roll	1345	1394	1444			1331
	50 ft	2490	2560	2631			2470
10000	Grnd Roll	1398	1449				1373
	50 ft	2565	2639				2529

Figure 5-19

Center of Gravity Limits

The charts below depict the airplane center-of-gravity envelope in terms of inches aft of the reference datum and as a percentage of the Mean Aerodynamic Cord (MAC). The relationship between the two is detailed in the weighing instructions.

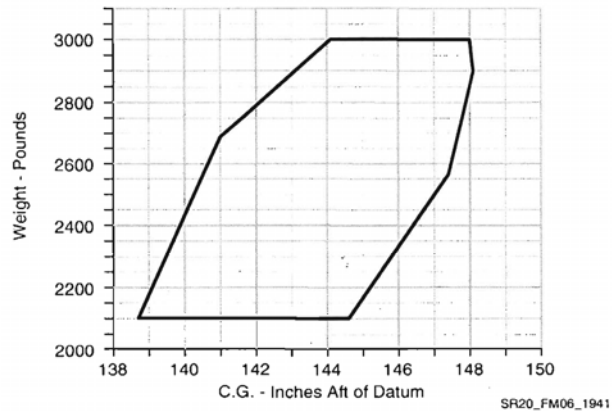
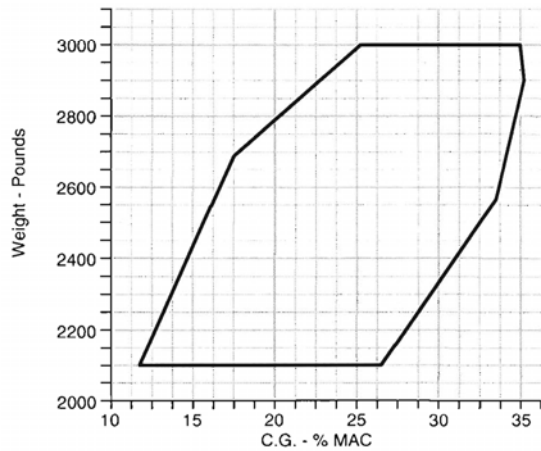
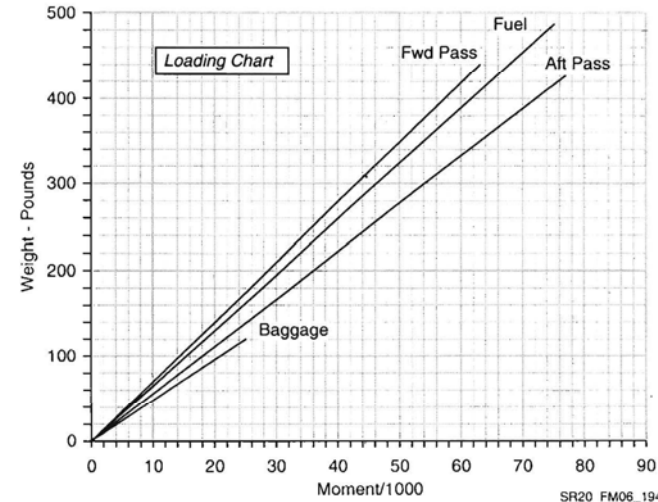


Figure 6-6
Center of Gravity Limits

Loading Data

Use the following chart or table to determine the moment/1000 for fuel and payload items to complete the Loading Form (Figure 6-7).



Weight LB	Fwd Pass FS 143.5	Aft Pass FS 180.0	Baggage FS 208.0	Fuel FS 153.8	Weight LB	Fwd Pass FS 143.5	Aft Pass FS 180.0	Fuel FS 153.8
20	2.87	3.60	4.16	3.08	220	31.57	39.60	33.83
40	5.74	7.20	8.32	6.15	240	34.44	43.20	36.90
60	8.61	10.80	12.48	9.23	260	37.31	46.80	39.98
80	11.48	14.40	16.64	12.30	280	40.18	50.40	43.05
100	14.35	18.00	20.80	15.38	300	43.05	54.00	46.13
120	17.22	21.60	24.96	18.45	320	45.92	57.60	49.20
140	20.09	25.20	(27.04)*	21.53	340	48.79	61.20	52.28
160	22.96	28.80		24.60	360	51.66	64.80	55.35
180	25.83	32.40		27.68	380	54.53	68.40	
200	28.70	36.00		30.75	400	57.40	72.00	

*130 lb Maximum

Figure 6-8
Loading Data