Figure 6-8. Center of Gravity Limits



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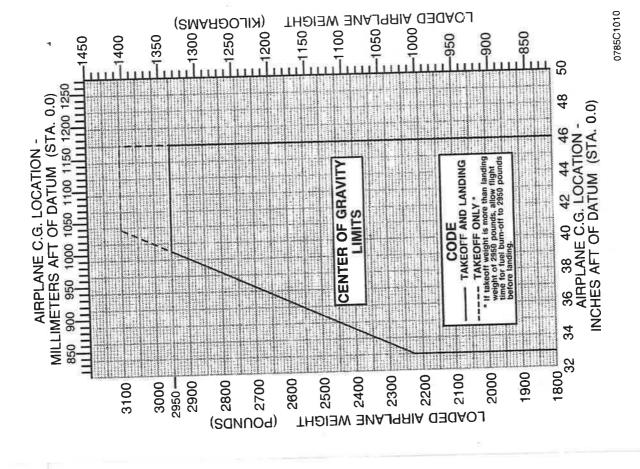
- AR SAP P. Maradan FOC

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Figure 6-2. Sample Weigh

and Balance Record

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SAMPLE WEIGHT AND BALANCE RECORD

(CONTINUOUS HISTORY OF CHANGES IN STRUCTURE OR EQUIPMENT AFFECTING WEIGHT AND BALANCE)

١	AIRPI	ANE	MODE	161852 MP-11	PK SE	RIAL	10. 18	(8034	PAG	E NUM	IBER		
ŀ		ITEM NO.				١	VEIGHT	CHANG	RUNNING BASIC EMPTY				
1	DATE			DESCRIPTION OF ARTICLE OR	ADDED (+)			REMOVED (-)			WEIGHT		ļ
	DATE	IN	ОИТ	MODIFICATION	WT. (LB.)	ARM (IN.)	/1000	WT. (LB.)	ARM (IN.)	/1000	WT. (LB.)	/1000	
Ì				AS DELIVERED			1201						į.
	11.5.12			Peridical Weighting	1	éc si	åu/					75,956	5
1			K	ADF Lud				06	139	0009	1994,4		
	9.10.53			House er Flisus	09	139	0012	-			19953	7596	AVIONITECA
1	05/15	×	×	Avience Change	18.1	15.65	0.283	26.5	38.64	1,024	1986.3	75.24	AVIONITECA CH. 145.01810
1	CALA		X	KITD 150 MJF: display		-		3			19839		
1	0//20		×	Vacum system				101	196	0019	19739		
	04/20	X		Inst G5 EADI				- 6	- 74	×	1974.80	75174	
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						_	_		_	_	-		1
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CESSNA MODEL 182S

SECTION 6
WEIGHT & BALANCE / EQUIPMENT LIST

WEIGHT LIMITS

Maximum Ramp Weight: 3110 lbs. Maximum Takeoff Weight: 3100 lbs. Maximum Landing Weight: 2950 lbs.

Maximum Weight in Baggage Compartment:

Baggage Area A - Station 82 to 109: 120 lbs. See note below. Baggage Area B - Station 109 to 124: 80 lbs. See note below. Baggage Area C - Station 124 to 134: 80 lbs. See note below.

NOTE

The maximum allowable combined weight capacity for baggage in areas A, B and C is 200 pounds. The maximum allowable weight capacity for baggage in areas B and C is 80 pounds.

CENTER OF GRAVITY LIMITS

Center of Gravity Range:

Forward:

33.0 inches aft of datum at 2250 lbs. or less, with straight line variation to 40.9 inches aft of datum at

3100 lbs.

Aft:

46.0 inches aft of datum at all weights.

Reference Datum: Front face of firewall.

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CESSNA MODEL 182S

SECTION 5 PERFORMANCE

SHORT FIELD TAKEOFF DISTANCE AT 3100 POUNDS

CONDITIONS:

Flaps 20°
2400 RPM, Full Throttle and Mixture Set Prior to Brake Release Cowl Flaps Open Paved, Level, Dry Runway Zero Wind Lift Off: 49 KIAS Lift Off: 49 KIAS Speed at 50 Ft: 58 KIAS

		0°C	-	10°C	2	20°C 30°C			1	40°C	
Press Alt In Feet	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst									
S. L.	715	1365	765	1460	825	1570	885	1680	945	1800	
1000	775	1490	835	1600	900	1720	965	1845	1030	1980	
2000	850	1635	915	1760	980	1890	1055	2035	1130	2190	
3000	925	1800	995	1940	1070	2090	1150	2255	1235	2435	
4000	1015	1990	1090	2150	1175	2325	1260	2515	1355	2720	
5000	1110	2210	1195	2395	1290	2595		2820	1485	3070	
6000	1220	2470	1315	2690	1415	2930		3200	1635	3510	
7000	1340	2785	1445	3045	1560	3345		3685	1033	3310	
8000	1480	3175	1595	3500		3880					

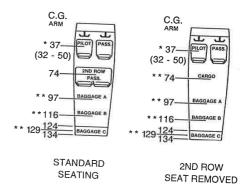
NOTES:

Short field technique as specified in Section 4.
Prior to takeoff, the mixture should be leaned to the Maximum Power Fuel Flow placard value in a full throttle, static runup.
Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2 knots

For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure

Figure 5-6. Short Field Takeoff Distance (Sheet 1 of 3)

LOADING ARRANGEMENTS



Pilot or passenger center of gravity on adjustable seats positioned for average occupant. Numbers in parentheses indicate forward and aft limits of occupant center of gravity range.

NOTES

The usable fuel C.G. arm is located at station 46.5
 The alt baggage wall (approximate station 134) can be used as a convenenient interior reference point for determining the location of baggage area fuselage stations.

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Figure 6-3. Loading Arrangements

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CESSNA MODEL 182S

SECTION 5 PERFORMANCE

SHORT FIELD LANDING DISTANCE AT 2950 POUNDS

CONDITIONS:

Flaps FULL Power Off Maximum Braking Paved, level, dry runway Zero Wind Speed at 50 Ft: 60 KIAS

	0°C		1	10°C		0°C	3	0°C	40°C	
Press Alt In Feet	Grnd Roli Ft	Total Ft To Clear 50 Ft Obst		Total Ft To Clear 50 Ft Obst	Grnd Roli Ft	Total Ft To Clear 50 Ft Obst		Total Ft To Clear 50 Ft Obst	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst
S. L.	560	1300	580	1335	600	1365	620	1400	640	1435
1000	580	1265	600	1365	620	1400	645	1440	665	1475
2000	600	1370	625	1405	645	1440	670	1480	690	1515
3000	625	1410	645	1445	670	1485	695	1525	715	1560
4000	650	1450	670	1485	695	1525	720	1565	740	1600
5000	670	1485	695	1525	720	1565	745	1610	770	1650
6000	700	1530	725	1575	750	1615	775	1660	800	1700
7000	725	1575	750	1615	780	1665	805	1710	830	1750
8000	755	1625	780	1655	810	1715	835	1760	865	1805

NOTES:

Short field technique as specified in Section 4.
Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2

For operation on dry, grass runway, increase distances by 45% of the "ground roll" figure.

If a landing with flaps up is necessary, increase the approach speed

4. by 10 KIAS and allow for 40% longer distances.

Figure 5-12. Short Field Landing Distance

^{**} Arms measured to the center of the areas shown.