

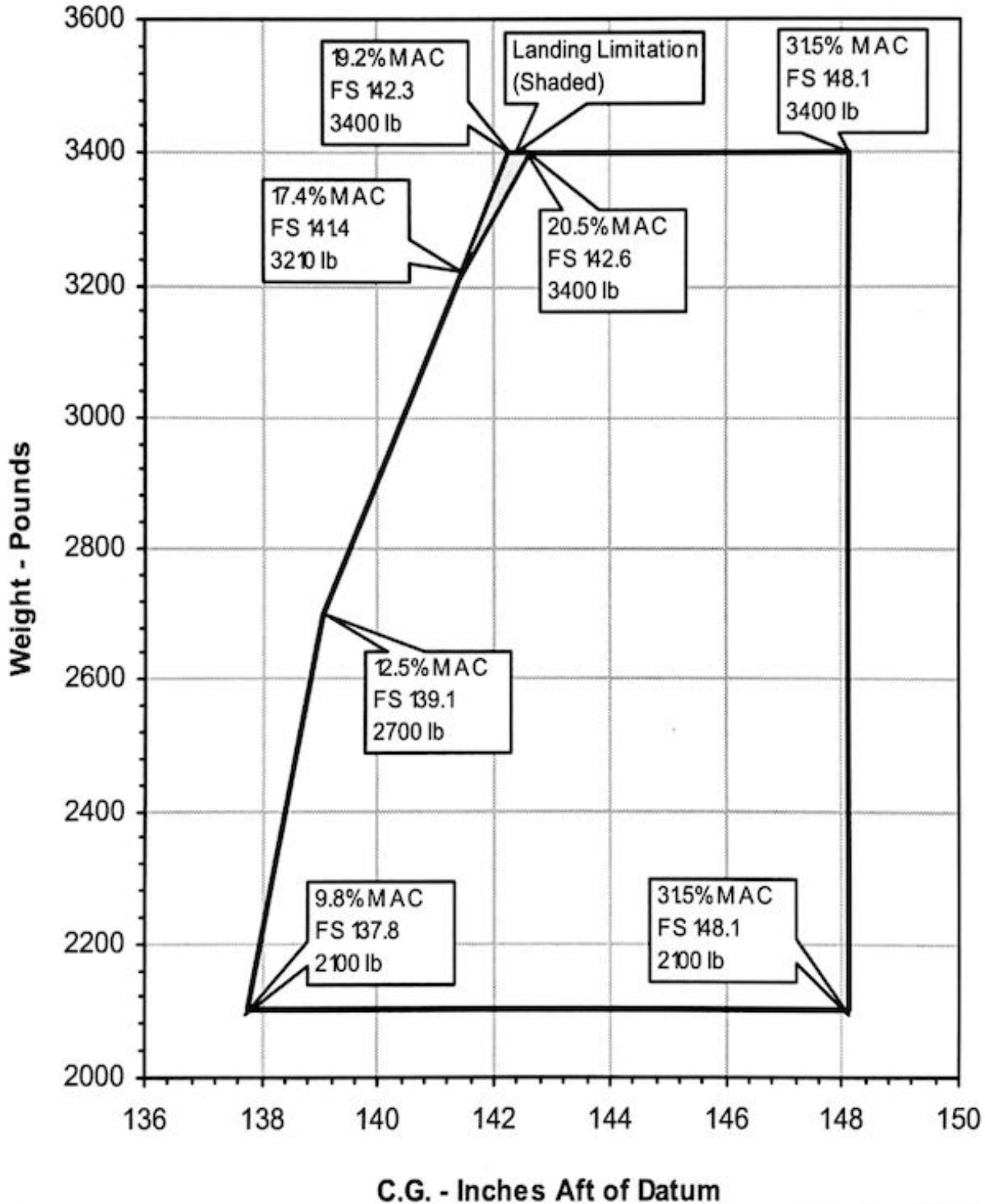
SR22 FM06 1019

Location	Length	Width	Height	Volume
Cabin	122"	49.3"	49.7	137 cu ft
Baggage Compartment	36"	39.8"	38.5"	32 cu ft

Figure 6-5
Airplane Interior Dimensions

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.



FORWARD LIMIT - The forward limit is FS 137.8 (9.8% MAC) at 2100 lb, with straight line taper to FS 139.1 (12.5% MAC) at 2700 lb, to FS 142.3 (19.2% MAC) at 3400 lb.
AFT LIMIT - The aft limit is FS 148.1 (31.5% MAC) at all weights from 2100 lb to 3400 lb.
LANDING LIMITATION - The Landing Limitation is FS 141.4 (17.4% MAC) at 3210 lb, to FS 142.3 (19.2% MAC) at 3400 lb, to FS 142.6 (20.5% MAC) at 3400 lb, to FS 141.4 (17.4% MAC) at 3210 lb. **CAUTION:** Before landing, verify aircraft Center of Gravity does not fall in the Landing Limitation Zone. Allow flight time for fuel burn so the landing C.G. falls outside of this zone.

Figure 6-6
Center of Gravity Limits

Weight & Balance Loading Form

Serial Num: _____ Date: _____

Reg. Num: _____ Initials: _____

Item	Description	Weight LB	Moment/ 1000
1.	Basic Empty Weight <i>Includes unusable fuel & full oil</i>		
2.	Front Seat Occupants <i>Pilot & Passenger (total)</i>		
3.	Rear Seat Occupants		
4.	Baggage Area <i>130 lb maximum</i>		
5.	Zero Fuel Condition Weight <i>Sub total item 1 thru 4</i>		
6.	Fuel Loading <i>81 Gallon @ 6.0 lb/gal. Maximum</i>		
7.	Ramp Condition Weight <i>Sub total item 5 and 6</i>		
8.	Fuel for start, taxi, and runup <i>Normally 9 lb at average moment of 1394.</i>	-	-
9.	Takeoff Condition Weight <i>Subtract item 8 from item 7</i>		

• Note •

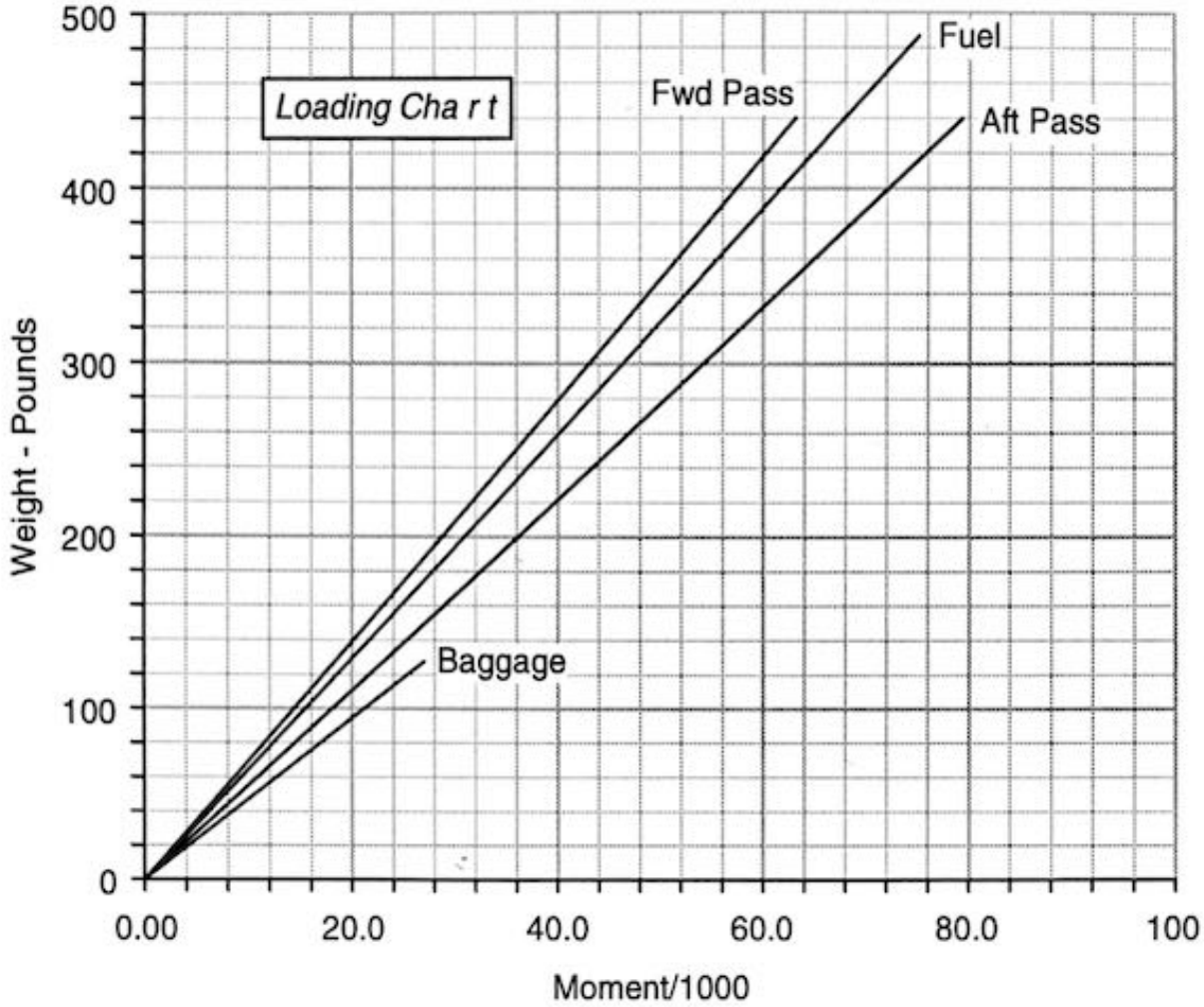
The Takeoff Condition Weight must not exceed 3400 lb.

The Takeoff Condition Moment must be within the Minimum Moment to Maximum Moment range at the Takeoff Condition Weight. (Refer to Figure 6-9, Moment Limits).

Figure 6-7
Weight and Balance Loading Form

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 154.9	Weight LB	Fwd Pass FS 143.5	Aft Pass FS 180.0	Fuel FS 154.9
20	2.87	3.60	4.16	3.10	260	37.31	46.80	40.27
40	5.74	7.20	8.32	6.20	280	40.18	50.40	43.37
60	8.61	10.80	12.48	9.29	300	43.05	54.00	46.47
80	11.48	14.40	16.64	12.39	320	45.92	57.60	49.57
100	14.35	18.00	20.80	15.49	340	48.79	61.20	52.67
120	17.22	21.60	24.96	18.59	360	51.66	64.80	55.76
140	20.09	25.20	(27.04)*	21.69	380	54.53	68.40	58.86
160	22.96	28.80		24.78	400	57.40	72.00	61.96
180	25.83	32.40		27.88	420	60.27	75.60	65.06
200	28.70	36.00		30.98	440	63.14	79.20	68.16
220	31.57	39.60		34.08	460			71.25
240	34.44	43.20		37.18	486**			75.28

*130 lb Maximum

**81 U.S. Gallons Usable

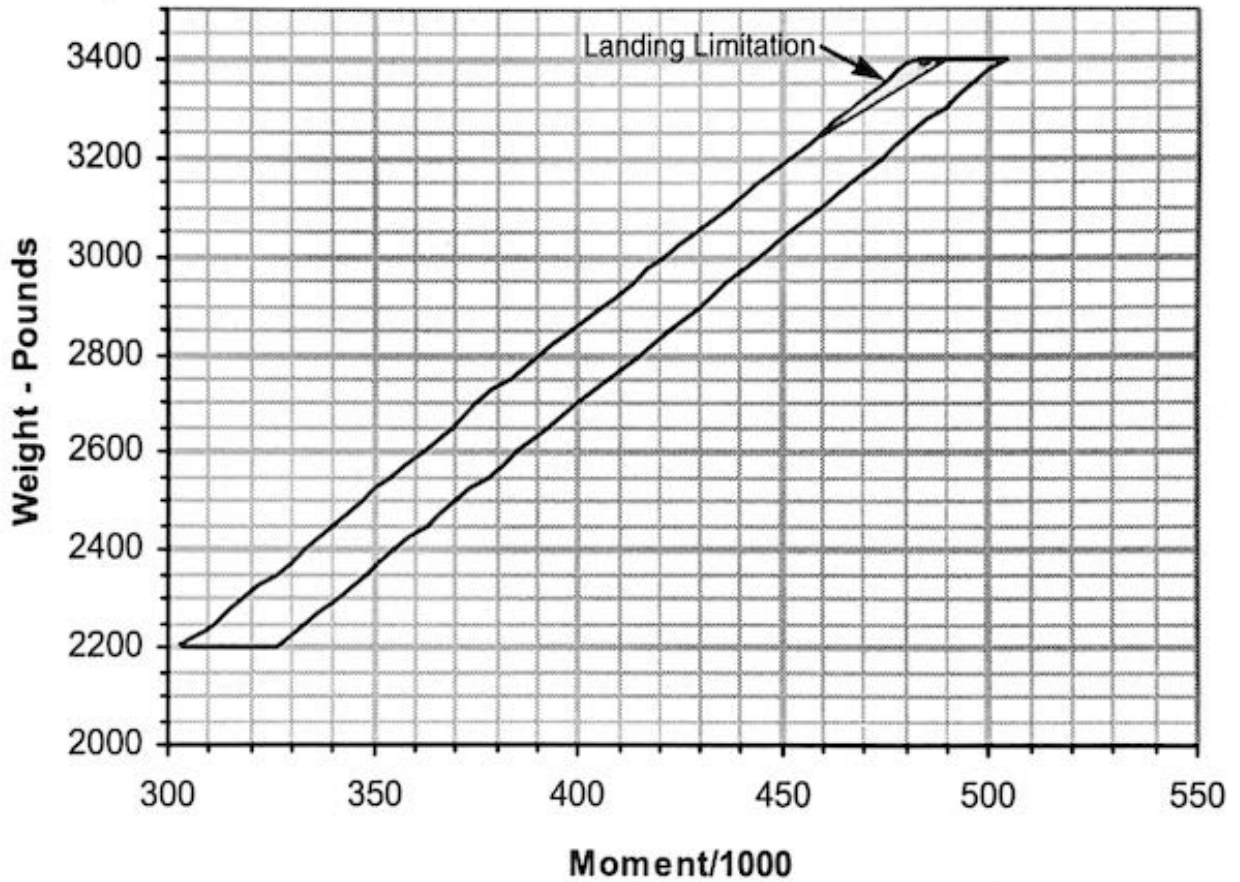
Figure 6-8
Loading Data

Moment Limits

Use the following chart or table to determine if the weight and moment from the completed Weight and Balance Loading Form are within limits.

• **Caution** •

Before landing, verify aircraft weight and moment do not fall in the Landing Limitation Zone.



Weight LB	Moment/1000		Weight LB	Moment/1000	
	Minimum	Maximum		Minimum	Maximum
2200	304	326	2850	398	422
2250	311	333	2900	406	430
2300	318	341	2950	414	437
2350	326	348	3000	421	444
2400	333	355	3050	429	452
2450	340	363	3100	437	459
2500	347	370	3150	444	467
2550	354	378	3200	452	474
2600	362	385	3250	460	481
2650	369	392	3300	467	489
2700	375	400	3350	475	496
2750	383	407	3400	483	504
2800	390	415			

Figure 6-9
Moment Limits

AIRCRAFT WEIGHT & BALANCE - EQUIPMENT LIST REVISION

Aeroways Inc

131 N DUPONT HWY • NEW CASTLE, DE 19720

302-324-9970 www.flyadvanced.com

A/C NUMBER	N314A	DATE:	2/18/2019
A/C MAKE	CIRFUS	FLIGHT TIME:	3184.2
A/C MODEL	SR22	MAX WEIGHT:	3400
A/C S/N	2061	WORK ORDER:	10265-02-2019
PREVIOUS A/C EMPTY WEIGHT:	2421.99	PREVIOUS A/C MOMENT:	335138.47
PREVIOUS A/C EMPTY C.G.:	138.37	PREVIOUS A/C USEFUL LOAD:	978.01

Equipm	Description	Part Number	Serial Number	Weight	Arm	Moment
REMOVED EQUIPMENT				3.00		374.70
	Garmin GTX327 Transponder	011-00490-00	83724793	3.00	124.90	374.70
INSTALLED EQUIPMENT				3.30		410.47
	Garmin GTX335 Transponder	011-03300-40	3EE421981	2.80	124.90	349.72
	Garmin GA35 GPS WAAS Antenna	013-00235-00	158998	0.50	121.50	60.75
NEW A/C EMPTY WEIGHT:		2422.29	NEW A/C MOMENT:		335174.24	
NEW A/C EMPTY C.G.:		138.37	NEW A/C USEFUL LOAD:		977.71	

Computed by: *Dale A. Walley*
 Dale Walley A3542463

Form , Rev.