

## Aircraft Weight and Balance Revision

Tail Number: <b>N205EC</b>			Date: 04/06/2018		
Prepared by: RYAN MCGEE ADVANCED WINGS 1501 NARCISSA ROAD BLUE BELL, PA 19422			Work Order No: T10351		
			Type Certificate Data No: A00009CH		
Aircraft Make: Cirrus	Model: SR20	Serial No: 2127	Time: 2516.9		
Registered Owner: N514CG LLC		Address: 1501 NARCISSA ROAD BLUE BELL, PA 19422			
Maximum Weight <b>3050</b>		CG Range FWD 137.8 AFT 148.1			
As Received; Date of Previous Weight and Balance: ORIGINAL		Useful Load: 853	EW: 2197	EWCG: 140.56	Moment: 308806
Notes:					
			<b>Weight</b>	<b>Arm</b>	<b>Moment</b>
REMOVED ENGINE WITH STARTER C24ST3			-6.63	93.0	-616.59
INSTALLED NEW ENGINE WITH STARTER ES646275-1			14.5	93.0	1348.50
			0.00	0.00	0.00
			0.00	0.00	0.00
			0.00	0.00	0.00
			0.00	0.00	0.00
			0.00	0.00	0.00
			0.00	0.00	0.00
			0.00	0.00	0.00
			0.00	0.00	0.00
<input checked="" type="checkbox"/> As Calculated <input type="checkbox"/> As Weighed		Moment <span style="float: right;">309537.91</span> <hr/> Weight <span style="float: right;">2204.87</span>	<b>New Empty Weight CG</b>  <span style="font-size: 1.2em; font-weight: bold;">140.39</span>		<b>New Useful Load</b>  <span style="font-size: 1.2em; font-weight: bold;">845.13</span>
Signature					
Repair Agency or License No: <b>A+P 3786795</b>					

# Weight and Balance Loading Form

• Note •

For Center of Gravity Envelope, refer to Section 2, Limitations.

The Takeoff Condition Weight must not exceed 3050 lb.

The Takeoff Condition Moment must be within the Minimum Moment to Maximum Moment range at the Takeoff Condition Weight. (Refer to Moment Limits).

Serial Num: \_\_\_\_\_ Date: \_\_\_\_\_

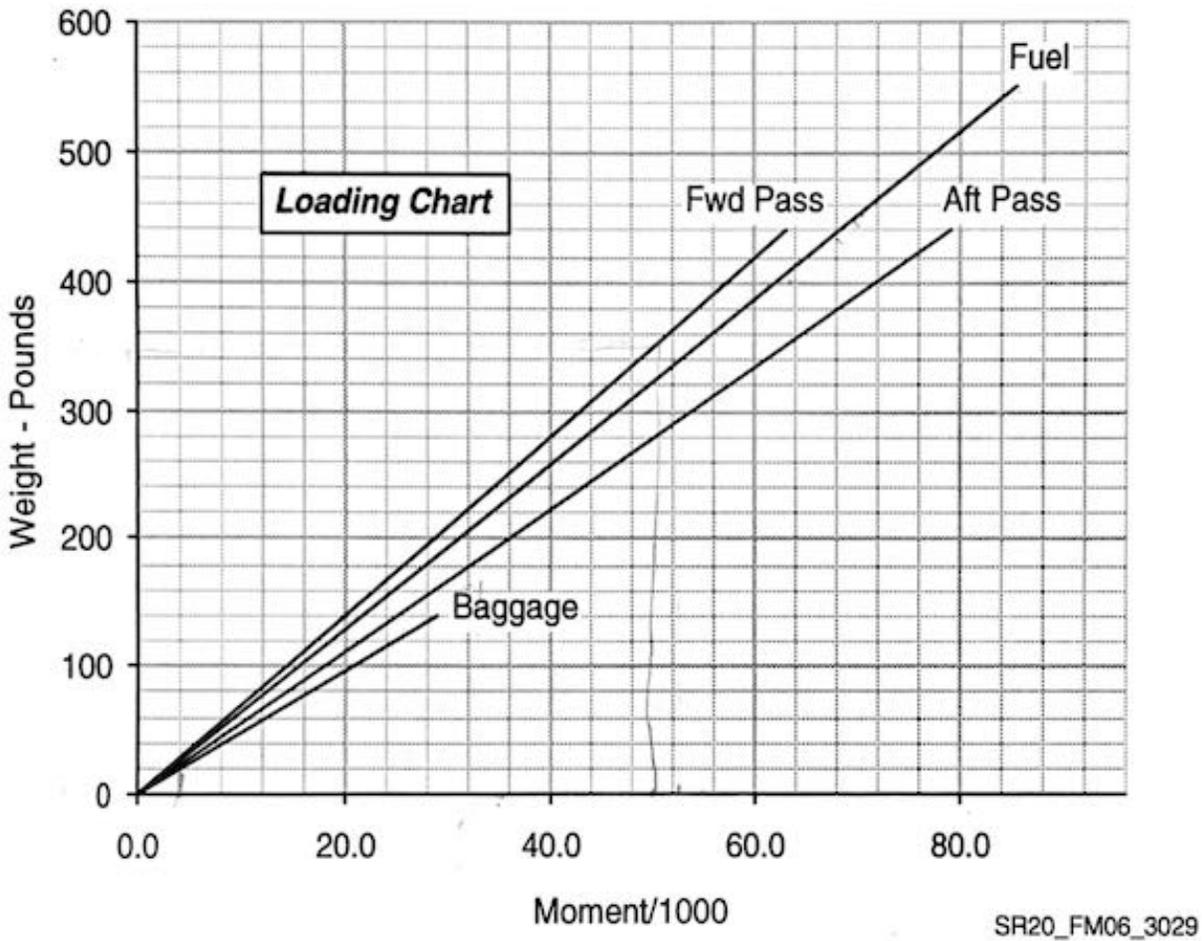
Reg. Num: \_\_\_\_\_ Initials: \_\_\_\_\_

Item	Description	Weight LB	Moment/ 1000
1.	Basic Empty Weight <i>Includes unusable fuel &amp; full oil</i>		
2.	Front Seat Occupants <i>Pilot &amp; 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>56 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 run-up <i>Normally 9 lb at average moment of 922.8.</i>	-	-
9.	Takeoff Condition Weight <i>Subtract item 8 from item 7</i>		

Figure 6-3

# Loading Data

Use the following chart or table to determine the moment/1000 for fuel and payload items to complete the Loading Form.

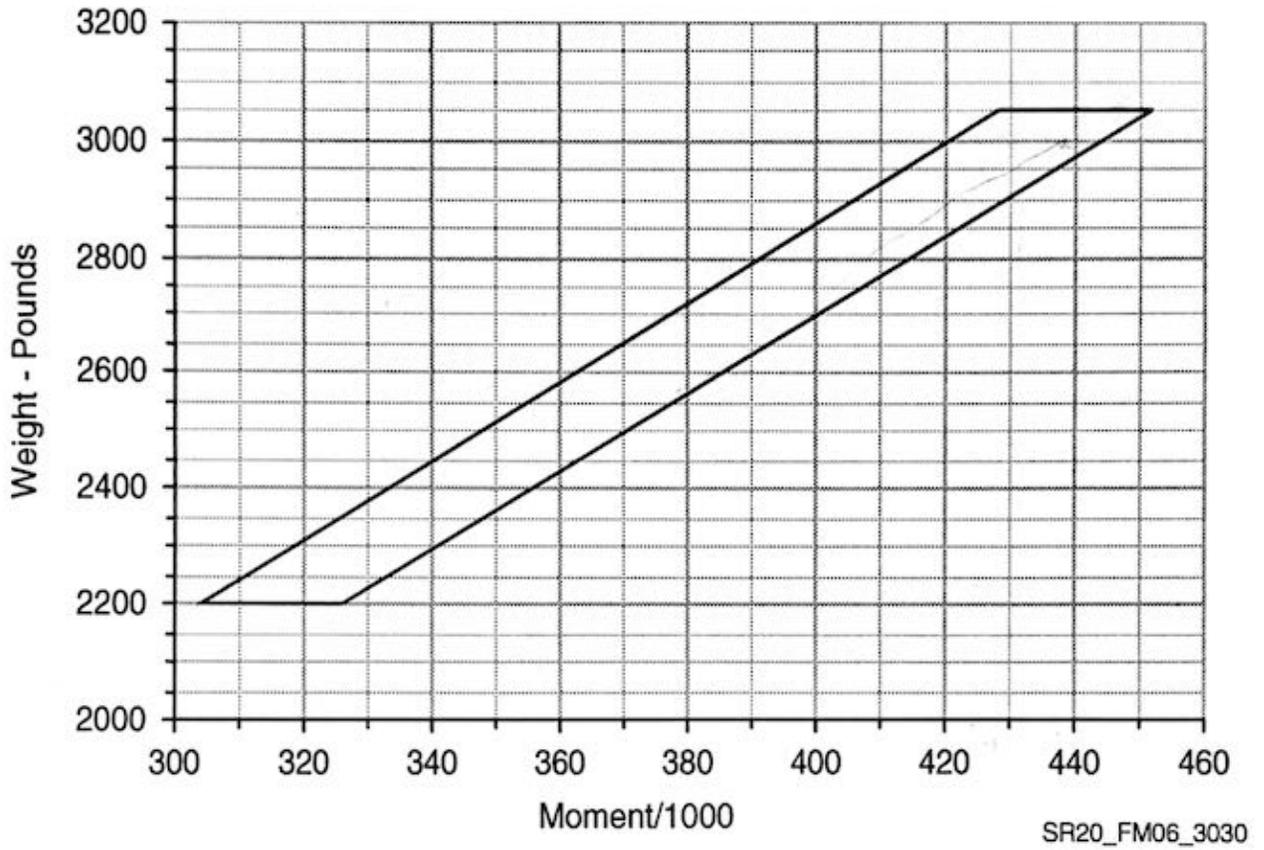


Weight LB	Fwd Pass FS 143.5	Aft Pass FS 180.0	Baggage FS 208.0	Fuel FS 153.8	Weight LB	Fwd Pass FS 143.5	Aft Pass FS 180.0	Fuel FS 153.8
20	2.87	3.60	4.16	3.10	220	31.57	39.60	34.08
40	5.74	7.20	8.32	6.20	240	34.44	43.20	37.18
60	8.61	10.80	12.48	9.29	260	37.31	46.80	40.27
80	11.48	14.40	16.64	12.39	280	40.18	50.40	43.37
100	14.35	18.00	20.80	15.49	300	43.05	54.00	46.47
120	17.22	21.60	24.96	18.59	320	45.92	57.60	49.57
140	20.09	25.20	(27.04)*	21.69	336**	48.79	61.20	52.05
160	22.96	28.80		24.78	360	51.66	64.80	
180	25.83	32.40		27.88	380	54.53	68.40	
200	28.70	36.00		30.98	400	57.40	72.00	

Figure 6-4

## Moment Limits

Use the following chart or table to determine if the weight and moment from the completed Weight and Balance Loading Form (*Figure 6-3*) are within limits.



Weight LB	Moment/1000		Weight LB	Moment/1000	
	Minimum	Maximum		Minimum	Maximum
2200	304	326	2700	375	398
2250	311	333	2750	383	406
2300	318	341	2800	390	414
2350	326	348	2850	398	421
2400	333	354	2900	406	429
2450	340	362	2950	414	437
2500	347	369	3000	421	444
2550	354	375	3050	429	452
2600	362	383	2700	375	398
2650	369	390			

Figure 6-5