

Weight & Balance Report

Lancair Legacy FG N60AL

5/23/2007 Rev A

All equipment installed (seats, radios, spinner, etc)

Engine - Continental IO-550

Prop - 3 Blade Hartzell

Empty Weight	1526	lb
Max Gross Weight	2400	lb
Max No Fuel Weight	1900	lb

W&B References	ARM	Measure
Nose Gear FS	48.375	inches
Main Gear FS	101.375	inches
Firewall Joggle Reference Point at FS	64.625	inches
Leading Edge of Wing @ BL 27	81.824	inches
Leading Edge of MAC (Leading Edge of Wing @ BL 27 + 1.96")	83.784	inches
Forward CG Limit (MAC + 5.98")	87.804	inches
Aft CG Limit MAC + 12")	93.824	inches

Aircraft Scale Weight	Nose	L Main	R Main	Total Main
Aircraft Empty Weight (7Qt Oil)	473	526	527	1053

Empty CG Calculation	Weight	ARM	Moment
Nose Gear Moment	473	48.375	22881.38
Main Gear Moment	1053	101.375	106747.88
Total	1526		129629.25
Empty Center of Gravity ARM		84.947	

Configuration 1 - Pilot, Min Fuel

Empty A/C	1526	84.947	129629.25
Fuel	60	100.492	6029.50
Pilot	180	108.994	19618.88
Total	1766		155277.63
C.G		87.926	CG OK

Configuration 2 - Pilot, Max Fuel and Baggage

Empty A/C	1526	84.947	129629.25
Fuel	384	100.492	38588.80
Pilot	180	108.994	19618.88
Baggage	80	141.125	11290.00
Total	2170		199126.93
C.G		91.764	CG OK

Configuration 3 - Pilot, Co-Pilot, Max Fuel and Baggage

Empty A/C	1526	84.947	129629.25
Fuel	384	100.492	38588.80
Pilot	180	108.994	19618.88
Co-Pilot	160	108.994	17439.00
Baggage	80	141.125	11290.00
Total	2330		216565.93
C.G		92.947	CG OK

Configuration 4 - Pilot, Co-Pilot, Min Fuel and Baggage

Empty A/C	1526	84.947	129629.25
Fuel	324	100.492	32559.30
Pilot	180	108.994	19618.88
Co-Pilot	160	108.994	17439.00
Baggage	80	141.125	11290.00
Total	2270		210536.43
C.G		92.747	CG OK
No Fuel Weight (no more than 1900 lb)	1946		TOO HEAVY

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Note - Values in BLUE are Measured and entered by the Owner

Critical ARM Measurements (center of specific areas)		
Nose Gear FS	48.375	Baggage ARM 141.125
Main Gear FS	101.375	
Leading Edge of Wing @ BL 27	81.824	
Pilot/CoPilot ARM	108.994	
Fuel ARM	100.492	

Critical Empty Weight Measurements	
Nose Weight	473
L Main Weight	526
R Main Weight	527

Notes: Do the Measurements below in the top down order so you only have to pump fuel once :)

Pilot/CoPilot Weight ARM Calculations		Notes:
Empty Weight	1526	
Nose Gear	473	
Main Gear Total	1053	
Pilot/CoPilot on -board	1686	
Nose Gear	450	
Main Gear Total	1236	
Pilot/CoPilot Weight	160	
Pilot/CoPilot Moment	147068.25	
Pilot/CoPilot ARM	108.994	
Baggage ARM Calculations		
Empty Weight	1526	
Nose Gear	473	
Main Gear Total	1053	
Baggage on-board	1586	
Nose Gear	428	
Main Gear Total	1158	
Baggage Weight	60	
Baggage Moment	138096.75	
Baggage ARM	141.125	
Fuel Weight ARM Calculations		
Empty Weight	1526	
Nose Gear	473	
Main Gear Total	1053	
Fuel on-board	1706	
Nose Gear	476	
Main Gear Total	1230	
Fuel Weight	180	
Fuel Moment	147717.75	
Fuel ARM	100.492	