

**RainAir Avionics Services
FAA CRS # 9RSR194C
Weight & Balance
Equipment List Revision**

DATE: 12/11/2018
REGISTRATION: N270SA
MODEL: PA-28-140

SERIAL NUMBER: 28-21576
WORK ORDER# : 575A

DESCRIPTION INSTALLED	WEIGHT	DESCRIPTION REMOVED	WEIGHT	STATION	MOMENT
		Vacuum Pump	-3.6	36.3	-130.68
		Analog Clock	-0.4	68.3	-27.32
				67	160.80
GMA 350 Audio Pnl	2.40			62.8	439.60
GTN 650 N/C/GPS	7.00			62.8	248.69
GNC 255 Nav/Com	3.96			67	80.40
KI-209 Nav Indicator	1.20			62.8	195.94
GTX 345 Xpdr	3.12			58	11.60
GAE 12 Encoder	0.20			68.3	68.30
G5 Elect.ADI	1.00			68.3	68.30
G5 Elect.HSI	1.00			165.5	43.03
GMU 11 AHRS	0.26			63	40.95
GAD 29B Adapter	0.65			95	47.50
GA 35 GPS Ant	0.50			68.3	13.66
Davtron Clock	0.20				1260.76
TOTAL lbs: 21.49		TOTAL lbs:	-4.00		

TOTAL CHANGE: 17.49
OLD BASIC EMPTY WEIGHT: 1245.55
OLD CENTER OF GRAVITY: 85.22
OLD MOMENT ARM: 106141.22
MAX T/O WEIGHT 2150.00
MAX GROSS WEIGHT 2150.00
OLD USEFUL LOAD: 1062.10

NEW BASIC EMPTY WEIGHT: 1263.04
NEW CENTER OF GRAVITY: 85.03
NEW MOMENT ARM: 107401.98
NEW USEFUL LOAD: 1044.61

THIS DATA SUPERSEDES W&B / EQUIPMENT LIST DATED: 11/30/18

APPROVED: _____

N270SA Weight and Balance Calculation

Last Weight and Balance		
Max Gross Weight	2150	
New Basic Empty Weight	1263.04	
New Center of Gravity	85.03	
New Moment Arm	107401.98	
New Useful Load	886.96	

Loading Calculation					
Description	Weight (lbs)		Arm Aft Datum (in.)		Moment (lb/in)
Empty Weight	1263.04		85.03		107396.2912
Oil (Estimate)					0
Pilot and Passenger	480		85.5		41040
Fuel (36g = Tabs)	216		95		20520
Total	1959.04				168956.2912
Loaded CG (In.)	86.2444316				

Forward Limit (1950) 84
Rearward Limit (1950) 95.9

CENTER OF GRAVITY ENVELOPE

