

RV-8 N998RV

Weight & Balance

Version 1.0 - April 9 2010 - Matt Dralle

Adjustable Parameters			
Pilot Weight:	263		
Right Wheel Weight:	583		
Left Wheel Weight:	566		
Tail Wheel Weight:	64		
Full Fuel Weight:	252		
Forward Baggage Arm:	58.51		
Fuel Arm:	80.00		
Pilot Arm:	91.78		
Passenger Arm:	119.12		
Aft Baggage Floor Arm:	138.00		
Aft Baggage Shelf Arm:	152.91		

Empty Weight			
	Weight	Arm	Moment
Right Wheel	583	68.76	40087.08
Left Wheel	566	68.76	38918.16
Tail Wheel	64	251.06	16067.84
Empty Weight	1213		95073.08
CG	78.38	(Acceptable Range: 78.70 - 86.82)	

Full Fuel Scenarios

Scenario: Pilot / No Passenger / Full Fuel / No Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	252	80.00	20160.00
Pilot	263	91.78	24138.14
Passenger	0	119.12	0.00
Aft Bag Floor	0	138.00	0.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1728		139371.22
CG	80.65		

Half Fuel Scenarios

Scenario: Pilot / No Passenger / Half Fuel / No Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	126	80.00	10080.00
Pilot	263	91.78	24138.14
Passenger	0	119.12	0.00
Aft Bag Floor	0	138.00	0.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1602		129291.22
CG	80.71		

Low Fuel Scenarios

Scenario: Pilot / No Passenger / Low Fuel / No Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	36	80.00	2880.00
Pilot	263	91.78	24138.14
Passenger	0	119.12	0.00
Aft Bag Floor	0	138.00	0.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1512		122091.22
CG	80.75		

Scenario: Pilot / Passenger 200# / Full Fuel / No Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	252	80.00	20160.00
Pilot	263	91.78	24138.14
Passenger	200	119.12	23824.00
Aft Bag Floor	0	138.00	0.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1928		163195.22
CG	84.64		

Scenario: Pilot / Passenger 200# / Half Fuel / No Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	126	80.00	10080.00
Pilot	263	91.78	24138.14
Passenger	200	119.12	23824.00
Aft Bag Floor	0	138.00	0.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1802		153115.22
CG	84.97		

Scenario: Pilot / Passenger 200# / Low Fuel / No Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	36	80.00	2880.00
Pilot	263	91.78	24138.14
Passenger	200	119.12	23824.00
Aft Bag Floor	0	138.00	0.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1712		145915.22
CG	85.23		

Scenario: Pilot / Passenger 250# / Full Fuel / No Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	252	80.00	20160.00
Pilot	263	91.78	24138.14
Passenger	250	119.12	29780.00
Aft Bag Floor	0	138.00	0.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1978		169151.22
CG	85.52		

Scenario: Pilot / Passenger 250# / Half Fuel / No Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	126	80.00	10080.00
Pilot	263	91.78	24138.14
Passenger	250	119.12	29780.00
Aft Bag Floor	0	138.00	0.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1852		159071.22
CG	85.89		

Scenario: Pilot / Passenger 250# / Low Fuel / No Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	36	80.00	2880.00
Pilot	263	91.78	24138.14
Passenger	250	119.12	29780.00
Aft Bag Floor	0	138.00	0.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1762		151871.22
CG	86.19		

Scenario: Pilot / Passenger 200# / Full Fuel / 50# Rear Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	252	80.00	20160.00
Pilot	263	91.78	24138.14
Passenger	200	119.12	23824.00
Aft Bag Floor	50	138.00	6900.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1978		170095.22
CG	85.99		

Scenario: Pilot / Passenger 200# / Half Fuel / 50# Rear Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	126	80.00	10080.00
Pilot	263	91.78	24138.14
Passenger	200	119.12	23824.00
Aft Bag Floor	50	138.00	6900.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1852		160015.22
CG	86.40		

Scenario: Pilot / Passenger 200# / Low Fuel / 50# Rear Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	36	80.00	2880.00
Pilot	263	91.78	24138.14
Passenger	200	119.12	23824.00
Aft Bag Floor	50	138.00	6900.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1762		152815.22
CG	86.73		

Scenario: Pilot / Passenger 100# / Full Fuel / 50# Rear Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	252	80.00	20160.00
Pilot	263	91.78	24138.14
Passenger	100	119.12	11912.00
Aft Bag Floor	50	138.00	6900.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1878		158183.22
CG	84.23		

Scenario: Pilot / Passenger 100# / Half Fuel / 50# Rear Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	126	80.00	10080.00
Pilot	263	91.78	24138.14
Passenger	100	119.12	11912.00
Aft Bag Floor	50	138.00	6900.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1752		148103.22
CG	84.53		

Scenario: Pilot / Passenger 100# / Low Fuel / 50# Rear Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	36	80.00	2880.00
Pilot	263	91.78	24138.14
Passenger	100	119.12	11912.00
Aft Bag Floor	50	138.00	6900.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1662		140903.22
CG	84.78		

Scenario: Pilot / No Passenger / Full Fuel / 100# Rear Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	252	80.00	20160.00
Pilot	263	91.78	24138.14
Passenger	0	119.12	0.00
Aft Bag Floor	100	138.00	13800.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1828		153171.22
CG	83.79		

Scenario: Pilot / No Passenger / Half Fuel / 100# Rear Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	126	80.00	10080.00
Pilot	263	91.78	24138.14
Passenger	0	119.12	0.00
Aft Bag Floor	100	138.00	13800.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1702		143091.22
CG	84.07		

Scenario: Pilot / No Passenger / Low Fuel / 100# Rear Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	36	80.00	2880.00
Pilot	263	91.78	24138.14
Passenger	0	119.12	0.00
Aft Bag Floor	100	138.00	13800.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1612		135891.22
CG	84.30		

Scenario: Pilot / 250# Passenger / Full Fuel / 100# Rear Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	252	80.00	20160.00
Pilot	263	91.78	24138.14
Passenger	250	119.12	29780.00
Aft Bag Floor	100	138.00	13800.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	2078		182951.22
CG	88.04		

Scenario: Pilot / 250# Passenger / Half Fuel / 100# Rear Baggage			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	126	80.00	10080.00
Pilot	263	91.78	24138.14
Passenger	250	119.12	29780.00
Aft Bag Floor	100	138.00	13800.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1952		172871.22
CG	88.56		

Scenario: Pilot / 250# Passenger / Low Fuel / 100# Rear Bag.			
	Weight	Arm	Moment
Empty	1213	78.38	95073.08
FWD Baggage	0	58.51	0.00
Fuel	36	80.00	2880.00
Pilot	263	91.78	24138.14
Passenger	250	119.12	29780.00
Aft Bag Floor	100	138.00	13800.00
Aft Bag Shelf	0	152.91	0.00
Gross Weight	1862		165671.22
CG	88.97		