

Date: 2023-04-29

Measurements - Arms / Fuselage Stations		
	Arm/FS	Notes
Forward side of canard bulkhead	10.00	Measured
Firewall - forward side	125.00	As stated by Dave Ronneberg. This establishes the 0 reference point (FS0).
Instrument Panel	27.63	Measured
Nose Wheel	2.25	Measured
Main Gear	110.88	Measured
Pilot Seat	47.00	Twelve inches in front of the Long EZ (Long EZ has 59)
Back Seat (Passenger)	94.00	Six inches in front of the Long EZ
Fuel - Tanks	104.50	Measured
Nose compartment	-19.00	Small storage space just behind the pitot tube, in front of battery.
Canard	10.00	Measured
Spinner flange	169.50	Forward edge
Starter ring	162.50	Aft edge of gears on starter ring.
Baggage - Strakes	80.00	Measured

Weighing Results	
	Reading (lbs)
Right Main	779
Left Main	752
Nose Wheel	35
Weight on Canard	22
Weight in Nose Compartment	34
Total Aircraft Weight with Tare	1566
Aircraft Weight without Tare	1510

2023-04-29: First Flight CG (with 50 lb nose ballast and 31 lb knee ballast)

Berkut 540 (N567JS)

	Wt (lb)	Arm	Moment
Left Wheel	752	110.88	83,381.76
Right Wheel	779	110.88	86,375.52
Nose Wheel	35	2.25	78.75
Nose Ballast	34	-19.00	-646.00
Canard Ballast	22	10.00	220.00
Empty Weight with Ballast	1566	108.45	169,836.03
Empty Weight without Ballast	1510	112.76	170,262.03
Nose Ballast	50	-19.00	-950.00
Pilot	165	47.00	7,755.00
Passenger	0	94.00	0.00
Instrument Panel Ballast	31	26.13	810.03
Baggage	0	80.00	0.00
Fuel - Gal	20	120	12,540.00
Total	1876	101.50	190,417.06

Green: Can enter weights
Red: Measured (Don't edit)
Blue: Computed (don't edit)

CG Limits for Berkut 540

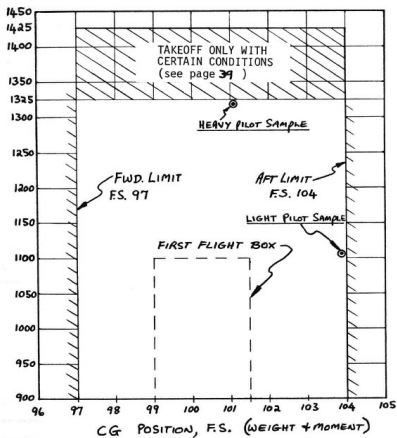
Forward CG Limit: 97.0

Aft CG Limit: 103.0

Max Gross Weight: 2300 lb

Recommended First Flight CG Range: 99 - 101.5

Weight and C.G. Limits.



2023-04-29: Gross Weight CG (Standard FAA person weights)

Berkut 540 (N567JS)

	Wt (lb)	Arm	Moment
Left Wheel	752	110.88	83,381.76
Right Wheel	779	110.88	86,375.52
Nose Wheel	35	2.25	78.75
Nose Ballast	34	-19.00	-646.00
Canard Ballast	22	10.00	220.00

Green: Can enter weights
Red: Measured (Don't edit)
Blue: Computed (don't edit)

Empty Weight with Ballast 1566 108.45 169,836.03

Empty Weight without Ballast 1510 112.76 170,262.03

Nose Ballast	50	-19.00	-950.00
Pilot	170	47.00	7,990.00
Passenger	170	94.00	15,980.00
Instrument Panel Ballast	0	26.13	0.00
Baggage	88	80.00	7,040.00
Fuel - Gal	52	312	104.50

	Wt (lb)	Arm	Moment
Total	2300	101.27	232,926.03

CG Limits for Berkut 540

Forward CG Limit: 97.0
Aft CG Limit: 103.0

Max Gross Weight: 2300 lb

2023-04-29: Minimum Pilot weight CG (with 50 lb ballast)

Berkut 540 (N567JS)

	Wt (lb)	Arm	Moment
Left Wheel	752	110.88	83,381.76
Right Wheel	779	110.88	86,375.52
Nose Wheel	35	2.25	78.75
Nose Ballast	34	-19.00	-646.00
Canard Ballast	22	10.00	220.00

Green: Can enter weights
Red: Measured (Don't edit)
Blue: Computed (don't edit)

Empty Weight with Ballast 1566 108.45 169,836.03

Empty Weight without Ballast 1510 112.76 170,262.03

Nose Ballast	50	-19.00	-950.00
Pilot	162.5	47.00	7,637.50
Passenger	0	94.00	0.00
Instrument Panel Ballast	0	26.13	0.00
Baggage	0	80.00	0.00
Fuel - Gal	52	312	104.50
	312	104.50	32,604.00

	Wt (lb)	Arm	Moment
Total	2034.5	103.00	209,553.53

CG Limits for Berkut 540

Forward CG Limit: 97.0
Aft CG Limit: 103.0

Max Gross Weight: 2300 lb