

WEIGHT/BALANCE N51YX
 08/23/2016 with new CAMit 3300, S/N 0099
 Max Gross Weight: 1234
 Empty Weight: 712

	Utility Category	Aerobatic Category
MAXIMUM FORWARD C.G.:	20% MAC	23% MAC
MAXIMUM AFT C.C.:	32% MAC	29% MAC
EMPTY WEIGHT CG:		

	Weight	X	Arm	=	Moment
Left wheel:	335		55.50		18592.50
Right wheel:	336		55.50		18648.00
Tailwheel:	41		219.25		8989.25
Empty weight:	712				
Total moment:					46229.75

Empty weight: CG = 64.92 (46229.75 / 712 = 64.9294)
 Empty weight % MAC: = 22% (64.9294-53/54=22)

MAXIMUM AFT CG:

	Weight	X	Arm	=	Moment
Aircraft:	712		64.93		46230.16
Pilot:	200		76.90		15380.00
Co-pilot:	000		76.90		00000.00
Minimum fuel:	12		45.75		549.00
Baggage:	40		102.00		4080.00
Total weight:	964				
Total moment:					66239.16

Maximum aft CG: 68.70. (66239/964 = 68.70)
 Maximum aft % MAC: = 29 (68.79-53/54= 29)

MAXIMUM FORWARD CG:

	Weight	X	Arm	=	Moment
Aircraft:	712		64.93		46230.16
Pilot:	200		76.90		15380.00
Co-pilot:	000		76.90		0000.00
Maximum fuel:	102		45.75		4666.50
Baggage:	000		102.00		0000.00
Total weight:	1014				
Total moment:					66276.66

Maximum forward CG: 65.36 (66276.66/1014 = 65.36)
 Maximum forward %MAC: = 22.8 (65.36-53/54 = 22.8)

MAXIMUM GROSS TAKEOFF WEIGHT:

	Weight	X	Arm	=	Moment
Aircraft:	712		64.93		46230.16
Pilot:	200		76.90		15380.00
Co-pilot:	180		76.90		13842.00
Maximum fuel:	102		45.75		4666.50
Baggage:	40		102.00		4080.00
Total weight:	1234				
Total moment:					84199.66
Maximum weight CG:	68.23 (84199.66/1234 = 68.23)				
Maximum weight % MAC:	28.2 (68.23-53/54 = 28.2)				