

# BRISTELL TDO WEIGHT & BALANCE WORKSHEET

**AIRCRAFT SPECIFICATION**

CUSTOMER:  
ORDER #  
AIRCRAFT TYPE:  
SERIAL No:

093/2014  
**BRISTELL TDO Rotax 912 ULS**  
093/2014

**MEASURING THE AIRCRAFT:**

INFLATE THE TIRES  
LEVEL THE UPPER FUSELAGE LONGERON WITH A SPIRIT LEVEL  
DATUM: LEADING EDGE BETWEEN RIB # 8 AND 9.  
MEASURE WHEEL AXLE LOCATION FROM DATUM  
POSITIVE IS BEHIND DATUM

**INSTALLED EQUIPMENT:**

ROTAX 912 ULS  
Radio Garmin SL 30  
Garmin G3X  
0,0  
Transponder Garmin GTX 328 - AK 350  
Garmin AERA 795 GPS  
0,0  
Dual brakes  
Adjustable pedals  
Parking brake  
Fuel pressure gauge  
Leather upholstery  
*Other installed items are listed in a c packing list*

CG LIMITS:	IN	% MAC
MAC :	53,1	100%
FORWARD CG :	13,3	25%
AFT CG :	18,6	35%
CG RANGE :	5,3	10%

OIL WEIGHT = 7.5 LBS/GALL 3.7 LITERS	7.50 LBS/GALLON 3.40 KG/GALLON
FUEL WEIGHT = 6 LBS/GALL 100 LITERS	6.00 LBS/GALLON 2.72 KG/GALLON
COOLANT WEIGHT=8 LBS/G 2.5 LITERS	8.00 LBS/GALLON 3.63 KG/GALLON
	0.96 KG/LITER

**POSITION OF:**

RIGHT MAIN WHEEL  
LEFT MAIN WHEEL  
NOSE WHEEL  
DISTANCE BETWEEN NOSE AND MAIN WHEELS  
SEAT FOR PILOT/PASSENGER  
BAGGAGE IN FUSELAGE  
BAGGAGE IN WING LOCKERS  
LEADING EDGE WING TANKS

	INCH
RIGHT MAIN WHEEL	5,6
LEFT MAIN WHEEL	5,6
NOSE WHEEL	162,6
DISTANCE BETWEEN NOSE AND MAIN WHEELS	157,0
SEAT FOR PILOT/PASSENGER	23,6
BAGGAGE IN FUSELAGE	55,1
BAGGAGE IN WING LOCKERS	24,8
LEADING EDGE WING TANKS	7,9

**WEIGHING POINT**

	SCALE READING	TARE	NET WEIGHT
RIGHT WHEEL	314,7		314,7
LEFT WHEEL	320,6		320,6
NOSE WHEEL	39,2		39,2

**EMPTY WEIGHT** NOTE: EMPTY WEIGHT INCLUDING OIL, COOLANT AND HYDRAULIC FLUID **674,5 LB**

**EMPTY WEIGHT CENTER OF GRAVITY**

	14,7	IN
	27,6%	of MAC

**MAXIMUM USEFUL WEIGHT**

NOTE: MAXIMUM USEFUL WEIGHT INCLUDING PILOT, PASSENGER, BAGGAGE AND FUEL **645,5 LB**

**MOST FORWARD WEIGHT & BALANCE**

ACTUAL EMPTY WEIGHT	674,5 LB
EMPTY WEIGHT CENTER OF GRAVITY	14,7 IN
PILOT	121,3 LB
PASSENGER	0,0 LB
BAGGAGE IN FUSALAGE	0,0 LB
BAGGAGE IN WING LOCKERS	0,0 LB
FUEL IN WING TANK	198,5 LB

**CHECK OF FORWARD WEIGHT & BALANCE**

WEIGHT (LB) x ARM (IN) = MOMENT (LB\*IN)

	Weight LB	Arm IN	Moment LB*IN
AIRCRAFT EMPTY	674,5	14,7	9906,7
PILOT	121,3	23,6	2864,8
PASSENGER	0,0	23,6	0,0
BAGGAGE IN FUSALAGE	0,0	55,1	0,0
BAGGAGE IN WING LOCKERS	0,0	24,8	0,0
FUEL IN WING TANK	198,5	7,9	1562,6
<b>TOTAL</b>	<b>994,2</b>		<b>14334,1</b>

**TOTAL MOMENT**

**14334,1 LB\*IN**

**TOTAL WEIGHT**

**994,2 LB**

**RESULT OF FORWARD CG**

**14,4 27,1% of MAC**

**FORWARD C.G. LIMIT**

**13,3 25% of MAC**

**TEST PASSED**