WEIGHING REPORT

Model: DA 40 Serial Number: 40.518 Registration: N139PS

Data with reference to the Type Certificate Data Sheet and the Airplane Flight Manual.

Reference Plane: Vertical plane 2194 mm (86.38 in) in front of the leading edge of wing at the root rib.

Horizontal reference line: Wedge 600:31 (2.96°), 2910 mm (114.57 in) aft of the step in the cockpit rim.

Equipment Inventory - dated:_____ Cause for Weighing: verify previous wt & balance sheets

Weight and Balance Calculations (Weighing at the wheels)

Weight Condition: Including brake fluid, engine oil (MAX level), coolant (TAE version only), and unusable fuel (Lycoming: 2 x 0.5 US gal / 2 x 1.9 liters; TAE: 2 x 1 US gal / 2 x 3.8 liters). with wheel fairings removed

Support	Gross	Tare	Net
MAIN G_{1LH}			762.00
MAIN G_{1RH}			763.66
NOSE G_2			230.33
Empty Weight			1756.0

Lever Arm
X_{1LH} = 107.72
X_{1RH} = 107.72
X_2 = 37.99

Calculate the Empty Weight, G = MAIN G_{1LH} + MAIN G_{1RH} + NOSE G_2.	G = 1756.0
Calculate the Empty Weight Moment, $M = (G_{1LH} * X_{1LH}) + (G_{1RH} * X_{1RH}) + (G_2 * X_2)$.	M = 173095.1767
Calculate the Empty Weight Center-of-Gravity position, X_{CG} = M/G.	X_{CG} = 98.57
Maximum permitted all-up-weight: Max AUW (see AFM). Max gross	2646
Maximum useful load = Max AUW - G.	890.0

Record the Empty Weight (G) and the Empty-Weight Moment (M) in the Airplane Flight Manual.

Place/Date	Authorizing Stamp	Authorizing Signature
AdvAvid 15 June 2021	At p3517275	Chuck Harris

Figure 6: Weighing Report for Mechanical Scales Under the Wheels