



When we designed the new Velocity 173 we simply wanted to provide to the public a quality airplane that would be fun to fly and a useful mode of transportation. On several occasions a potential owner would comment about the Velocity's certain sense of security never experienced in an airplane before. It is a very delightful plane to fly and ride in. The Velocity has performance and efficiency unmatched by any production aircraft but still retaining the predictability and friendliness of the Cessna 172. We have nicknamed the 173 Velocity "Majic" because it has surpassed many of our expectations and calculations. We haven't honestly concluded why. Imagine flying at idle power eighty five miles per hour with a twenty to one glide ratio. It's amazing, this plane just seems to defy gravity. Advance the throttle to about 25% power and you will soon be cruising silently at a 172's top speed without experiencing any of the heat, turbulence and odors created by having the engine in front of you. At a 25% power setting your fuel burn will be around 3.5 gallons per hour yielding approximately forty miles per gallon. Now increase the power to approximately 65%. Your indicated airspeed will be around 160 to 170 mph. This is an excellent cruising speed for the Velocity 173 especially at higher altitudes.

It is also very easy on your engine and pocketbook. Go ahead and firewall the throttle and you will find that the Velocity will show you between 190 to 200 mph. Not bad for a fixed gear four place airplane with a fixed pitch propeller. All the while you are confident that when it comes to making a cross wind landing on a short field it will be a piece of cake. Once you take off in the Velocity 173 you will soon feel like you're in a twin with it's excellent visibility and ride. But when you pull the power for slow flight the twin becomes a handful and the Velocity shines.



At speeds below 100 mph, the aerodynamic design of the 173 takes a very dramatic part in keeping the airplane straight and level, resisting steep turns and rapid pitch changes, thus making pilot induced departures difficult, if not impossible. This built in stability can keep a distracted or careless pilot from getting into trouble. As a matter of fact

the Velocity 173 can perform satisfactory landings with the stick in the full aft position on final approach. As the airspeed increases above 100 mph, the Velocity 173 acquires a more neutral stability and allows the pilot to perform the maneuvers he wishes while maintaining the line of flight of the last input. The Velocity 173 is a fun and easy airplane requiring minimum pilot skill. But providing remarkable performance and efficiency in incomparable comfort. The Velocity's strongest point is it's simplicity. This becomes extremely important in an aircraft that is built, maintained and operated by yourself. Honestly, simpler is better and lighter. Fact is, the Velocity is 400 to 800 lbs. lighter than competitive four place aircraft. If you have ever flown a four place airplane you can't help notice the difference when three people either get in or out. A Velocity with four people weighs about the same as most four place aircraft do empty. That explains the conventional aircraft's need for retract gear, constant speed propellers, flaps and turbo chargers just to compensate initial weight disadvantage. Incidentally these systems are responsible for a lot of the complexity. The time and money spent paying for maintenance on these contraptions would be better used for flying.

The reason we have airplanes is to provide fun and economical travel. That's what the Velocity 173 is all about. Without looking too hard at the competition you will find the Velocity provides the most performance, economy and comfort for the money.

SPECS ON PRODUCTION 173 VELOCITY

Length overall	19'2"
Height	7'9"
Wheel base	100"
Track width	80"
Wingspan	31'
Canard span	188"
Wing area	122.5 sq. ft.
Canard area	22.8 sq. ft.
Total wing area	145 sq. ft.
Empty weight	1300 lbs.
Gross weight	2400 lbs.
Useful load	1100 lbs.
Fuel useful	Approx. 80 gals.
Wing loading at gross	15.5 lbs./sq. ft.
Design load factors	+12 G's/-9 G's
Tested airframe load	+6 G's
Cabin W/L/H	43.5" x 84" x 42.5"
Seating	2 + 2
HP	200 HP Lycoming

ACTUAL PERFORMANCE OF PROTOTYPE 173 N4253M 200 HP LYCOMING IO360 B.T. 68-74 PROP

	SOLO	GROSS
T.O. Distance	400 ft.	1150 ft.
ROC	1700 ft.	1000 ft.
Landing Distance	350 ft.	1200 ft.
Cruise Actual (9,500')	187 mph	187 mph
Maximum Speed Sea Level	197 mph	197 mph
Ceiling	30K +	30K +
Range at 65%	1800 miles	1800 miles
Minimum speed	55-65 mph	55-65 mph
Landing speed	60-70 mph	60-70 mph

CONTROL SYSTEM

Center mounted stick	3-axis
Rudder and brake	Pilot & Copilot
Trim	Electric pitch & roll
Speed brake	Electric
Elevator	Linked directly to the stick via push-pull tube
Ailerons	Connected via torque tube and HD push-pull cables
Rudders	Cable activated and independent with spring return

KIT INFO

All parts are common to the standard Velocity kit except the following:

- Extended Canard and Elevator Cores
- 4 Trailing Edge Cores per Wing (new airfoil)
- 3 Leading Edge Cores per Wing (new airfoil)
- Larger Fuel and Baggage Strakes
- Heavy Duty Nose Gear
- Larger Nose and Main Wheels and Tires
- Heavy Duty Dual Puck 6" Matco Brakes
- Heavier Main Gear Attachments

Velocity

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