

WEATHERLY

620 • B



THE AIRPLANE THAT WORKS FOR YOU

The 620B is a rugged,
versatile ag-airplane —
especially designed to
make you money. Its
reliable Pratt & Whitney
R-985 engine provides

enough power to haul a
hopper full of circus
elephants while the fuel
cost is only peanuts. ●

The 620B flies like an
airplane — not like a
tractor. Its impressive
performance offers
owner-operators of
620Bs many profit
making advantages.



Pratt & Whitney &
Hartzell Combination

Reliable Pratt & Whitney R-985 power

Because the Weatherly 620B is an efficient airplane, it can carry the same load as its competitors with less power. This means less fuel and more profit. The R-985 costs less to feed, less to maintain and less to overhaul than the larger engines used in competitive airplanes. Yet most operators are able to haul a full load of 355 gallons of spray. The R-985 with the Hartzell 3-bladed propeller is a much quieter combination as well.

Effective control of spray pattern

Efficient control surfaces, tip vanes, Weath-Aero fan and the pneumatic boom system work together with the 620B's agile flight characteristics and instant control responses to enable you to do a better job than competitors who only wish they owned a Weatherly. With just a flick of a finger the airplane puts the spray where you want it — and keeps it from going where you don't. An environmentalist may even invite you to lunch!



**Oleo Strut Type
Landing Gear**



**Weath-Aero Fan & Pump
Assembly**



Pneumatic Split-boom System

Weath-Aero fan cuts costs

Weatherly's leadership continues with the innovative Weath-Aero fan. Its blades feather during ferrying and at the end of a spray run. This reduces drag to a small fraction of the drag offered by old-fashioned fixed pitch, brake type fans. The operator adjusts the blade angle during flight to obtain the needed boom pressure. This results in better control of the spray pattern, keeping you another step ahead of the competition. Weatherly's competitors offer the Weath-Aero fan as an option — Weatherly Aviation offers it as standard equipment.

Heavy-duty landing gear

The 620 series airplanes feature Oleo landing gear suspension, pinned at the spar so that landing loads are transmitted to the spar in a manner that avoids twisting stresses. A trailing strut carries forward and aft loads during landing. The landing gear's wide track provides excellent ground handling characteristics not available from a spring type landing gear. There are also no side loads on the tires during normal landings. This means that you can be flying while your competitor is driving to the tire store!



Outstanding cockpit visibility and comfort

If you always like to see where you're going, where you've been and what you're doing, you should be flying the 620B. The redesigned cockpit makes the pilot's workplace a comfortable and safe environment.



Wing Tip Vane



Wing Night Lights

Rugged construction

The 620B fuselage features monocoque construction to reduce airframe weight. It allows simple less expensive replacement in the unlikely event that damage occurs. Large openings and removable panels make the 620B easy to inspect and maintain. The hopper construction is sturdy, chemical-resistant and tough. The wing leading edges are attached with piano hinges so the wing is easily inspected for damage or corrosion.

Night lighting option

The Weatherly night lighting system allows you to work while your competition sleeps. This option features two 600 watt lights, turning lights, wing tip strobes along with a larger alternator. It effectively lights the flight path for safe night spraying and fertilizing operations.

Tip vanes for increased efficiency

Only Weatherly airplanes offer the wing tip vane feature. They diffuse the normal formation of the wing tip vortex, creating a strong downwash outboard of the tip, introducing smaller vortices in the tip area. This results in both a delay in the formation of the trailing vortex and a decrease in its intensity. What the operator sees is an increase in the speed

of the airplane at a given power setting and a more even distribution of the spray pattern without drift. Competitive aircraft will have tip vanes one day, but until then, you can only get them on a Weatherly.

The 620B allows you to spray where you want to

- The airplane is nimble and quick.
- Wing tip vanes control the tip vortex, reducing drift.
- Aerodynamically balanced controls allow precision flying.

The 620B reduces pilot fatigue

- Control forces are light.
- Noise levels are low.
- Spacious cockpit

The 620B makes you money

- Less fuel is used to pull the airplane through the air.
- It hauls more load, faster and at less cost.
- Tire wear is far less than with spring gear airplanes.
- 90 gallons of usable fuel

The wing's the thing

- The 620B wing has a high lift to drag ratio, resulting in excellent all-around performance for ag operations.
- With a 15 percent thickness wing you can fly slowly over a small field — performing jobs your competitors only wish they could.





PERFORMANCE

Maximum speed <i>(without spreader, hopper empty)*</i>	176 mph	(283 kph)
Maximum speed <i>(with spreader, hopper empty)*</i>	155 mph	(249 kph)
Cruise speed <i>@ 70% power</i>	115 mph	(185 kph)
Maneuvering speed	129 mph	(208 kph)
Stall speed <i>(unloaded, standard equipment)*</i>	54 mph	(87 kph)
Stall speed <i>(4,000 lbs. gross, standard equipment)*</i>	57 mph	(92 kph)
Stall speed <i>(5,000 lbs. gross, standard equipment)*</i>	65 mph	(105 kph)
Takeoff distance <i>@ 5,900 lbs.*</i>	1,210 ft	(368.8 m)
S. L. rate of climb <i>@ 5,900 lbs.*</i>	700 ft/min	(213.3 mpm)
Service ceiling	15,000 ft	(4,572 m)
Fuel burn rate <i>*Standard day conditions</i>	21-24 gph	(79-91 lph)

SPECIFICATIONS

Empty weight <i>(with standard equipment)</i>	2,840 lbs	(1,288.2 kg)
Certified gross weight	4,000 lbs	(1,814.4 kg)
Typical Part 8 operating weight • •	5,900 lbs	(2,676.2 kg)
Typical Part 8 useful load • •	3,060 lbs	(1,388.0 kg)

••Under Part 8, operator may choose own gross weight within approved limits.

DIMENSIONS

Wing span	46 ft 8 in	(14.22 m)
Length	26 ft 9 in	(8.15 m)
Height	8 ft 0 in	(2.44 m)
Wing area	277 sq ft	(25.73 sq m)
Main gear tread width	10 ft 6 in	(3.2 m)
Main gear tire size	8.50 x 10	
Tail wheel tire size	12.5 x 4.5	

CAPACITIES

Materials hopper (47.5 cu. ft.)	355 gallons	(1,344 liters)
Usable fuel (97.5 gallons total)	90 gallons	(341 liters)
Oil (total)	7.7 gallons	(29.1 liters)

G20B STANDARD EQUIPMENT

- All metal airframe and control surfaces
- Pratt & Whitney R-985-AN-1, -3 or -14B engine (450 HP)
- All new 3-blade Hartzell propeller; HC-B3R30-4B hub, R10152-5 1/2R blades
- 97.5 gallon fuel capacity
- 3 piston Cleveland brakes
- 24 volt electrical system with 50 amp alternator (Jasco)

STANDARD EQUIPMENT CONTINUED:

- Aerodynamically balanced, ball bearing mounted control surfaces
- Stainless steel rudder cables
- Spring tail wheel assembly with full swivel locking wheel
- Quick detach fuselage access panels
- Main gear and cockpit wire cutters
- Wire deflector cable (canopy to vertical fin)
- Landing, navigation and cockpit lights
- Fiberglass tail fairings
- 3 color polyurethane paint (90 colors to choose from) with additional corrosion proofing in critical areas
- 355 gallon (47.5 cu. ft.) heavy duty fiberglass hopper with window
- 2.5" bottom load tube, less valve
- 2" Agrinautics spray pump and Agrinautics 3-way valve
- 2" spray system with pylon mounted drop boom, including 40 nozzles.
- Adjustable rudder pedals
- Control lock
- 3" cabin fresh air system
- 4-way adjustable seat with open nylon mesh covering
- Baggage compartment
- Engine ring cowl
- Electronic tachometer
- 25" Transland gate box
- Wing tip vanes
- Tinted, canopy, turning windows
- Ball turn indicator
- Old man's step

G20B OPTIONS

- Engine oil filter
- Stainless steel spray system
- Spray system emergency cut off valve
- Trailing edge and aileron booms (in place of standard pylon mounted drop booms)
- Windshield washer
- Electric cockpit heater
- Crop hawk
- Solids spreader
- Smoker
- Electronic outside air temperature gauge
- Automatic Flagman
- Night lighting system consisting of two 600-watt adjustable working lamps, two 250-watt turning lamps, wing tip strobes, instrument panel lighting and 70 amp alternator
- Air conditioner
- Pneumatic Spray Boom System
- Hopper rinse out system
- Spinner
- External APU plug