

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A26WE
Revision 8
Weatherly
620
620TP
620A
620B
620B-TG
November 5, 2014

TYPE CERTIFICATE DATA SHEET A26WE

| | |
|-----------------------------------|---|
| Type Certificate Holder: | Weatherly Aircraft Company 2034 W/ Potomac Avenue Chicago, Illinois 60622-3152 |
| Type Certificate Ownership Record | GBECK, Inc. (D.B.A.) Weatherly Aviation Company, Inc., 2100 Flightline Drive. Lincoln, California 95648 transferred ownership of TC A26WE to Weatherly Aircraft Company on November 6, 2000 |

I - Model 620 (Restricted Category) Approved October 24, 1979

(See ALL MODEL Section) (See NOTES Section)

Engine Pratt & Whitney R985-AN-1, AN-3, or AN-14B

Fuel 80/87 Minimum Grade Aviation Gasoline. Alternate fuel is 100LL.

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|-------------------------------------|----------------|-------------------|----------------|-------------------|------------------------|-----|------|------|----|--------------------------|-----|------|------|----|--------------------|-----|------|------|----------|-----------------------|-----|------|------|----------|
| Engine Limits | <table border="0"> <tr> <td><u>Engine Model AN-1 & AN-3</u></td> <td><u>HP</u></td> <td><u>RPM</u></td> <td><u>In. Hg.</u></td> <td><u>Press Alt.</u></td> </tr> <tr> <td>Takeoff (1 min.) at SL</td> <td>450</td> <td>2300</td> <td>37.5</td> <td>SL</td> </tr> <tr> <td>Maximum Continuous at SL</td> <td>350</td> <td>2100</td> <td>33.0</td> <td>SL</td> </tr> <tr> <td>Maximum Continuous</td> <td>350</td> <td>2100</td> <td>32.0</td> <td>3000 ft.</td> </tr> <tr> <td>(Rated Pressure Alt.)</td> <td>350</td> <td>2100</td> <td>31.0</td> <td>6000 ft.</td> </tr> </table> | <u>Engine Model AN-1 & AN-3</u> | <u>HP</u> | <u>RPM</u> | <u>In. Hg.</u> | <u>Press Alt.</u> | Takeoff (1 min.) at SL | 450 | 2300 | 37.5 | SL | Maximum Continuous at SL | 350 | 2100 | 33.0 | SL | Maximum Continuous | 350 | 2100 | 32.0 | 3000 ft. | (Rated Pressure Alt.) | 350 | 2100 | 31.0 | 6000 ft. |
| <u>Engine Model AN-1 & AN-3</u> | <u>HP</u> | <u>RPM</u> | <u>In. Hg.</u> | <u>Press Alt.</u> | | | | | | | | | | | | | | | | | | | | | | |
| Takeoff (1 min.) at SL | 450 | 2300 | 37.5 | SL | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Continuous at SL | 350 | 2100 | 33.0 | SL | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Continuous | 350 | 2100 | 32.0 | 3000 ft. | | | | | | | | | | | | | | | | | | | | | | |
| (Rated Pressure Alt.) | 350 | 2100 | 31.0 | 6000 ft. | | | | | | | | | | | | | | | | | | | | | | |

Straight line variation of manifold pressure between points listed.

| | | | | |
|----------------------------|-----------|------------|----------------|-------------------|
| <u>Engine Model AN-14B</u> | <u>HP</u> | <u>RPM</u> | <u>In. Hg.</u> | <u>Press Alt.</u> |
| Takeoff (1 min.) at SL | 450 | 2300 | 36.5 | SL |
| Maximum Continuous at SL | 350 | 2100 | 31.5 | SL |
| Maximum Continuous | 350 | 2100 | 30.5 | 3000 ft. |
| (Rated Pressure Alt.) | 350 | 2100 | 29.5 | 6000 ft. |
| | 350 | 2100 | 29.0 | 7800 ft. |

Straight line variation of manifold pressure between points listed.

| | |
|------------------------------|---|
| Propeller & Propeller Limits | <p>Hartzell HC-B3R30-4 or -4B Hub with R10152-5½ R Blades</p> <p>Diameter: Not over 95½ ins.; Not under 95½ ins.</p> <p>Pitch settings at 30" station:</p> <p>(Constant Speed) - 16° Low, 28° High</p> <p>Static RPM at maximum throttle setting not over 2300 RPM; not under 2200 RPM.</p> |
|------------------------------|---|

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|------------------------------------|---|--------------------------------|--------------------------------|------------------------------------|--------------------------------|------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Airspeed Limits | <p><u>Without Spreader or Tip Vanes</u></p> <table border="0"> <tr> <td>V_{NE} - Never Exceed</td> <td>176 mph (153 knots) IAS or CAS</td> </tr> <tr> <td>V_{NO} - Normal Operating</td> <td>140 mph (122 knots) IAS or CAS</td> </tr> <tr> <td>V_A - Maneuvering</td> <td>129 mph (112 knots) IAS or CAS</td> </tr> </table> <p><u>With P/N 50453 Spreader Installed</u></p> <table border="0"> <tr> <td>V_{NE} - Never Exceed</td> <td>155 mph (135 knots) IAS or CAS</td> </tr> </table> | V _{NE} - Never Exceed | 176 mph (153 knots) IAS or CAS | V _{NO} - Normal Operating | 140 mph (122 knots) IAS or CAS | V _A - Maneuvering | 129 mph (112 knots) IAS or CAS | V _{NE} - Never Exceed | 155 mph (135 knots) IAS or CAS |
| V _{NE} - Never Exceed | 176 mph (153 knots) IAS or CAS | | | | | | | | |
| V _{NO} - Normal Operating | 140 mph (122 knots) IAS or CAS | | | | | | | | |
| V _A - Maneuvering | 129 mph (112 knots) IAS or CAS | | | | | | | | |
| V _{NE} - Never Exceed | 155 mph (135 knots) IAS or CAS | | | | | | | | |

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|----------|---|---|---|---|---|---|---|---|---|
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| Rev. No. | 8 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |

With P/N 50520 Tip Vanes InstalledV_{NE} - Never Exceed 166 mph (144 knots) IAS or CAS

Airspeed limits are unchanged with Cowl Speed Ring installed P/N 50784 per Drawing 50783

| | | | | | |
|----------------------------|--|------|-----------|-----------------------------------|------------|
| Maximum Operating Altitude | 15,500 ft. | | | | |
| C.G. Range | Inches aft of datum | | | (+22.1) to (+26.0) at all weights | |
| Empty Weight C.G. Range | None | | | | |
| Maximum Weight | 4000 lbs. | | | | |
| No. of Seats | 1 (+68.0) | | | | |
| Hopper Capacity | 2000 lbs. (+15.0) | | | | |
| Baggage Shelf | 25 lbs. (+91.25) | | | | |
| Fuel Capacity | 72.5 gal. total Right Wing Tank 27½ gal. with unusable 2½ gal. (+36.0) Left Wing Tank (combined with center tank) 45 gal. with unusable 5 gal. (+36.0) | | | | |
| Oil Capacity | 6.7 gal. plus 1 gal. in system (-22.2) | | | | |
| Control Surface | Rudder | Left | 20° ± 1° | Right | 20° ± 1° |
| | Elevator | Up | 27° ± 1° | Down | 15° ± 1° |
| | Aileron | Up | 26° ± 1½° | Down | 13½° ± 1½° |
| Serial Nos. Eligible | 1501 and subsequent | | | | |

II - Model 620TP (Restricted Category) Approved October 17, 1980

(See ALL MODEL Section) (See NOTES Section)

| | | | | | |
|---------------|---|------------------------------|---------------|--------------------------|--|
| Engine | Pratt & Whitney PT6A-11AG | | | | |
| Fuel | Jet A and Jet B fuel. Refer to P&WC Service Bulletin No. 12144. With certain limitations, automotive diesel fuels are approved for use. | | | | |
| Engine Limits | <u>Engine</u> | <u>HP</u> | <u>Np RPM</u> | <u>N_G RPM</u> | |
| | Takeoff (5 min. SL) | 500 | 2200 (100%) | 38,100 (101.5%) | |
| | Maximum Cont., SL | 350 | 2000 (91%) | 38,100 | |
| | Maximum Reverse | 475 | 2112 (96%) | 38,100 | |
| | Maximum torque (steady) = 1194 lb. ft. (38.6 psig) (5 min. SL) | | | | |
| | Maximum torque (accel.) = 1800 lb. ft. (58.3 psig) (5 sec.) | | | | |
| | Maximum Permissible Temperature | Inter-Turb. Temp. | | | |
| | Takeoff | 1292°F (700°C) | | | |
| | Maximum Continuous | 1292°F (700°C) | | | |
| | Starting Transient | 1994°F (1090°C) | | | |
| | Oil Temperature | | | | |
| | Normal range | 50°F to 210°F (10°C to 99°C) | | | |
| | Maximum | 210°F (99°C) | | | |

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|---|---|
| Oil Pressure | |
| Normal range (27,000 RPM N _G or above) | 80-100 psig |
| Minimum | 40 psig |
| Maximum | 100 psig |
| Fuel Pressure | |
| Engine inlet pressure is measured at the inlet to the engine high pressure gear pump. (This point is also the outlet of the Weatherly installed low pressure pump mounted on the engine). | |
| Minimum | 15 psig |
| Maximum | 35 psig |
| Propeller & Propeller Limits | Hartzell reversing propeller with Woodward overspeed governor |
| Model | HC-B3T |
| Hub No. | HC-B3TN-3 |
| Blade No. | T10282-6 |
| Diameter | Maximum 96 inches |
| | Minimum 92 inches |
| Pitch settings at 30 inch radius | |
| Low pitch $16^{\circ} \pm 0.5^{\circ}$ | |
| Propeller spinner, Hartzell P/N 3434-6 | |
| Overspeed governor, Woodward P/N A210507 | |
| Airspeed Limits | <u>Without Spreader or Tip Vanes</u> |
| V _{NE} - Never Exceed | 176 mph (153 knots) IAS or CAS |
| V _{NO} - Normal Operating | 140 mph (122 knots) IAS or CAS |
| V _A - Maneuvering | 129 mph (112 knots) IAS or CAS |
| | <u>With P/N 50453 Spreader Installed</u> |
| V _{NE} - Never Exceed | 155 mph (135 knots) IAS or CAS |
| | <u>With P/N 50520 Tip Vanes Installed</u> |
| V _{NE} - Never Exceed | 166 mph (144 knots) IAS or CAS |
| C.G. Range | Inches 3500 lbs. gross weight (+24.8) to (+22.1) with straight line variation to 4000 lbs. gross weight (+23.6) to (+22.1) |
| Empty Weight C.G. Range | None |
| Maximum Weight | 4000 lbs. |
| No. of Seats | 1 (+68.0) |
| Hopper Capacity | 2000 lbs. (+15.0) |
| Baggage Shelf | 15 lbs. (+91.25) |
| Fuel Capacity | 96 gal. total Right Main Tank with Right Outer Wing Tank, 42 gal., unusable 6 gal. (+36.0) Left Main Tank (combined with center tank) with Left Outer Wing Tank, 54 gal., unusable 6 gal. (+36.0) |
| Oil Capacity | 2.3 gal. plus .75 gal. in system (-24.0) |
| Maximum Operating Altitude | 15,000 ft. |

| | | | | | |
|-----------------|----------|------|---------------------------------------|-------|--|
| Control Surface | Rudder | Left | $20^{\circ} \pm 1^{\circ}$ | Right | $20^{\circ} \pm 1^{\circ}$ |
| | Elevator | Up | $27^{\circ} \pm 1^{\circ}$ | Down | $15^{\circ} \pm 1^{\circ}$ |
| | Aileron | Up | $26^{\circ} \pm 1\frac{1}{2}^{\circ}$ | Down | $13\frac{1}{2}^{\circ} \pm 1\frac{1}{2}^{\circ}$ |

Serial Nos. Eligible 1502 and subsequent, Model 620TP airplanes have the letters TP following the numerical serial number.

III - Model 620A (Restricted Category) Approved March 25, 1987

(See ALL MODEL Section) (See NOTES Section)

Engine Pratt & Whitney R985-AN-1, AN-3, or AN-14B

Fuel 80/87 Minimum Grade Aviation Gasoline. Alternate fuel is 100LL.

| Engine Limits | <u>Engine Model AN-1 & AN-3</u> | <u>HP</u> | <u>RPM</u> | <u>In. Hg.</u> | <u>Press Alt.</u> |
|---------------|-------------------------------------|-----------|------------|----------------|-------------------|
| | Takeoff (1 min.) at SL | 450 | 2300 | 37.5 | SL |
| | Maximum Continuous at SL | 350 | 2100 | 33.0 | SL |
| | Maximum Continuous | 350 | 2100 | 32.0 | 3000 ft. |
| | (Rated Pressure Alt.) | 350 | 2100 | 31.0 | 6000 ft. |

Straight line variation of manifold pressure between points listed.

| | <u>Engine Model AN-14B</u> | <u>HP</u> | <u>RPM</u> | <u>In. Hg.</u> | <u>Press Alt.</u> |
|--|----------------------------|-----------|------------|----------------|-------------------|
| | Takeoff (1 min.) at SL | 450 | 2300 | 36.5 | SL |
| | Maximum Continuous at SL | 350 | 2100 | 31.5 | SL |
| | Maximum Continuous | 350 | 2100 | 30.5 | 3000 ft. |
| | (Rated Pressure Alt.) | 350 | 2100 | 29.5 | 6000 ft. |
| | | 350 | 2100 | 29.0 | 7800 ft. |

Straight line variation of manifold pressure between points listed.

Propeller & Propeller Limits Hartzell HC-B3R30-4B Hub with R10152-5½ Blades
Diameter: Not over 95½ ins.; Not under 95½ ins.
Pitch settings at 30" station:
(Constant Speed) - 16° Low, 28° High
Static RPM at maximum throttle setting not over 2300 RPM; not under 2200 RPM.

| | | |
|-----------------|------------------------------------|--------------------------------|
| Airspeed Limits | <u>Without Spreader</u> | |
| | V _{NE} - Never Exceed | 176 mph (153 knots) IAS or CAS |
| | V _{NO} - Normal Operating | 140 mph (122 knots) IAS or CAS |
| | V _A - Maneuvering | 129 mph (112 knots) IAS or CAS |

With P/N 50453 Spreader Installed

V_{NE} - Never Exceed 155 mph (135 knots) IAS or CAS

Airspeed limits are unchanged with Cowl Speed Ring installed P/N 50784 per Drawing 50783

Maximum Operating Altitude 15,500 ft.

C.G. Range Inches aft of datum (+22.1) to (+26.75) at all weights

Empty Weight C.G. Range None

Maximum Weight 4000 lbs.

No. of Seats 1 (+68.0)

Hopper Capacity 2000 lbs. (+15.0)

| | | | | | |
|----------------------|--|------|-----------|-------|-----------|
| Baggage Shelf | 25 lbs. (+91.25) | | | | |
| Fuel Capacity | 72.5 gal. total Right Wing Tank 27½ gal. with unusable 2½ gal. (+36.0) Left Wing Tank (combined with center tank) 45 gal. with unusable 5 gal. (+36.0) | | | | |
| Oil Capacity | 6.7 gal. plus 1 gal. in system (-22.2) | | | | |
| Control Surface | Rudder | Left | 20° ± 1° | Right | 20° ± 1° |
| | Elevator | Up | 27° ± 1° | Down | 15° ± 1° |
| | Aileron | Up | 29° ± 1½° | Down | 11½° ± 1° |
| Serial Nos. Eligible | 1520 and subsequent | | | | |

IV - Model 620B (Restricted Category) Approved July 17, 1992

(See ALL MODEL Section) (See NOTES Section)

| | | | | | |
|------------------------------|---|-----------|------------|----------------|-------------------|
| Engine | Pratt & Whitney R985-AN-1, AN-3, or AN-14B | | | | |
| Fuel | 80/87 Minimum Grade Aviation Gasoline. Alternate fuel is 100LL. | | | | |
| Engine Limits | <u>Engine Model AN-1 & AN-3</u> | <u>HP</u> | <u>RPM</u> | <u>In. Hg.</u> | <u>Press Alt.</u> |
| | Takeoff (1 min.) at SL | 450 | 2300 | 37.5 | SL |
| | Maximum Continuous at SL | 350 | 2100 | 33.0 | SL |
| | Maximum Continuous | 350 | 2100 | 32.0 | 3000 ft. |
| | (Rated Pressure Alt.) | 350 | 2100 | 31.0 | 6000 ft. |
| | Straight line variation of manifold pressure between points listed. | | | | |
| | <u>Engine Model AN-14B</u> | <u>HP</u> | <u>RPM</u> | <u>In. Hg.</u> | <u>Press Alt.</u> |
| | Takeoff (1 min.) at SL | 450 | 2300 | 36.5 | SL |
| | Maximum Continuous at SL | 350 | 2100 | 31.5 | SL |
| | Maximum Continuous | 350 | 2100 | 30.5 | 3000 ft. |
| | (Rated Pressure Alt.) | 350 | 2100 | 29.5 | 6000 ft. |
| | | 350 | 2100 | 29.0 | 7800 ft. |
| | Straight line variation of manifold pressure between points listed. | | | | |
| Propeller & Propeller Limits | Hartzell HC-B3R30-4B Hub with R10152-5½ R Blades Diameter: Not over 95½ ins.; Not under 95½ ins. Pitch settings at 30" station: (Constant Speed) - 16° Low, 28° High Static RPM at maximum throttle setting not over 2300 RPM; not under 2200 RPM. | | | | |
| Airspeed Limits | <u>Without Spreader</u> V _{NE} - Never Exceed 176 mph (153 knots) IAS or CAS V _{NO} - Normal Operating 140 mph (122 knots) IAS or CAS V _A - Maneuvering 129 mph (112 knots) IAS or CAS <u>With P/N 50453 Spreader Installed</u> V _{NE} - Never Exceed 155 mph (135 knots) IAS or CAS Airspeed limits are unchanged with Cowl Speed Ring installed P/N 50784 per Drawing 50783 | | | | |
| Maximum Operating Altitude | 15,000 ft. | | | | |
| C.G. Range | Inches aft of datum (+22.1) to (+27.5) at all weights | | | | |
| Empty Weight C.G. Range | None | | | | |

| | | | | | |
|----------------------|---|------|-----------|-------|-----------|
| Maximum Weight | 4000 lbs. | | | | |
| No. of Seats | 1 (+70.0) | | | | |
| Hopper Capacity | 2000 lbs. (+15.0) | | | | |
| Baggage Shelf | 25 lbs. (+93.25) | | | | |
| Fuel Capacity | 97.5 gal. total Right Wing Tank 40 gal. with unusable 2½ gal. (+36.0) Left Wing Tank (combined with center tank) 57.5 gal. with unusable 5 gal. (+36.0) | | | | |
| Oil Capacity | 6.7 gal. plus 1 gal. in system (-22.2) | | | | |
| Control Surface | Rudder | Left | 20° ± 1° | Right | 20° ± 1° |
| | Elevator | Up | 27° ± 1° | Down | 15° ± 1° |
| | Aileron | Up | 29° ± 1½° | Down | 11½° ± 1° |
| Serial Nos. Eligible | 1550 and subsequent | | | | |

V- Model 620B-TG (Restricted Category) Approved March 12, 1997

(See ALL MODEL Section) (See NOTES Section)

| | |
|--------|--|
| Engine | Allied Signal TPE331-1-151A (See NOTE 7) |
| Fuel | Jet A , Jet A-1, Jet B, Jet P-4, and Jet P-5 fuel. Refer to Allied Signal Service Bulletin No. EMS 53111, EMS 53112, EMS 53113, and EMS 53116. (See NOTE 8). |

| | | | | | | | | | | | | | |
|---|---|---------------------------------|--------------------------|---|-------------------------------|--------------------------|-------------------------------|---|----------------|-------------|-----------------|-----|---------------|
| Engine Limits | <table><tr><td><u>Engine</u></td><td><u>HP</u></td><td><u>Np RPM</u></td></tr><tr><td>Takeoff (SL)</td><td>500*</td><td>2000 (100%)</td></tr><tr><td>Maximum Cont., SL</td><td>500*</td><td>2000 (100%)</td></tr><tr><td>Maximum Reverse</td><td>475</td><td>1910 (96.5 %)</td></tr></table> | <u>Engine</u> | <u>HP</u> | <u>Np RPM</u> | Takeoff (SL) | 500* | 2000 (100%) | Maximum Cont., SL | 500* | 2000 (100%) | Maximum Reverse | 475 | 1910 (96.5 %) |
| <u>Engine</u> | <u>HP</u> | <u>Np RPM</u> | | | | | | | | | | | |
| Takeoff (SL) | 500* | 2000 (100%) | | | | | | | | | | | |
| Maximum Cont., SL | 500* | 2000 (100%) | | | | | | | | | | | |
| Maximum Reverse | 475 | 1910 (96.5 %) | | | | | | | | | | | |
| | * Maximum steady torque (SL) = 1313 lb. ft (47.0 psig) | | | | | | | | | | | | |
| | <table><tr><td>Ground Idle</td><td>64-66% (speed lever low)</td></tr><tr><td>Flight Idle</td><td>94.5-96.5% (speed lever high)</td></tr></table> | Ground Idle | 64-66% (speed lever low) | Flight Idle | 94.5-96.5% (speed lever high) | | | | | | | | |
| Ground Idle | 64-66% (speed lever low) | | | | | | | | | | | | |
| Flight Idle | 94.5-96.5% (speed lever high) | | | | | | | | | | | | |
| | <table><tr><td>Maximum Permissible Temperature</td><td>Exhaust Gas Temp</td></tr><tr><td>Takeoff</td><td>1047°F (564°C)</td></tr><tr><td>Maximum Continuous</td><td>1047°F (564°C)</td></tr><tr><td>Starting Transient (1 sec.)</td><td>1472°F (800°C)</td></tr></table> | Maximum Permissible Temperature | Exhaust Gas Temp | Takeoff | 1047°F (564°C) | Maximum Continuous | 1047°F (564°C) | Starting Transient (1 sec.) | 1472°F (800°C) | | | | |
| Maximum Permissible Temperature | Exhaust Gas Temp | | | | | | | | | | | | |
| Takeoff | 1047°F (564°C) | | | | | | | | | | | | |
| Maximum Continuous | 1047°F (564°C) | | | | | | | | | | | | |
| Starting Transient (1 sec.) | 1472°F (800°C) | | | | | | | | | | | | |
| | <table><tr><td>Oil Temperature</td><td></td></tr><tr><td>Type I Oil Normal Range</td><td>40°F (-40°C) to 200°F (93°C)</td></tr><tr><td>Type II Oil Normal Range</td><td>40°F (-40°C) to 260°F (127°C)</td></tr><tr><td>Oil conforming to Allied Signal EMS 53110 (Type I and Type II)</td><td></td></tr></table> | Oil Temperature | | Type I Oil Normal Range | 40°F (-40°C) to 200°F (93°C) | Type II Oil Normal Range | 40°F (-40°C) to 260°F (127°C) | Oil conforming to Allied Signal EMS 53110 (Type I and Type II) | | | | | |
| Oil Temperature | | | | | | | | | | | | | |
| Type I Oil Normal Range | 40°F (-40°C) to 200°F (93°C) | | | | | | | | | | | | |
| Type II Oil Normal Range | 40°F (-40°C) to 260°F (127°C) | | | | | | | | | | | | |
| Oil conforming to Allied Signal EMS 53110 (Type I and Type II) | | | | | | | | | | | | | |
| | <table><tr><td>Oil Pressure</td><td></td></tr><tr><td>Normal @ 100% speed (green)</td><td>70-120 psig</td></tr><tr><td>Normal Caution (amber)</td><td>50-70 psig</td></tr><tr><td>Minimum @ 65% speed ground idle</td><td>50 psig</td></tr><tr><td>Maximum</td><td>120 psig</td></tr></table> | Oil Pressure | | Normal @ 100% speed (green) | 70-120 psig | Normal Caution (amber) | 50-70 psig | Minimum @ 65% speed ground idle | 50 psig | Maximum | 120 psig | | |
| Oil Pressure | | | | | | | | | | | | | |
| Normal @ 100% speed (green) | 70-120 psig | | | | | | | | | | | | |
| Normal Caution (amber) | 50-70 psig | | | | | | | | | | | | |
| Minimum @ 65% speed ground idle | 50 psig | | | | | | | | | | | | |
| Maximum | 120 psig | | | | | | | | | | | | |
| | <table><tr><td>Fuel Pressure</td><td></td></tr><tr><td>Engine fuel pump inlet pressure is 5 psig plus true vapor pressure of fuel. Engine inlet pressure is measured at the inlet to the engine high pressure gear pump. (This point is also the outlet of the Weatherly installed low pressure pump mounted on the engine). See NOTE 9.</td><td></td></tr></table> | Fuel Pressure | | Engine fuel pump inlet pressure is 5 psig plus true vapor pressure of fuel. Engine inlet pressure is measured at the inlet to the engine high pressure gear pump. (This point is also the outlet of the Weatherly installed low pressure pump mounted on the engine). See NOTE 9. | | | | | | | | | |
| Fuel Pressure | | | | | | | | | | | | | |
| Engine fuel pump inlet pressure is 5 psig plus true vapor pressure of fuel. Engine inlet pressure is measured at the inlet to the engine high pressure gear pump. (This point is also the outlet of the Weatherly installed low pressure pump mounted on the engine). See NOTE 9. | | | | | | | | | | | | | |

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|------------------------------|---|-------------------------|-----------------|
| | Minimum (red line) | | 15 psig |
| | Normal (amber arc) | | 15-20 psig |
| | Normal (green arc) | | 20- 50 psig |
| | Maximum (red line) | | 50 psig |
| Propeller & Propeller Limits | McCauley reversing propeller with Woodward overspeed governor | | |
| | Model | 3GFR34C602/100LA-2 | |
| | Hub No. | 3GFR34C602 | |
| | Blade No. | 100LA-2 | |
| | Diameter: | Maximum | 98.0 inches |
| | | Minimum | 96.0 inches |
| | Pitch setting at 30 inch radius | | |
| | Low pitch | 9.5° ± 0.5° | |
| | Propeller spinner, McCauley P/N E4858 | | |
| | Overspeed governor, Woodward P/N 895282-14 | | |
| | Propeller Speed | | |
| | Normal | | 2000 rpm |
| | Maximum (5 sec.) | | 2100 rpm |
| | Maximum (5 min.) | 2020 rpm | |
| Airspeed Limits | V _{MO} - Maximum Operating without Spreader | 176 mph (153 knots) IAS | |
| | V _{MO} - Maximum Operating with Spreader | 155 mph (135 knots) IAS | |
| | V _{NO} - Normal Operating | 140 mph (122 knots) IAS | |
| | V _A - Maneuvering | 129 mph (112 knots) IAS | |
| | V _y - Best Rate Climb | 90 mph (78 knots) IAS | |
| C.G. Range | +19.5 to +26.5 inches aft of datum for all weights. | | |
| Empty Weight C.G. Range | 3328 lb. at +19.1 in. (with optional Spreader P/N 72097 installed 3272 lb. at +17.4 in.) | | |
| Maximum Weight | 4300 lb. (+24.73) See NOTE 11. | | |
| No. of Seats | 1 (+73.0) | | |
| Hopper Capacity | 2000 lb. (+15.0) | | |
| Baggage Shelf | 25 lb. (+93.25) | | |
| Fuel Capacity | 130 gal. total , 14 gal. unusable (+36.0). The fuel tank system consists of 7 interconnected tanks (2 in the left wing, 2 in the right wing, and 3 in wing center section) . | | |
| Oil Capacity | 1.56 gal. total (-54.0) | | |
| Maximum Operating Altitude | 15,000 ft. | | |
| Control Surface | Rudder | Left 20° ± 1° | Right 20° ± 1° |
| | Elevator | Up 27° ± 1° | Down 15° ± 1° |
| | Aileron | Up 29° ± 1½° | Down 11½° ± 1½° |
| Serial Nos. Eligible | 1615, 1636, and 3000 and subsequent | | |

Specifications Pertinent to all Models

| | |
|-------------|---|
| Datum | Wing leading edge outboard of fillet (6 inches forward of the main gear axle). |
| Level Means | Leveling lugs on outboard side of right hand fuselage frame near pilot's seat. |

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| Certification Basis | <p>FAR 21.25(a) effective February 1, 1965, with policies contained in CAM 8 Appendix B Airworthiness Requirements for the Special Purpose of:</p> <p>Agricultural Operations under FAR 21.25(b)(1).</p> <p>Note: In accordance with FAR 36.1(a)(2), compliance with the noise requirements was not shown. Therefore, aircraft certificated under this certificate are only eligible for agricultural operations excepted by FAR 36.1(a)(2) and defined under FAR 137.3.</p> <p>620TP Turboprop Installation: FAR 23, Amendments 23-1 to 23-21; Subpart B - Flight, Subpart E - Powerplant and 23.1305 Powerplant Instruments. (FAR's 23.221, 23.954, 23.967(a)(6), 23.973(d), 23.1093, 23.1305(q), 23.1305(s), and 23.1305(t) have been waived under the provisions of FAR 21.25)</p> <p>620B-TG Turboprop Installation: FAR 23, Amendments 23-1 to 23-46; Subpart B - Flight, Subpart E - Powerplant. (FAR's 23.1305(s) and 23.1305(t) have been waived under the provision of FAR 21.25)</p> <p>Noise Control Act of 1972</p> <p>Restricted Type Certificate issued October 24, 1979 Application for Type Certificate dated June 16, 1978</p> |
| Production Basis | Production Certificate No. 416 |
| Export Eligibility | <p>Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with Federal Aviation Regulations Part 21, Subpart L, Sections 21.321 through 21.339. The applicable procedures are contained in Advisory Circular 21.2.</p> |
| Equipment | <p>The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.</p> <p>In addition, the following items of equipment are required:</p> <p>620: (a) FAA Approved Airplane Flight Manual dated October 24, 1979, and FAA approved revisions</p> <p>(b) Weatherly Equipment List A-620</p> <p>620TP: (a) FAA Approved Airplane Flight Manual dated October 15, 1980, and FAA approved revisions</p> <p>(b) Weatherly Equipment list A-620TP</p> <p>620A: (a) FAA Approved Airplane Flight Manual dated March 25, 1987, and FAA approved revisions</p> <p>(b) Weatherly Equipment List A-620A</p> <p>620B: (a) FAA Approved Airplane Flight Manual dated July 16, 1992, and FAA approved revisions</p> <p>(b) Weatherly Equipment List A-620B</p> <p>620B-TG: (a) FAA Approved Airplane Flight Manual dated March 20, 1997, and FAA approved revisions</p> <p>(b) Weatherly Equipment List A-620B-TG</p> |
| NOTE 1. | <p>Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions, when necessary, must be provided for each aircraft at the time of original certification.</p> |

The certification weight and corresponding center of gravity must include for Models 620, 620A, and 620B undrainable system oil of 2.3 lb. at (-22.2) and unusable fuel of 7.5 gals. at (+36.0).

The certificated empty weight and corresponding center of gravity must include for Model 620TP undrainable system oil for 5.25 lb. at (-24.0) and unusable fuel of 12 gals. at (+36.0).

The certificated empty weight and corresponding center of gravity must include for Model 620B-TG undrainable system oil for 11.7 lb. at (-54.0) and unusable fuel of 14 gals. at (+36.0).

NOTE 2. In addition to the operating limitations in this data sheet, area, economic, passenger and other appropriate operating limitations in accordance with FAR 21.25 shall be shown on placard or listing accessible to the pilot.

The following placard must be displayed in front of and in clear view of the pilot:

"This airplane must be operated as a restricted category airplane in compliance with the operating limitations stated in the form of placards, markings, and manuals."

For additional placards, see Weatherly Model 620, 620A, 620B, 620TP, and 620B-TG Airplane Flight Manuals.

NOTE 3. 620 and 620A: Alternator 24 volt, Motorola Model AN24N900, Maximum current load is limited to a total load of 20.8 Amps.
620B : Alternator 24 volt, 50 Amps. Skytronics Model JASCO 7555T and/or 70 Amps Model JASCO 7655T with Voltage Controller J12M24SP is approved for this installation.
620B-TG: Starter Generator Lucas Aerospace Model 23048-023 with Voltage Regulator General Electric CSV1105-30 is approved for this installation. Maximum current load is limited to a total load of 250 Amps, 28.5 Volts.

NOTE 4. 620TP and 620B-TG: Flight into known icing conditions is prohibited. Do not fly into areas of visible moisture when the temperature is below 40°F.

NOTE 5. 620TP and 620B-TG: Approved for reverse thrust during ground operation only.

NOTE 6. All fuel and oil capacities are in US gallons.

NOTE 7. The Allied Signal TPE331-1-151A engine is a derivative of the TPE331 -1 engine approved for this installation.

NOTE 8. 620B-TG: When operating at ambient temperature of 0°C or below, the fuel must contain an icing inhibitor, the quantity not to exceed 0.15% by volume in compliance with MIL-I-27686D or E.

NOTE 9. 620B-TG: A Fuel Pressure \ Flow Instrument (Electronic International Model FP-5) and a Flow Transducer (EG&G Model FT-8AEXSBLEA-2) may be used as an option to the standard Fuel Pressure Gage with the following placard installed:

"Do not rely on the electronic fuel flow instrument to determine fuel quantity level in tanks."

NOTE 10. Noise Certification: This airplane has not been shown to comply with the noise limits in FAR Part 36 and must be operated in accordance with the noise operation limitation required by FAR 91.815.

NOTE 11. The 620B-TG model aircraft has been certificated up to a Maximum Gross Weight of 4300 lbs. Any increase in Gross Weight will require FAA evaluation and approval.

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