

Max Weight	8,000 lbs.		
No. of Seats	2 (+74.0), (+113.0)		
Max. Hopper Load	4,100 lbs. (+12.0)		
Fuel Capacity	260 gal. (+33.0) (254 gal. usable capacity, one 106 gal. tank and one 24 gal. tank in each wing)		
Oil Capacity	2.5 gals. (1.5 gals. usable)		
Control Surface Movements	Elevator	Up $30^{\circ} \pm 1^{\circ}$	Down $18^{\circ} \pm 1^{\circ}$
	Elevator tab	Up $8^{\circ} \pm 1.5^{\circ}$	Down $8^{\circ} \pm 1.5^{\circ}$
	Rudder	Left $21^{\circ} \pm 1^{\circ}$	Right $21^{\circ} \pm 1^{\circ}$
	Aileron	Up $23^{\circ} \pm 1$	Down $15^{\circ} \pm 1^{\circ}$
	Flaps	---	Down $26^{\circ} \pm 1.5^{\circ}$
	Aileron droop with full flap $10^{\circ} \pm 1^{\circ}$		
Serial Nos. Eligible	503-0001 and subsequent.		
Equipment	The basic required equipment as prescribed in applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required:		
	a. Operative pre-stall warning system (Dwg. 50130)		
	b. 24 volt electrical system		
	c. Slip indicator		
	d. Light package of Strobe, Instrument, Dome, Flap Lights, Landing Lights.		
Agricultural Dispersal Equipment	The following agricultural dispersal equipment may be installed: None, or any of the following:		
	a. Dust spreader (Dwg. 80020)		
	b. Standard spray system (Dwg. 80299)		
	c. Micronair spray system (Dwg. 80039)		
Optional Equipment	Fire bomber gate and vent installation (Dwg. 80343)		
Datum	Wing leading edge.		
Leveling Means	Screw heads on engine inlet airscoop.		
Baggage	One baggage compartment at (+98). Max capacity 60 lb.		
Production Basis	PC2SW		
Export Eligibility	Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with FAR Part 21.		
NOTE 1	FAA approved Airplane Flight Manual dated September 8, 1986, or later FAA approved revision is required. 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. The empty weight and corresponding center of gravity location must include the following unusable fuel: 39 lbs. at (+33.0).		
NOTE 2	The following information on placards pertaining to flight and operating limitations must be displayed:		
	(a) On all Canopy Doors: RESTRICTED.		

(b) Attached to skin of aircraft:

(1) Next to Fuel Filler Caps: (Main Tanks) Fuel 106 U.S. Gal. Jet A. Fuel tanks are interconnected. Allow sufficient time for fuel level to equalize before top-off of tank. No aeromatic fuel.

Next to Fuel Filler Caps: (Auxiliary Tanks) Fuel 24 U.S. Gal. Jet A. Fuel tanks are interconnected. Allow sufficient time for fuel level to equalize before top-off of tank. No aeromatic fuel.

(2) Inside main fuel tanks below fuel filler caps: 3/4 fuel.

(3) Next to Oil Filler Cap: Oil tank 10.0 qt. cap.

(4) On lower aft edge of nose cowl: Chip Detector.

(5) Next to pitot static buttons: Static Air - Keep Clean.

(6) On side of engine air scoop: Leveling Point.

(7) On baggage door: 60 POUNDS MAXIMUM BAGGAGE.

WARNING: FAILURE TO FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT.

(c) In full view of pilot:

(1) This airplane must be operated in restricted category in accordance with placards and markings displayed in the cockpit. No acrobatic maneuvers, including spins. Design maneuvering speed 148 MPH. Max flap down speed 130 MPH. Max crosswind velocity landing 15 MPH. Alt. loss from stall 220 ft.

(2) The operation of this airplane is limited to day and night VFR flight conditions. Flight into known icing conditions is prohibited.

(3) Push stick forward to unlock tail wheel.

(4) Park brake operation: ON: Pull lever, depress pedal. OFF: Push lever full forward. WARNING: Lever must be full forward before take-off or landing.

For optional Scott Park Brake Valve:

PART BRAKE OPERATION:
ON: DEPRESS PEDALS AND PULL LEVER.
OFF: DEPRESS PEDALS.

(5) DO NOT OPERATE ENGINE ABOVE 1700 FT-LBS. TORQUE ON GROUND RUN-UP OR TAIL WILL COME UP. FLIGHT IN VICINITY OF THUNDERSTORMS PROHIBITED. FLIGHT IN VISIBLE MOISTURE BELOW 40°F PROHIBITED. FLIGHT BELOW 10°F PROHIBITED. USE PRIST WHEN OPERATING BELOW 40°F.

(6) WARNING: Do not move power lever into reverse position with engine stopped or controls will be damaged.

(7) Do not operate pump above 140 MPH.

(8) WARNING: Sulfur dusting is prohibited unless special fire prevention measures are incorporated in aircraft.

(9) Air filter.

(10) On engine control quadrant at the respective HI and LO idle positions: FLIGHT IDLE and RUN. On Start Control Lever: S.

(11) On aft end of engine control quadrant next to power lever REV. At the stop detent: IDLE. On power control lever: POWER LEVER AND BETA RELEASE.

(12) On engine control quadrant: OPS RANGE.

(13) On prop control lever: P, and on aft end of travel: F.

C.G. Range	(±16.0) to (±24.0) at 6,000 pounds (±16.0) to (±24.5) at 5,937 pounds and below Straight line variation between points.		
Max Weight	6,000 pounds		
No. of Seats	1 (±74.0)		
Max Hopper Load	3,250 lbs. (±12.0)		
Fuel Capacity	126 gal. (±33.0) (120 gal. usable capacity, one 63.0 gal. tank in each wing) (170 gal. optional (164 gal. usable)) (216 gal. optional (210 gal. usable))		
Oil Capacity	9.5 gal. total 71 lb. at (-23.0) (8 gal. usable)		
Control Surface Movements	Elevator	Up 28° ± 1°	Down 18° ± 1°
	Elevator tab	Up 11° ± 1.5°	Down 10° ± 1.5°
	Rudder	Left 21° ± 1°	Right 21° ± 1°
	Aileron	Up 20° ± 1°	Down 14° ± 1°
	Flaps	---	Down 26° ± 1.5°
	Aileron droop with full flap 10° ± 1°		
Serial Nos. Eligible	401-0662 and subsequent.		
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required:		
	a. Operative pre-stall warning system (Dwg. 50130)		
	b. 24 volt electrical system.		
	c. Slip indicator.		
Agricultural	The following agricultural dispersal equipment may be installed:		
Dispersal Equipment	None, or any of the following:		
	a. Dust spreader (Dwg. 80020)		
	b. Standard spray system (Dwg. 80038)		
	c. Micronair spray system (Dwg. 80039)		
	d. Hopper rinse tank (Dwg. 80939)		
Optional Equipment	Fire bomber gate and vent installation (Dwg 80343). 3-Piece Windshield (Dwg. 11464) Windshield washer (Dwg. 80216) Windshield wiper (Dwg. 60177) Avionics (Dwg. 60195) Night working lights (Dwg. 60038) Automatic Flagman (Dwg. 80038) Smoker (Dwg. 80610)		
Datum	Wing leading edge.		
Leveling Means	Top of L/H landing gear leg at intersection of fuselage side skin.		
Baggage	One baggage compartment at (+94). Max capacity 60 lbs.		
Production Basis	PC2SW		
Export Eligibility	Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with FAR Part 21.		
NOTE 1	FAA approved Airplane Flight Manual dated April 6, 1987, or later FAA approved revision is required. 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. The empty weight and corresponding center of gravity location must include the following unusable fuel: 36 lbs. at (33.0).		

NOTE 2

The following information on placards pertaining to flight and operating limitations must be displayed:

(a) On all Canopy Doors: RESTRICTED.

(b) Attached to skin of aircraft:

- (1) Next to Fuel Filler Caps: FUEL 63 U.S. GAL. 80/87 OCTANE MINIMUM. FUEL TANKS ARE INTERCONNECTED. ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE BEFORE TOP-OFF OF TANK. NO AEROMATIC FUEL.
- (2) Next to oil filler cap: OIL TANK 8.0 GAL. CAP.
- (3) Next to pitot static buttons: STATIC AIR - KEEP CLEAN.
- (4) On top of L/H landing gear leg at intersection with fuselage side skin: LEVELING POINT.
- (5) On baggage door: 60 POUNDS MAXIMUM BAGGAGE.
WARNING: FAILURE TO FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT.

(c) In full view of pilot:

- (1) THIS AIRPLANE MUST BE OPERATED IN RESTRICTED CATEGORY IN ACCORDANCE WITH PLACARDS AND MARKINGS IN THE COCKPIT, NO ACROBATIC MANEUVERS, INCLUDING SPINS. DESIGN MANEUVERING SPEED 140 MPH. MAX FLAP DOWN SPEED 115 MPH, MAX CROSSWIND VELOCITY LANDING 15 MPH. ALT. LOSS FROM STALL 220 FT.
- (2) THE OPERATION OF THIS AIRPLANE IS LIMITED TO DAY AND NIGHT* VFR CONDITIONS. FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED.

*Delete the words "AND NIGHT" unless aircraft is equipped with operable lighting package.
- (3) PUSH STICK FORWARD TO UNLOCK TAILWHEEL.
- (4) PARK BRAKE OPERATION: ON: PULL LEVER, DEPRESS PEDAL. OFF: PUSH LEVER FULL FORWARD. WARNING: LEVER MUST BE FULL FORWARD BEFORE TAKE-OFF OR LANDING.

For Optional Scott Park Brake Valve: PARK BRAKE OPERATION
ON: DEPRESS PEDALS AND PULL LEVER
OFF: DEPRESS PEDALS
- (5) DO NOT OPERATE PUMP ABOVE 140 MPH.
- (6) REDUCE ENGINE RPM TO 2200 OR LESS WHEN OPERATING NEAR HOUSES OR AREAS WHERE EXCESSIVE NOISE SHOULD BE AVOIDED.
- (7) DO NOT TURN ALTERNATOR OFF IN FLIGHT EXCEPT IN CASE OF EMERGENCY.
- (8) WARNING: SULFUR DUSTING IS PROHIBITED UNLESS SPECIAL FIRE PREVENTION MEASURES ARE INCORPORATED IN AIRCRAFT.
- (9) Next to carb heat knob: PULL FOR CARB HEAT.
- (10) Next to fuel press. light: WARNING LOW FUEL PRESSURE.
- (11) On canopy doors: DO NOT OPEN DOORS IN FLIGHT.
- (12) On canopy doors: IF DOORS WILL NOT OPEN AFTER OVERTURN, KICK OUT WINDOW WITH KNEES OR FEET.
- (13) Next to Chip Detector Light: CHIP DETECTOR (If installed)
- (14) Below Hopper Rinse Fill: HOPPER RINSE TANK FILL (If installed)
- (15) Below Windshield Washer fill: WINDSHIELD WASHER FILL

NOTE 3

Safe-life of Air Tractor Model AT-401, wing carry-through structure, and attaching structure is limited to 26,752 hours time in service.

III - Model AT-501 1 PCLM (Restricted Category) Approved June 23, 1987

Engine Pratt & Whitney Wasp R1340 S3H1-G (Military designation R1340-59)
or Pratt & Whitney Wasp R1340 S1H1-G (Military designation R1340-61)

Fuel 80/87 minimum grade aviation gasoline.

Engine Limits	HP	RPM	M.P.	ALT.
Takeoff (5 minutes)	600	2250	36.0	S.L.
Max. Continuous	550	2200	34.0	S.L.
Max. Continuous	550	2200	32.5	5000

Propeller & Propeller Limits Hamilton Standard 23D40 hub, 7035A-9 blades, constant speed, hydromatic. Diameter 129 inch maximum 127 inch minimum. Pitch settings 19.0° low and 34.0° high at 42 inch station.
or Hamilton Standard 23D40 hub, 6529A-9 blades, constant speed, hydromatic. Diameter 129 inch maximum 127 inch minimum. Pitch settings 19.0° low and 34° high at 42 inch station.

Airspeed Limits (CAS) VNE (Never Exceed) 176 mph (153 knots)
VA (Maneuvering) 140 mph (122 knots)
VNO (Max. structural cruise) 140 mph (122 knots)
VFE (Flap extended) 115 mph (100 knots)

C.G. Range (+15.0) to (+24.0) at 6,500 pounds.

Max Weight 6,500 pounds.

No. of Seats 1 (+74.0)

Max Hopper Load 4,100 lbs. (+12.0)

Fuel Capacity 126 gal. (+33.0)
(120 gal. usable capacity, one 63.0 gal. tank in each wing)

Oil Capacity 9.5 gal. total 71 lbs. at (-23.0) (8 gal. usable).

Control Surface Movements		Up	Down
Elevator		28° ± 1°	16° ± 1°
Elevator tab		9° ± 1.5°	9° ± 1.5°
Rudder		21° ± 1°	21° ± 1°
Aileron		20° ± 1°	14° ± 1°
Flaps	---		26° ± 1.5°
Aileron droop with full flap		10° ± 1°	

Serial Nos. Eligible 501-0002 and subsequent.

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required.

- Operative pre-stall warning system (Dwg. 50130)
- 24 volt electrical system.
- Slip indicator.

Agricultural Dispersal Equipment The following agricultural dispersal equipment may be installed: None, or any of the following:

- Dust spreader (Dwg. 80020)
- Standard spray system (Dwg. 80038)
- Micronair spray system (Dwg. 80039)
- Hopper rinse tank (Dwg. 80707, Sh. 1)

Optional Equipment Fire bomber gate and vent system (Dwg. 80343).
Windshield washer (Dwg. 80216)
Windshield wiper (Dwg. 60177)
Avionics (Dwg. 60195)
Night working lights (Dwg. 60038)
Automatic Flagman (Dwg. 80038)
Smoker (Dwg. 80610)

Datum	Wing leading edge.
Leveling Means	Underside of propeller dome.
Baggage	One baggage compartment at (+98.0). Max capacity 60 lbs.
Production Basis	PC2SW
Export Eligibility	Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with FAR Part 21.
NOTE 1	FAA approved Airplane Flight Manual dated June 23, 1987, or later FAA approved revision is required. 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. The empty weight and corresponding center of gravity location must include the following unusable fuel: 36 lbs. at (+33.0).
NOTE 2	The following information on placards pertaining to flight and operating limitations must be displayed: <ul style="list-style-type: none"> (a) On all Canopy Doors: RESTRICTED. (b) Attached to skin of aircraft: <ul style="list-style-type: none"> (1) Next to Fuel Filler Caps: FUEL 63 U.S. GAL. 80/87 OCTANE MINIMUM. FUEL TANKS ARE INTERCONNECTED. ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE BEFORE TOP-OFF OF TANK. NO AEROMATIC FUEL. (2) Next to Oil Filler Cap: OIL TANK 8.0 GAL. CAP. (3) Next to pitot static buttons: STATIC AIR - KEEP CLEAN. (4) On baggage door: 60 POUNDS MAXIMUM BAGGAGE. WARNING: FAILURE TO FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT. (c) In full view of pilot: <ul style="list-style-type: none"> (1) THIS AIRPLANE MUST BE OPERATED IN RESTRICTED CATEGORY IN ACCORDANCE WITH PLACARDS AND MARKINGS IN THE COCKPIT. NO ACROBATIC MANEUVERS, INCLUDING SPINS. DESIGN MANEUVERING SPEED 140 MPH. MAX FLAP DOWN SPEED 115 MPH. MAX CROSSWIND VELOCITY LANDING 15 MPH. ALT. LOSS FROM STALL 220 FT. (2) THE OPERATION OF THIS AIRPLANE IS LIMITED TO DAY AND NIGHT* VFR FLIGHT CONDITIONS. FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED. *Delete the words "AND NIGHT" unless aircraft is equipped with operable lighting package. (3) PUSH STICK FORWARD TO UNLOCK TAILWHEEL. (4) PARK BRAKE OPERATION: <u>ON</u>: PULL LEVER, DEPRESS PEDAL. <u>OFF</u>: PUSH LEVER FULL FORWARD. <u>WARNING</u>: LEVER MUST BE FULL FORWARD BEFORE TAKEOFF OR LANDING. For optional Scott Park Brake Valve: PARK BRAKE OPERATION: ON: DEPRESS PEDALS AND PULL LEVER OFF: DEPRESS PEDALS (5) DO NOT OPERATE PUMP ABOVE 140 MPH. (6) REDUCE ENGINE RPM TO 2200 OR LESS WHEN OPERATING NEAR HOUSES OR AREAS WHERE EXCESSIVE NOISE SHOULD BE AVOIDED. (7) DO NOT TURN ALTERNATOR OFF IN FLIGHT EXCEPT IN CASE OF EMERGENCY. (8) WARNING: SULFUR DUSTING IS PROHIBITED UNLESS SPECIAL FIRE PREVENTION MEASURES ARE INCORPORATED IN AIRCRAFT. (9) Next to carb heat knob: PULL FOR CARB HEAT.

- (10) Next to fuel press. light: WARNING LOW FUEL PRESSURE.
- (11) On canopy doors: DO NOT OPEN DOORS IN FLIGHT.
- (12) On canopy doors: IF DOORS WILL NOT OPEN AFTER OVERTURN, KICK OUT WINDOW WITH KNEES OR FEET.
- (13) Next to Chip Detector Light: CHIP DETECTOR (If installed)
- (14) Below Hopper Rinse Fill: HOPPER RINSE TANK FILL (If installed)
- (15) Below Windshield Washer fill: WINDSHIELD WASHER FILL

NOTE 3 Safe-life of Air Tractor Model AT-501, wing carry-through structure, and attaching structure is limited to 9,454 hours' time in service.

NOTE 4 Air Tractor Model AT-501 airplane is eligible for conversion to Model AT-502 configuration in accordance with Air Tractor Service Letter No. 80A dated April 14, 1989.

IV - Model AT-502 1 PCLM (Restricted Category), Approved June 23, 1987

Engine Pratt & Whitney PT6A-15AG, PT6A-27, PT6A-34, PT6-34AG, PT6A-36, or PT6A-34B.

Fuel Per specifications CPW 46, PWA 522, or Automotive diesel fuels.

Oil Per specifications CPW 202 or PWA 521.

Engine Limits PT6A-15AG or PT6A-27

Power Setting	SHP	Torque Ft-Lb	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pres PSIG	Oil Temp °C
All Operations	680 ISA +6.7°C	1628	725	38,100 101.5	2200 100.0	80 to 100	10 to 99
Lo Idle			660			40 (MIN)	-40 to 99
Starting			1090 2 seconds				-40(MIN)
Transient		2100	825 2 seconds	38,500 102.6	2420 110.0		0 to 99
Max Reverse	620	1554	725	35,812 95.5	2100 95.5	80 to 100	0 to 99

Engine Limits PT6A-34, PT6A-34AG, PT6A-36, or PT6A-34B

Power Setting	SHP	Torque Ft-Lb	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pres PSIG	Oil Temp °C
All Operations	750 ISA +15.6°C	1795	790	38,100 101.5	2200 100.0	85 to 105	10 to 99
Lo Idle			685			40 (MIN)	-40 to 99
Starting			1090 2 seconds				-40(MIN)
Transient		2100	850 2 seconds	38,500 102.6	2420 110.0		0 to 99
Max Reverse	750	1795	790	35,812 95.5	2100 95.5	85 - 105	0 to 99

Propeller & Hartzell HC-B3TN-3D/T10282 +4 or HC-B3TN-3D/T10282N + 4 or HC-B3TN-3D/T10282NS + 4

Propeller Maximum dia. 106 inch, minimum. dia. 102 inch.
Limits Pitch settings, high 86° - 88°, low 18°, reverse -8.0° at 30 inch station.

Airspeed VNE (Never Exceed) 155 mph (135 knots)
Limits VA (Maneuvering) 140 mph (122 knots)
(CAS) VNO (Max. structural cruise) 140 mph (122 knots)
VFE (Flap extended) 115 mph (100 knots)
See NOTE 6 regarding VNE speed

C.G. Range (+16.0) to (+26.0) at 6,500 lbs (S/N 502-0003 thru 502-0038)
 (+16.0) to (+28.0) at 6,500 lbs (S/N 502-0039 thru 502-0061)
 (+16.0) to (+24.0) at 8,000 lbs (S/N 502-0062 and subs.)
 (+16.0) to (+28.0) at 6,980 lbs and below
 Straight line variation between points
 See NOTE 4 regarding C.G. range.

Max Weight 6,500 lbs. (S/N 502-0003 thru 502-0061)
 8,000 lbs. (S/N 502-0062 and subs.)
 See NOTE 5 regarding gross weight

No. of Seats 1 (+74.0), 2(+74.0) with optional buddy seat installed per Dwg. 11360

Max Hopper Load 4,100 lbs. (+12.0)

Fuel Capacity 126 gal. (+33.0)
 (120 gal. usable capacity, one 63.0 gal. tank in each wing.)
 234 gallons optional (228 gallons usable)
 216 gallons optional (210 gallons usable)
 170 gallons optional (164 gallons usable)

Oil Capacity 2.3 gals. (1.5 gals. usable)

Control Elevator Up $28^{\circ} \pm 1^{\circ}$ Down $16^{\circ} \pm 1^{\circ}$
 Surface Elevator tab Up $9^{\circ} \pm 1.5^{\circ}$ Down $7^{\circ} \pm 1.5^{\circ}$
 Movements Rudder Left $21^{\circ} \pm 1^{\circ}$ Right $21^{\circ} \pm 1^{\circ}$
 Aileron Up $20^{\circ} \pm 1^{\circ}$ Down $14^{\circ} \pm 1^{\circ}$
 Flaps --- Down $26^{\circ} \pm 1.5^{\circ}$
 Aileron droop with full flap $10^{\circ} \pm 1^{\circ}$

Serial Nos. Eligible 502-0003 and subsequent.

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required:

- Operative pre-stall warning system (Dwg. 50130)
- 24 volt electrical system.
- Slip indicator.

Agricultural Dispersal Equipment The following agricultural dispersal equipment may be installed: None, or any of the following:

- Dust spreader (Dwg. 80020)
- Standard spray system (Dwg. 80038)
- Micronair spray system (Dwg. 80039)
- Hopper rinse tank (Dwg. 80707, Sh. 1)
- Hopper rinse tank (Dwg. 80707, Sh. 3)

Optional Equipment Fire bomber gate and vent installation (Dwg. 80343)
 Air conditioning system (Dwg. 60586)
 COM radio or NAV/COM radio (Dwg. 60616)
 Attitude Gyro (Dwg. 51619)
 Fuel flowmeter (Dwg. 60585)
 Cockpit heater (Dwg. 51026)
 Air conditioning system (Dwg. 60740)
 ADF (Dwg. 51619)
 Turn coordinator (Dwg. 51619)
 Transponder (Dwg. 60434)
 Directional Gyro (Dwg. 51619)
 Vertical Speed Indicator (Dwg. 51619)
 Light package (Dwg. 60038)

Datum Wing leading edge.

Leveling Means Screw heads on engine inlet air scoop.

Baggage One baggage compartment at (+98.0). Max capacity 60 lbs.

Production Basis PC2SW

Export
Eligibility

Aircraft will be eligible for issuance of an Export Certificate of
Airworthiness subject to compliance with FAR Part 21.

NOTE 1

FAA approved Airplane Flight Manual dated June 23, 1987, or later FAA approved
revision is required. 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. The empty weight and corresponding center of gravity location
must include the following unusable fuel: 39 lbs. at (+33.0).

NOTE 2

The following information on placards pertaining to flight and operating
limitations must be displayed:

(a) On all Canopy Doors: RESTRICTED.

(b) Attached to skin of aircraft:

(1) Next to Fuel Filler Caps: FUEL 63* U.S. GAL. JET A. FUEL TANKS ARE
INTERCONNECTED. ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE
BEFORE TOP-OFF OF FUEL. NO AEROMATIC FUEL.

*Substitute "117" when optional 117 gal. tanks are installed.

Substitute "108" when optional 108 gal. tanks are installed.

Substitute "85" when optional 85 gal. tanks are installed.

(2) Next to Oil Filler Cap: OIL TANK 9.0 QT. CAP.

(3) On lower aft edge of nose cowl or on upper panel: CHIP DETECTOR.

(4) Next to pitot static buttons: STATIC AIR - KEEP CLEAN.

(5) On side of engine air scoop: LEVELING POINT.

(6) On baggage door: 60 POUNDS MAXIMUM BAGGAGE. WARNING: FAILURE TO
FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN
AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT.

(c) In full view of pilot:

(1) THIS AIRPLANE MUST BE OPERATED IN RESTRICTED CATEGORY IN ACCORDANCE
WITH PLACARDS AND MARKINGS IN THE COCKPIT. NO ACROBATIC MANEUVERS,
INCLUDING SPINS. DESIGN MANEUVERING SPEED 140 MPH. MAX FLAP DOWN SPEED
115 MPH. MAX CROSSWIND VELOCITY LANDING 15 MPH. ALT. LOSS FROM STALL
220 FT.

(2) THE OPERATION OF THIS AIRPLANE IS LIMITED TO DAY AND NIGHT* VFR
CONDITIONS. FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED.

*Delete the words "AND NIGHT" unless aircraft is equipped with operable
lighting package.

(3) PUSH STICK FORWARD TO UNLOCK TAILWHEEL.

(4) PARK BRAKE OPERATION: ON: PULL LEVER, DEPRESS PEDAL. OFF: PUSH
LEVER FULL FORWARD. WARNING: LEVER MUST BE FULL FORWARD BEFORE
TAKEOFF OR LANDING.

For optional Scott Park Brake Valve:

PARK BRAKE OPERATION:

ON: DEPRESS PEDALS AND PULL LEVER

OFF: DEPRESS PEDALS

(5) DO NOT OPERATE ENGINE ABOVE 800 FT-LBS TORQUE ON GROUND RUN-UP OR TAIL
WILL COME UP. FLIGHT IN VICINITY OF THUNDERSTORMS PROHIBITED. FLIGHT
IN VISIBLE MOISTURE BELOW 40°F PROHIBITED. FLIGHT BELOW 5°F
PROHIBITED. USE PRIST WHEN OPERATING BELOW 40°F.

(6) WARNING: DO NOT MOVE POWER LEVER INTO REVERSE POSITION WITH ENGINE
STOPPED OR CONTROLS WILL BE DAMAGED.

(7) DO NOT OPERATE PUMP ABOVE 140 MPH.

(8) WARNING: SULFUR DUSTING IS PROHIBITED UNLESS SPECIAL FIRE PREVENTION
MEASURES ARE INCORPORATED IN AIRCRAFT.

(9) FUEL PRESSURE AND AIR FILTER warning light placards.

- (10) On engine control quadrant at the respective HI and LO idle positions: FLIGHT IDLE and RUN. On Start Control Lever: S.
- (11) On aft end of engine control quadrant next to power lever REV. At the stop detent: IDLE. On power control lever: POWER.
- (12) On prop control lever: P and on aft end of travel: F
- (13) On canopy doors: DO NOT OPEN DOORS IN FLIGHT. IF DOORS WILL NOT OPEN AFTER OVERTURN, KICK OUT WINDOW WITH KNEES OR FEET.
- (14) Below beta light on upper panel: PROP IN BETA RANGE.
- (15) Below Hopper Rinse Fill: HOPPER RINSE TANK FILL (If installed)
- (16) Below windshield washer fill: WINDSHIELD WASHER FILL

- NOTE 3 Safe-life of Air Tractor Model AT-502, wing carry-through structure, and attaching structure is limited to 9,454 hours' time-in-service.
- NOTE 4 C.G. range on serials 502-0003 through 502-0038 may be changed to (+16.0) to (+28.0) at 6,500 lbs. by removing existing elevator down spring attach strap and installing p/n 70466-3 strap per Dwg. 70465.
- NOTE 5 Gross weight on serial 502-0002 through 502-0061 may be increased to 8,000 lbs. by incorporating main spar modifications in accordance with Air Tractor Service Letter No. 80J dated March 6, 1993.
- NOTE 6 VNE (Never Exceed) may be increased to 176 mph (153 knots) when Hartzell HC-B3TN-3D/T10282NS + 4 propeller is installed.

V - Model AT-402 1 PCLM (Restricted Category), Approved December 2, 1988

Engine Pratt & Whitney PT6A-15AG, PT6A-27, PT6A-34, or PT6-34AG

Fuel Per Specification CPW 46, PWA 522, or automotive diesel fuels.

Oil Per Specification CPW 202 or PWA 521.

Engine Limits PT6A-15AG or PT6A-27

Power Setting	SHP	Torque Ft-Lb	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pres PSIG	Oil Temp °C
All Operations	680 ISA +6.7°C	1628	725	38,100 101.5	2200 100.0	80 to 100	10 to 99
Lo Idle			660			40 (MIN)	-40 to 99
Starting			1090 2 seconds				-40(MIN)
Transient		2100	825 2 seconds	38,500 102.6	2420 110.0		0 to 99
Max Reverse	620	1554	725	35,812 95.5	2100 95.5	80 to 100	0 to 99

Engine Limits PT6A-34 or PT6A-34AG

Power Setting	SHP	Torque Ft-Lb	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pres PSIG	Oil Temp °C
All Operations	680 ISA +15.6°	1628	790	38,100 101.5	2200 100.0	85 to 105	10 to 99
Lo Idle			685			40 (MIN)	-40 to 99
Starting			1090 2 seconds				-40(MIN)
Transient		2100	850 2 seconds	38,500 102.6	2420 110.0		0 to 99
Max Reverse	620	1554	750	35,812 95.5	2100 95.5	85 to 100	0 to 99

Propeller & Hartzell HC-B3TN-3D/T10282 +4 or HC-B3TN-3D/T10282N + 4 or HC-B3TN-3D/T10282NS + 4

Propeller Max dia. 106 inch Min dia. 102 inch

Limits Pitch settings feather 86° - 88°, low 18°, reverse -8.0° at 30 inch station.

Airspeed Limits (CAS)	VNE (Never Exceed)	140 mph (122 knots)
	VA (Maneuvering)	140 mph (122 knots)
	VNO (Max. structural cruise)	140 mph (122 knots)
	VFE (Flap extended)	115 mph (100 knots)
	See NOTE 4 regarding VNE speed.	
C.G. Range	(+16.0) to (+24.0) at 6,000 pounds. (+16.0) to (+27.5) at 5,562 pounds and below. Straight line variation between points.	
Max Weight	6000 pounds.	
No. of Seats	1 (+74.0) 1 Crew (+110.0) when optional loader seat is installed in accordance with Dwg 11524	
Max Hopper Load	3,250 lbs. (+12.0)	
Fuel Capacity	126 gal. (+33.0) (120 gal. usable capacity, one 63.0 gal. tank in each wing.) 234 gallons optional (228 gallons usable) 216 gallons optional (210 gallons usable) 170 gallons optional (164 gallons usable)	
Oil Capacity	2.3 gals. (1.5 gals. usable)	
Control Surface Movements	Elevator	Up 28° ± 1° Down 18° ± 1°
	Elevator tab	Up 11° ± 1.5° Down 10° ± 1.5°
	Rudder	Left 21° ± 1° Right 21° ± 1°
	Aileron	Up 20° ± 1° Down 14° ± 1°
	Flaps	--- Down 20° ± 1.5°
	Aileron droop with full flap 8° ± 1°	
Serial Nos. Eligible	402-0694 and subsequent.	
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required:	
	a. Operative pre-stall warning system (Dwg. 50130)	
	b. 24 volt electrical system.	
	c. Slip indicator.	
Agricultural Dispersal Equipment	The following agricultural dispersal equipment may be installed: None, or any of the following:	
	a. Dust spreader (Dwg. 80020)	
	b. Standard spray system (Dwg. 80038)	
	c. Micronair spray system (Dwg. 80039)	
	d. Hopper rinse tank (Dwg. 80939)	
Optional Equipment	Fire bomber gate and vent installation (Dwg. 80343) Cockpit heater (Dwg. 51026) Engine driven air conditioner (Dwg. 60906) 3-Piece Windshield (Dwg. 11464) Windshield washer (Dwg. 80216) Windshield wiper (Dwg. 60177) Avionics (Dwg. 60616) Night working lights (Dwg. 60038) Automatic Flagman (Dwg. 80038) Smoker (Dwg. 80610) Attitude Gyro (Dwg. 50950) Turn Coordinator (Dwg. 50950) Fuel Flowmeter (Dwg. 60585) Transponder (Dwg. 60434) Crophawk Flowmeter (Dwg. 80038) Loader Seat (Dwg. 11524) ADF (Dwg. 60616) NAV/COM Radio (Or COM only) (Dwg. 60616)	
Datum	Wing leading edge.	
Leveling Means	Top of L/H landing gear leg at intersection fuselage side skin.	

Baggage One baggage compartment at (+94.0). Max capacity 60 lbs.

Production Basis PC2SW

Export Eligibility Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with FAR Part 21.

NOTE 1 FAA approved Airplane Flight Manual dated November 23, 1988, or later FAA approved revision is required. 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. The empty weight and corresponding center of gravity location must include the following unusable fuel: 39 lbs. at (+33.0).

NOTE 2 The following information on placards pertaining to flight and operating limitations must be displayed:

(a) On all Canopy Doors: RESTRICTED.

(b) Attached to skin of aircraft:

(1) Next to Fuel Filler Caps: FUEL 63* U.S. GAL. JET A. FUEL TANKS ARE INTERCONNECTED. ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE BEFORE TOP-OFF OF TANK. NO AEROMATIC FUEL.

(2) Next to Oil Filler Cap: OIL TANK 9.0 QT. CAP.

(3) Next to pitot static buttons: STATIC AIR - KEEP CLEAN.

(4) On top of L/H landing gear leg at intersection with fuselage side skin: LEVELING POINT.

(5) On baggage door: 60 POUNDS MAXIMUM BAGGAGE. WARNING: FAILURE TO FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT.

*Substitute "117" when optional 117 gal. tanks are installed.
Substitute "108" when optional 108 gal. tanks are installed.
Substitute "85" when optional 85 gal. tanks are installed.

(c) In full view of pilot:

(1) THIS AIRPLANE MUST BE OPERATED IN RESTRICTED CATEGORY IN ACCORDANCE WITH PLACARDS AND MARKINGS IN THE COCKPIT. NO ACROBATIC MANEUVERS, INCLUDING SPINS. DESIGN MANEUVERING SPEED 140 MPH. MAX FLAP DOWN SPEED 115 MPH. MAX CROSSWIND VELOCITY LANDING 15 MPH. ALT. LOSS FROM STALL 220 FT.

(2) THE OPERATION OF THIS AIRPLANE IS LIMITED TO DAY AND NIGHT* VFR FLIGHT CONDITIONS. FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED.

*Delete the words "AND NIGHT" unless aircraft is equipped with operable lighting package.

(3) PUSH STICK FORWARD TO UNLOCK TAILWHEEL.

(4) PARK BRAKE OPERATION: ON: PULL LEVER, DEPRESS PEDAL. OFF: PUSH LEVER FULL FORWARD. WARNING: LEVER MUST BE FULL FORWARD BEFORE TAKEOFF OR LANDING.

For optional Scott Park Brake Valve:

PARK BRAKE OPERATION:
ON: DEPRESS PEDALS AND PULL LEVER
OFF: DEPRESS PEDALS

(5) DO NOT OPERATE ENGINE ABOVE 800 FT-LBS TORQUE ON GROUND RUN-UP OR TAIL WILL COME UP. FLIGHT IN VICINITY OF THUNDERSTORMS PROHIBITED. FLIGHT IN VISIBLE MOISTURE BELOW 40°F PROHIBITED. FLIGHT BELOW 5°F PROHIBITED. USE PRIST WHEN OPERATING BELOW 40°F.

(6) WARNING: DO NOT MOVE POWER LEVER INTO REVERSE POSITION WITH ENGINE STOPPED OR CONTROLS WILL BE DAMAGED.

(7) DO NOT OPERATE PUMP ABOVE 140 MPH.

- (8) WARNING: SULFUR DUSTING IS PROHIBITED UNLESS SPECIAL FIRE PREVENTION MEASURES ARE INCORPORATED IN AIRCRAFT.
- (9) FUEL PRESSURE AND AIR FILTER warning light placards.
- (10) On engine control quadrant at the respective HI and LO idle positions: FLIGHT IDLE and RUN. On Start Control Lever: S.
- (11) On aft end of engine control quadrant next to power lever REV. At the stop detent: IDLE. On power control lever: POWER.
- (12) On prop control lever: P and on aft end of travel: F
- (13) On canopy doors: DO NOT OPEN DOORS IN FLIGHT. IF DOORS WILL NOT OPEN AFTER OVERTURN, KICK OUT WINDOW WITH KNEES OR FEET.
- (14) Below beta light on upper panel: PROP IN BETA RANGE.
- (15) Below Hopper Rinse Fill: HOPPER RINSE TANK FILL (If installed)
- (16) Next to Chip Detector: CHIP DETECTOR (If installed)
- (17) Below windshield washer fill: WINDSHIELD WASHER FILL

NOTE 3 Safe-life of Air Tractor Model AT-402, wing carry-through structure, and attaching structure is limited to 26,752 hours' time in service.

NOTE 4 VNE (Never Exceed) may be increased to 176 mph (153 knots) when Hartzell HC-B3TN-3D/T10282NS + 4 Propeller is installed.

VI - Model AT-402A 1 PCLM (Restricted Category), Approved November 15, 1989

Engine Pratt & Whitney PT6A-11AG, PT6A-11, PT6A-20, PT6A-20A, PT6A-20B, PT6A-21, or PT6A-11AG BS 943.

Fuel Per Specifications CPW 46, PWA 522, or Automotive diesel fuels.

Oil Per Specifications CPW 202 or PWA 521.

Engine Limits PT6A-11AG or PT6A-11

Power Setting	SHP	Torque Ft-Lb	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pres PSIG	Oil Temp °C
All Operations	500 ISA +6.7°C	1194	700	38,100 101.5	2200 100.0	80 to 100	10 to 99
Lo Idle			660			40 (MIN)	-40 to 99
Starting			1090(3) 2 seconds				-40(MIN)
Transient		1500	825(3) 2 seconds	38,500 102.6	2420 110.0		0 to 99
Max Reverse	475	1194	700	38,100 101.5	2112 96.0	80 to 100	0 to 99

Engine Limits PT6A-20 or PT6A-20A or PT6A-20B

Power Setting	SHP	Torque Ft-Lb	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pres PSIG	Oil Temp °C
All Operations	500 ISA +6.7°C	1194	700	38,100 101.5	2200 100.0	65 to 105	10 to 99
Lo Idle			660			40 (MIN)	-40 to 99
Starting			1090(3) 2 seconds				-40(MIN)
Transient		1500	850(3) 2 seconds	38,500 102.6	2420 110.0		0 to 99
Max Reverse	500	1315	750	38,100 101.5	2090 95.0	65 to 85	0 to 99

Control	Elevator	Up $28^{\circ} \pm 1^{\circ}$	Down $18^{\circ} \pm 1^{\circ}$
Surface	Elevator tab	Up $11^{\circ} \pm 1.5^{\circ}$	Down $10^{\circ} \pm 1.5^{\circ}$
Movements	Rudder	Left $21^{\circ} \pm 1^{\circ}$	Right $21^{\circ} \pm 1^{\circ}$
	Aileron	Up $20^{\circ} \pm 1^{\circ}$	Down $14^{\circ} \pm 1^{\circ}$
	Flaps	---	Down $20^{\circ} \pm 1.5^{\circ}$
	Aileron droop with full flap	$10^{\circ} \pm 1^{\circ}$	
Serial Nos. Eligible	402A-0738 and subsequent.		
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required:		
	a. Operative pre-stall warning system (Dwg. 50130)		
	b. 24 volt electrical system.		
	c. Slip indicator.		
Agricultural Dispersal Equipment	The following agricultural dispersal equipment may be installed: None, or any of the following:		
	a. Dust spreader (Dwg. 80020)		
	b. Standard spray system (Dwg. 80038)		
	c. Micronair spray system (Dwg. 80039)		
	d. Hopper rinse tank (Dwg. 80939)		
Optional Equipment	Fire bomber gate and vent installation (Dwg. 80343) Cockpit heater (Dwg. 51026) Engine driven air conditioner (Dwg. 60906) 3-Piece Windshield (Dwg. 11464) Windshield washer (Dwg. 80216) Windshield wiper (Dwg. 60177) Avionics (Dwg. 60616) Night working lights (Dwg. 60038) Automatic Flagman (Dwg. 80038) Smoker (Dwg. 80610) Attitude Gyro (Dwg. 50950) Turn Coordinator (Dwg. 50950) COM radio or NAV/COM radio (Dwg. 60616) Fuel Flowmeter (Dwg. 60585) Loader Seat (Dwg. 11524) Transponder (Dwg. 60434) Crophawk Flowmeter (Dwg. 80038) ADF (Dwg. 60616)		
Datum	Wing leading edge.		
Leveling Means	Top of L/H landing gear leg at intersection fuselage side skin.		
Baggage	One baggage compartment at (+94.0). Max capacity 60 lbs.		
Production Basis	PC2SW.		
Export Eligibility	Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with FAR Part 21.		
NOTE 1	FAA approved Airplane Flight Manual dated November 15, 1989, or later FAA approved revision is required. 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. The empty weight and corresponding center of gravity location must include the following unusable fuel: 39 lbs. at (+33.0).		
NOTE 2	The following information on placards pertaining to flight and operating limitations must be displayed:		
	(a) On all Canopy Doors: RESTRICTED.		

(b) Attached skin of aircraft:

- (1) Next to Fuel Filler Caps: FUEL 63* U.S. GAL JET A. FUEL TANKS ARE INTERCONNECTED. ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE BEFORE TOP-OFF OF TANK. NO AEROMATIC FUEL.
- (2) Next to Oil Filler Cap: OIL TANK 9.0 QT. CAP.
- (3) Next to pitot static buttons: STATIC AIR - KEEP CLEAN.
- (4) On top of L/H landing gear leg at intersection with fuselage side skin: LEVELING POINT.
- (5) On baggage door: 60 POUNDS MAXIMUM BAGGAGE. WARNING: FAILURE TO FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT.

*Substitute "108" when optional 108 gal. tanks are installed.
Substitute "85" when optional 85 gal. tanks are installed.

(c) In full view of pilot:

- (1) THIS AIRPLANE MUST BE OPERATED IN RESTRICTED CATEGORY IN ACCORDANCE WITH PLACARDS AND MARKINGS IN THE COCKPIT. NO ACROBATIC MANEUVERS, INCLUDING SPINS. DESIGN MANEUVERING SPEED 140 MPH. MAX FLAP DOWN SPEED 115 MPH. MAX CROSSWIND VELOCITY LANDING 15 MPH. ALT. LOSS FROM STALL 220 FT.
- (2) THE OPERATION OF THIS AIRPLANE IS LIMITED TO DAY AND NIGHT VFR CONDITIONS. FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED.
- (3) PUSH STICK FORWARD TO UNLOCK TAILWHEEL.
- (4) PARK BRAKE OPERATION:
ON: DEPRESS PEDALS AND PULL LEVER
OFF: DEPRESS PEDALS
- (5) DO NOT OPERATE ENGINE ABOVE 800 FT-LBS TORQUE ON GROUND RUN-UP OR TAIL WILL COME UP. FLIGHT IN VICINITY OF THUNDERSTORMS PROHIBITED. FLIGHT IN VISIBLE MOISTURE BELOW 40°F PROHIBITED. FLIGHT BELOW 5°F PROHIBITED. USE PRIST WHEN OPERATING BELOW 40°F.
- (6) WARNING: DO NOT MOVE POWER LEVER INTO REVERSE POSITION WITH ENGINE STOPPED OR CONTROLS WILL BE DAMAGED.
- (7) DO NOT OPERATE PUMP ABOVE 140 MPH.
- (8) WARNING: SULFUR DUSTING IS PROHIBITED UNLESS SPECIAL FIRE PREVENTION MEASURES ARE INCORPORATED IN AIRCRAFT.
- (9) FUEL PRESSURE AND AIR FILTER warning light placards.
- (10) On engine control quadrant at the respective HI and LO idle positions: FLIGHT IDLE and RUN. On Start Control Lever: S.
- (11) On aft end of engine control quadrant next to power lever REV. At the stop detent: IDLE. On power control lever: POWER.
- (12) On prop control lever: P and on aft end of travel: F
- (13) On canopy doors: DO NOT OPEN DOORS IN FLIGHT. IF DOORS WILL NOT OPEN AFTER OVERTURN, KICK OUT WINDOW WITH KNEES OR FEET.
- (14) Below beta light on upper panel: PROP IN BETA RANGE.
- (15) Below Hopper Rinse Fill: HOPPER RINSE TANK FILL (If installed)
- (16) Below Windshield Wash Fill: WINDSHIELD WASHER Fill (If installed)
- (17) Next to Chip Detector: Chip Detect

NOTE 3

Safe-life of Air Tractor Model AT-402A, wing carry-through structure, and attaching structure is limited to 26,752 hours' time in service.

Safe-life of Air Tractor Model AT-402A, wing carry-through structure, and attaching structure is limited to 15,511 hours time-in-service For S/N 402A-1015, 402A-1021 and subsequent and with P/N 40059-21 Main Landing Gear and PT6A-11AG BS943 or PT6A-21 engine installed.

NOTE 4 VNE (Never Exceed) may be increased to 176 mph (153 Knots) when Hartzell HC-B3TN-3D/T10282NS+4 Propeller is installed.

VII - Model AT-503A 2 PCLM (Restricted Category), Approved November 26, 1990

Engine Pratt & Whitney PT6A-34 or PT6A-34AG
 Fuel Per Specifications CPW 46, PWA 522, or Automotive diesel fuels.
 Oil Per Specifications CPW 202 or PWA 521.

Engine Limits PT6A-34 or PT6A-34AG

Power Setting	SHP	Torque Ft-Lb	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pres PSIG	Oil Temp °C
All Operations	750 ISA +15.6°C	1795	790	38,100 101.5	2200 100.0	85 to 105	20 to 99
Lo Idle			685	19,500		40 (MIN)	-40 to 99
Starting			1090 2 seconds				-40 (MIN)
Transient		2100	850 2 seconds	38,500 102.6	2420 110.0	85 to 105	0 to 99
Max Reverse	750	1795	790	33,100 95.5	2100 95.5	85 to 105	0 to 99

Propeller & Hartzell HC-B3TN-3D/T10282 +4 or HC-B3TN-3D/T10282N+4 or HC-B3TN-3D/T10282NS+4.
 Propeller Max dia. 106 inch Min dia. 102 inch
 Limits Pitch settings feather 86° - 88°, low 18°, reverse -8.0° at 30 inch station.

Airspeed VNE (Never Exceed) 155 mph (135 knots)
 Limits VA (Maneuvering) 140 mph (122 knots)
 (CAS) VNO (Max. structural cruise) 140 mph (122 knots)
 VFE (Flap extended) 115 mph (100 knots)
 See NOTE 4 regarding VNE Speed.

C.G. Range (+18.0) to (+24.0) at 8,000 pounds.
 (+18.0) to (+28.0) at 6,980 pounds and below.
 Straight line variation between points.

Max Weight 8000 pounds.

No. of Seats 2 (+74.0), (+113.0)

Max Hopper Load 4,100 lbs.

Fuel Capacity 126 gallons (+33.0)
 (120 gallons usable capacity, one 63.0 gal. tank in each wing.)
 216 gallons optional (210 gallons usable)
 170 gallons optional (164 gallons usable)

Oil Capacity 2.3 gallons (1.5 gallons usable)

Control Elevator Up 28° ± 1° Down 18° ± 1°
 Surface Elevator tab Up 9° ± 1.5° Down 7° ± 1.5°
 Movements Rudder Left 21° ± 1° Right 21° ± 1°
 Aileron Up 20° ± 1° Down 14° ± 1°
 Flaps --- Down 26° ± 1.5°
 Aileron droop with full flap 10° ± 1°

Serial Nos. Eligible 503A-0067 and subsequent.

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required:

- a. Operative pre-stall warning system (Dwg. 50130)
- b. 24 volt electrical system.
- c. Slip indicator.

Agricultural Dispersal Equipment The following agricultural dispersal equipment may be installed:
None, or any of the following:

- a. Dust spreader (Dwg. 80020)
- b. Standard spray system (Dwg. 80038)
- c. Micronair spray system (Dwg. 80039)
- d. Hopper rinse tank (Dwg. 80707, Sh. 3)

Optional Equipment Fire bomber gate and vent installation (Dwg. 80343)
Air Conditioning system (Dwg. 60586)
COM radio or NAV/COM radio (Dwg. 60516)
Attitude Gyro (Dwg. 50913)
Fuel Flowmeter (Dwg. 60585)
Cockpit Heater (Dwg. 51026)
ADF (Dwg. 51619)
Turn Coordinator (Dwg. 51619)
Transponder (Dwg. 60434)
Directional Gyro (Dwg. 51619)
Vertical Speed Indicator (Dwg. 51619)
Light Package (Dwg. 60038)

Datum Wing leading edge.

Leveling Means Screw heads on engine inlet air scoop

Baggage One baggage compartment at (+98.0). Max capacity 60 lbs.

Production Basis PC2SW.

Export Eligibility Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with FAR Part 21.

NOTE 1 FAA approved Airplane Flight Manual dated November 26, 1990, or later FAA approved revision is required. 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. The empty weight and corresponding center of gravity location must include the following unusable fuel: 39 lbs. at (+33.0).

NOTE 2 The following information on placards pertaining to flight and operating limitations must be displayed:

- (a) On all Canopy Doors: RESTRICTED.
- (b) Attached skin of aircraft:
 - (1) Next to Fuel Filler Caps: FUEL 63* U.S. GAL JET A. FUEL TANKS ARE INTERCONNECTED. ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE BEFORE TOP-OFF OF TANK. NO AEROMATIC FUEL.
 - (2) Next to Oil Filler Cap: OIL TANK 9.0 QT. CAP.
 - (3) On lower aft edge of nose cowl or on upper panel: CHIP DETECTOR.
 - (4) Next to pitot static buttons: STATIC AIR - KEEP CLEAN
 - (5) On top of L/H landing gear leg at intersection with fuselage side skin: LEVELING POINT.
 - (6) On baggage door: 60 POUNDS MAXIMUM BAGGAGE. WARNING: FAILURE TO FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT.

*Substitute "85" when optional 85 gal. tanks are installed.
- (c) In full view of pilot:
 - (1) THIS AIRPLANE MUST BE OPERATED IN RESTRICTED CATEGORY IN ACCORDANCE WITH PLACARDS AND MARKINGS IN THE COCKPIT. NO ACROBATIC MANEUVERS, INCLUDING SPINS. DESIGN MANEUVERING SPEED 140 MPH. MAX FLAP DOWN SPEED 115 MPH. MAX CROSSWIND VELOCITY LANDING 15 MPH. ALT. LOSS FROM STALL 220 FT.
 - (2) THE OPERATION OF THIS AIRPLANE IS LIMITED TO DAY AND NIGHT VFR CONDITIONS. FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED.

- (3) PUSH STICK FORWARD TO UNLOCK TAILWHEEL.
- (4) PARK BRAKE OPERATION:
ON: DEPRESS PEDALS AND PULL LEVER
OFF: DEPRESS PEDALS
- (5) DO NOT OPERATE ENGINE ABOVE 800 FT-LBS TORQUE ON GROUND RUN-UP OR TAIL WILL COME UP. FLIGHT IN VICINITY OF THUNDERSTORMS PROHIBITED. FLIGHT IN VISIBLE MOISTURE BELOW 40°F PROHIBITED. FLIGHT BELOW 5°F PROHIBITED. USE PRIST WHEN OPERATING BELOW 40°F.
- (6) WARNING: DO NOT MOVE POWER LEVER INTO REVERSE POSITION WITH ENGINE STOPPED OR CONTROLS WILL BE DAMAGED.
- (7) DO NOT OPERATE PUMP ABOVE 140 MPH.
- (8) WARNING: SULFUR DUSTING IS PROHIBITED UNLESS SPECIAL FIRE PREVENTION MEASURES ARE INCORPORATED IN AIRCRAFT.
- (9) FUEL PRESSURE AND AIR FILTER warning light placards.
- (10) On engine control quadrant at the respective HI and LO idle positions: FLIGHT IDLE and RUN. On Start Control Lever: S.
- (11) On aft end of engine control quadrant next to power lever REV. At the stop dentent: IDLE. On power control lever: POWER.
- (12) On prop control lever: P and on aft end of travel: F
- (13) On canopy doors: DO NOT OPEN DOORS IN FLIGHT. IF DOORS WILL NOT OPEN AFTER OVERTURN, KICK OUT WINDOW WITH KNEES OR FEET.
- (14) Below beta light on upper panel: PROP IN BETA RANGE.
- (15) Below Hopper Rinse Fill: HOPPER RINSE TANK FILL (If installed)
- (16) Below Windshield Washer Fill: WINDSHIELD WASHER FILL (If installed)

NOTE 3 Safe-life of Air Tractor Model AT-503A, wing carry-through structure, and attaching structure is limited to 9,454 hours' time in service.

NOTE 4 VNE may be increased to 176 mph (153 knots) when Hartzell HC-B3TN-3D/T10282NS+4 propeller is installed.

VIII - Model AT-401A 1 PCLM (Restricted Category) Approved December 1, 1991

Engine	Wsk - "Pezetel" PZL-3S 2nd Series (Note 4)				
Fuel	91 Minimum grade aviation gasoline				
Engine Limits	Condition	HP	RPM	M.P	ALT.
	Takeoff (1 min.)	592	2200	37.0	S.L.
	Max. Continuous	542	2100	35.8	S.L.
	Max. Continuous	473	2100	32.0	5000
Propeller & Propeller Limits	Wsk Model US-132000/A constant speed, hydromatic, 4- blade. Diameter 103.7 inch maximum, 102 inch minimum. Pitch settings 12.0° low and 32.0° ± 1.0° high.				
Airspeed Limits (CAS)	VNE (Never Exceed)	176 mph (153 knots)			
	VA (Maneuvering)	140 mph (122 knots)			
	VNO (Max. structural cruise)	140 mph (122 knots)			
	VFE (Flap extended)	115 mph (100 knots)			
C.G. Range	(+16.0) to (+24.0) at 6,000 pounds (+16.0) to (+24.5) at 5,937 pounds Straight line variation between points.				
Max Weight	6,000 pounds				
No. of Seats	1 (+74.0)				
Max. Hopper Load	3,250 lbs. (+12.0)				

Fuel Capacity	126 gal. (+33.0) (120 gal. usable capacity, one 63.0 gal. tank in each wing)		
Oil Capacity	9.5 gal. total 71 lbs. at (-23.0) (8 gal. usable)		
Control Surface Movements	Elevator	Up 28° ± 1°	Down 18° ± 1°
	Elevator tab	Up 11° ± 1.5°	Down 10° ± 1.5°
	Rudder	Left 21° ± 1°	Right 21° ± 1°
	Aileron	Up 20° ± 1°	Down 14° ± 1°
	Flaps	---	Down 26° ± 1.5°
	Aileron droop with full flap 10° ± 1°		
Serial Nos. Eligible	401-0662 and subsequent.		
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required:		
	a. Operative pre-stall warning system (Dwg. 50130)		
	b. 24 volt electrical system.		
	c. Slip indicator.		
Agricultural Dispersal Equipment	The following agricultural dispersal equipment may be installed: None, or any of the following:		
	a. Dust spreader (Dwg. 80020)		
	b. Standard spray system (Dwg. 80038)		
	c. Micronair spray system (Dwg. 80039)		
Optional Equipment:	Fire bomber gate and vent installation (Dwg 80343).		
Datum	Wing leading edge.		
Leveling Means	Top of L/H landing gear leg at intersection of fuselage side skin.		
Baggage	One baggage compartment at (+94.0). Max capacity 60 lbs.		
Production Basis	PC2SW		
Export Eligibility	Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with FAR Part 21.		
NOTE 1	FAA approved Airplane Flight Manual dated November 1, 1991, or later FAA approved revision is required. 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. The empty weight and corresponding center of gravity location must include the following unusable fuel: 36 lbs. at (+33.0).		
NOTE 2	The following information on placards pertaining to flight and operating limitations must be displayed:		
	(a) On all Canopy Doors: RESTRICTED		
	(b) Attached to skin of aircraft:		
	(1) Next to Fuel Filler Caps: FUEL 63 U.S. GAL. 91 OCTANE MINIMUM. FUEL TANKS ARE INTERCONNECTED. ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE BEFORE TOP-OFF OF TANK. NO AEROMATIC FUEL.		
	(2) Next to Oil Filler Cap: OIL TANK 8.0 GAL. CAP.		
	(3) Next to pitot static buttons: STATIC AIR - KEEP CLEAN.		
	(4) On top of L/H landing gear leg at intersection with fuselage side skin: LEVELING POINT.		
	(5) On baggage door: 60 POUNDS MAXIMUM BAGGAGE. WARNING: FAILURE TO FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT.		

(c) In full view of pilot:

(1) THIS AIRPLANE MUST BE OPERATED IN RESTRICTED CATEGORY IN ACCORDANCE WITH PLACARDS AND MARKINGS IN THE COCKPIT, NO ACROBATIC MANEUVERS, INCLUDING SPINS. DESIGN MANEUVERING SPEED 140 MPH. MAX FLAP DOWN SPEED 115 MPH, MAX CROSSWING VELOCITY LANDING 15 MPH. ALT. LOSS FROM STALL 220 FT.

(2) THE OPERATION OF THIS AIRPLANE IS LIMITED TO DAY AND NIGHT* VFR FLIGHT CONDITIONS. FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED.

*Delete the words "AND NIGHT" unless aircraft is equipped with operable lighting package.

(3) PUSH STICK FORWARD TO UNLOCK TAILWHEEL.

(4) PARK BRAKE OPERATION: ON: PULL LEVER, DEPRESS PEDAL. OFF: PUSH LEVER FULL FORWARD. WARNING: LEVER MUST BE FULL FORWARD BEFORE TAKE-OFF OR LANDING.

For Optional Scott Park Brake Valve:

PARK BRAKE OPERATION:
ON: DEPRESS PEDALS AND PULL LEVER
OFF: DEPRESS PEDALS

(5) DO NOT OPERATE PUMP ABOVE 140 MPH.

(6) REDUCE ENGINE RPM TO 2100 OR LESS WHEN OPERATING NEAR HOUSES OR AREAS WHERE EXCESSIVE NOISE SHOULD BE AVOIDED.

(7) DO NOT TURN ALTERNATOR OFF IN FLIGHT EXCEPT IN CASE OF EMERGENCY.

(8) WARNING: SULFUR DUSTING IS PROHIBITED UNLESS SPECIAL FIRE PREVENTION MEASURES ARE INCORPORATED IN AIRCRAFT.

(9) Next to carb heat knob: PULL FOR CARB HEAT.

(10) Next to fuel press. light: WARNING LOW FUEL PRESSURE.

(11) On canopy doors: DO NOT OPEN DOORS IN FLIGHT.

(12) On canopy doors: IF DOORS WILL NOT OPEN AFTER OVERTURN, KICK OUT WINDOW WITH KNEES OR FEET.

NOTE 3 Safe-life of Air Tractor Model AT-401A, wing carry-through structure, and attaching structure is limited to 26,752 hours time in service.

NOTE 4 Cylinders having larger cooling fins PZL P/N 20.33.0280 are to be installed per PZL S/B Number 86/PZL-3S/90. Engine placard (data plate) is to be modified per Drawing 51135.

IX - Model AT-502A 1 PCLM (Restricted Category), Approved April 10, 1992

Engine Pratt & Whitney PT6A-45R, PT6A-45A, or PT6A-45B.

Fuel Per Specifications CPW 46, PWA 522.

Oil Per Specifications CPW 202 or PWA 521.

Engine Limits PT6A-45R or PT6A-45A or PT6A-45B

Power Setting	SHP	Torque Ft-Lb	Nominal ITT°	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pressure PSIG	Oil Temp °C
Takeoff	1100 ISA+ 0°C	3398		800	39,000 104.0	1700 100.0	90 to 135 NOTE 5	10 to 99
MAX. Continuous	1020 ISA+ 18.3°C	3398		800	39,000 104.0	1700 100.0	90 to 135	0 to 99
MAX Climb MAX Cruise	922 ISA +0°C	3398	740	765	39,000 104.0	1425 83.8	90 to 135	0 to 99
MIN Idle				700 (6)	2100 56.0 (MIN)		60 (MIN)	-40 to 99
Starting			800	1000 (4)			0 to 200	-40 (MIN)
Transient		5100 20 SEC (MAX)		850	39,000 104.0	1870 110.0	60 (MIN)	0 to 110
Max Reverse	900 @ ISA			800		1650 97.0	90 to 135	0 to 99

Propeller & Propeller Hartzell HC-B5MP-3C/M10876AS or HC-B5MP-3C/M10876ANS
Maximum dia. 111.2 inch, minimum dia. 110.7 inch
Limits Pitch settings, high 79.0°, low 16.5°, reverse -11.0° at 42 inch station.
(Note 4) or Hartzell HC-B5MP-3A/M10282A+6
Maximum dia. 111.2 inch, minimum dia. 110.7 inch
Pitch settings, high 79.0°, low 16.5°, reverse -11.0° at 42 inch station.

Airspeed VNE (Never Exceed) 176 mph (153 knots)
Limits VA (Maneuvering) 140 mph (122 knots)
(CAS) VNO (Max. structural cruise) 140 mph (122 knots)
VFE (Flap extended) 115 mph (100 knots)

C.G. Range (+16.0) to (+24.0) at 8,000 pounds
(+16.0) to (+28.0) at 6,980 pounds and below
Straight line variation between points

Max Weight 8,000 pounds

No. of Seats 1 (+74.0), 2(+74.0) with optional buddy seat installed per Dwg. 13060

Max Hopper Load 4,100 pounds (+12.0)

Fuel capacity 216 gallons (+33.0)
(210 gal. usable capacity, one 108.0 gal. tank in each wing)
234 gallons optional (228 gallons usable)

Oil capacity 2.5 gals. (1.5 gals. usable)

Control Elevator Up 28° ± 1° Down 16° ± 1°
Surface Elevator tab Up 9° ± 1.5° Down 7° ± 1.5°
Movements Rudder Left 21° ± 1° Right 21° ± 1°
Aileron Up 20° ± 1° Down 14° ± 1°
Flaps --- Down 26° ± 1.5°
Aileron droop with full flap 10° ± 1°

Serial Nos. 502A-0158 and subsequent.
Eligible

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required:
a. Operative pre-stall warning system (Dwg. 50130)
b. 24 volt electrical system.
c. Slip indicator.

Agricultural Dispersal Equipment The following agricultural dispersal equipment may be installed:
None, or any of the following:
a. Dust spreader (Dwg. 80020)
b. Standard spray system (Dwg. 80038)
c. Micronair spray system (Dwg. 80039)
d. Hopper rinse tank (Dwg. 80707, Sh. 1)
e. Hopper rinse tank (Dwg. 80707, Sh. 3)

Optional Equipment	Fire bomber gate and vent installation (Dwg. 80343) Air Conditioning system (Dwg. 60586) COM radio or NAV/COM radio (Dwg. 60616) Attitude Gyro (Dwg. 51619) Cockpit Heater (Dwg. 51377) Air conditioning system (Dwg. 60740) Turn Coordinator (Dwg. 51619) ADF (Dwg. 51619) Transponder (Dwg. 60434) Directional Gyro (Dwg. 51619) Vertical Speed Indicator (Dwg. 51619) Light Package (Dwg. 60038)
Datum	Wing leading edge.
Leveling Means	Screw heads on engine air inlet air scoop.
Baggage	One baggage compartment at (+98.0). Max capacity 60 lbs.
Production Basis	PC2SW
Export Eligibility	Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with FAR Part 21.
NOTE 1	FAA approved Airplane Flight Manual dated April 9, 1992, or later FAA approved revision is required. 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. The empty weight and corresponding center of gravity location must include the following unusable fuel: 39 lbs. at (+33.0).
NOTE 2	The following information on placards pertaining to flight and operating limitations must be displayed: (a) On all Canopy Doors: RESTRICTED (b) Attached to skin of aircraft: (1) Next to Fuel Filler Caps: FUEL 108* U.S. GAL. JET A. FUEL TANKS ARE INTERCONNECTED. ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE BEFORE TOP-OFF OF TANK. NO AEROMATIC FUEL. *Substitute "117" when optional 117 gal. tanks are installed. (2) Next to Oil Filler Cap: OIL TANK 10.0 QT. CAP. (3) Next to pitot static buttons: STATIC AIR - KEEP CLEAN. (4) On side of engine air scoop: LEVELING POINT. (5) On baggage door: 60 POUNDS MAXIMUM BAGGAGE. WARNING: FAILURE TO FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT. (c) In fuel view of pilot: (1) THIS AIRPLANE MUST BE OPERATED IN RESTRICTED CATEGORY IN ACCORDANCE WITH PLACARDS AND MARKINGS IN THE COCKPIT. NO ACROBATIC MANEUVERS, INCLUDING SPINS. DESIGN MANEUVERING SPEED 140 MPH. MAX FLAP DOWN SPEED 115 MPH. MAX CROSSWIND VELOCITY LANDING 15 MPH. ALT. LOSS FROM STALL 220 FT. (2) THE OPERATION OF THIS AIRPLANE IS LIMITED TO DAY AND NIGHT* VFR CONDITIONS. FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED. *Delete the words "AND NIGHT" unless aircraft is equipped with operable lighting package. (3) PUSH STICK FORWARD TO UNLOCK TAILWHEEL. (4) PARK BRAKE OPERATION: ON: DEPRESS PEDALS AND PULL LEVER OFF: DEPRESS PEDALS

- (5) DO NOT OPERATE ENGINE ABOVE 2,000 FT-LBS TORQUE ON GROUND RUN-UP OR TAIL WILL COME UP. FLIGHT IN VICINITY OF THUNDERSTORMS PROHIBITED. FLIGHT IN VISIBLE MOISTURE BELOW 40°F PROHIBITED. FLIGHT BELOW 0°F PROHIBITED. USE PRIST WHEN OPERATING BELOW 40°F. MAXIMUM OPERATIONAL ALTITUDE 12,500 FT. MSL
- (6) WARNING: DO NOT MOVE POWER LEVER INTO REVERSE POSITION WITH ENGINE STOPPED OR CONTROLS WILL BE DAMAGED.
- (7) DO NOT OPERATE PUMP ABOVE 160 MPH.
- (8) WARNING: SULFUR DUSTING IS PROHIBITED UNLESS SPECIAL FIRE PREVENTION MEASURES ARE INCORPORATED IN AIRCRAFT.
- (9) FUEL FILTER AND AIR FILTER warning light placard.
- (10) On engine control quadrant at the respective HI and LO idle positions: FLIGHT IDLE and RUN. On Start Control Lever: S.
- (11) On aft end of engine control quadrant next to power lever REV. At the stop detent: IDLE. On power control lever: POWER.
- (12) On prop control lever: P and on aft end of travel: F
- (13) On canopy doors: DO NOT OPEN DOORS IN FLIGHT. IF DOORS WILL NOT OPEN AFTER OVERTURN, KICK OUT WINDOW WITH KNEES OR FEET.
- (14) Below beta light on upper panel: PROP IN BETA.
- (15) Below chip light on upper panel: CHIP DETECT.
- (16) Below Hopper Rinse Fill: HOPPER RINSE FILL (If installed)
- (17) Below Windshield Washer Fill: WINDSHIELD WASHER FILL (If installed)

NOTE 3 Safe-life of Air Tractor Model AT-502A, wing carry-through structure, and attaching structure is limited to 9,454 hours' time-in-service.

NOTE 4 Stabilized ground operation is prohibited between 400 and 900 RPM and between 1170 and 1400 RPM.

NOTE 5 Oil Pressure Range for PT6A-45A and PT6A-45B is 100 to 135 psig.

X - Model AT-502B 1 PCLM (Restricted Category), Approved December 8, 1992

Engine Pratt & Whitney PT6A-15AG, PT6A-27, PT6A-34, PT6A-34AG, PT6A-36, or PT6A-34B.

Fuel Per Specifications CPW 46, PWA 522, or Automotive diesel fuels.

Oil Per Specifications CPW 202 or PWA 521.

Engine Limits PT6A-15AG or PT6A-27

Power Setting	SHP	Torque Ft-Lb	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pressure PSIG	Oil Temp °C
All Operations	680 ISA +6.7°C	1628	725	38,100 101.5	2200 100.0	80 to 100	10 to 99
Lo Idle			660			40 (MIN)	-40 to 99
Starting			1090 2 seconds				-40 (MIN)
Transient		2100	825 2 seconds	38,500 102.6	2420 110.0		0 to 99
Max Reverse	620	1554	725	35,812 95.5	2100 95.5	80 to 100	0 to 99

Engine Limits PT6A-34, PT6A-34AG, PT6A-36, or PT6A-34B.

Power Setting	SHP	Torque Ft-Lb	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pressure PSIG	Oil Temp °C
All Operations	750 ISA +15.6°C	1795	790	38,100 101.5	2200 100.0	85 to 105	10 to 99
Lo Idle			685			40 (MIN)	-40 to 99
Starting			1090 2 seconds				-40(MIN)
Transient		2100	850 2 seconds	38,500 102.6	2420 110.0		0 to 99
Max Reverse	750	1795	790	35,812 95.5	2100 95.5	85 to 105	0 to 99

Propeller & Hartzell HC-B3TN-3D/T10282 +4 or HC-B3TN-3D/T10282N+4 or HC-B3TN-3D/T10282NS+4.
 Propeller Max dia. 106 inch Min dia. 102 inch
 Limits Pitch settings, high 86° - 88°, low 18°, reverse -8.0° at 30 inch station.

Airspeed VNE (Never Exceed) 155 mph (135 knots)
 Limits VA (Maneuvering) 140 mph (122 knots)
 (CAS) VNO (Max. structural cruise) 140 mph (122 knots)
 VFE (Flap extended) 115 mph (100 knots)
 See NOTE 4 regarding VNE speed.

C.G. Range (+18.0 in.) to (+24.0 in.) at 8,000 pounds.
 (+18.0 in.) to (+28.0 in.) at 6,980 pounds and below.
 Straight line variation between points.

Max Weight 8,000 pounds.

No. of Seats 1 (+74.0), 2 (+74.0) with optional buddy seat installed per Dwg. 11360

Max Hopper Load 4,100 lbs. (+12.0)

Fuel Capacity 126 gal. (+33.0)
 (120 gal. usable capacity, one 63.0 gal. tank in each wing.)
 234 gallons optional (228 gallons usable)
 216 gallons optional (210 gallons usable)
 170 gallons optional (164 gallons usable)

Oil Capacity 2.3 gals. (1.5 gals. usable)

Control Elevator Up 29° ± 1° Down 16° ± 1°
 Surface Elevator tab Up 9° ± 1.5° Down 7° ± 1.5°
 Movements Rudder Left 21° ± 1° Right 21° ± 1°
 Aileron Up 20° ± 1° Down 14° ± 1°
 Flaps --- Down 26° ± 1.5°
 Aileron droop with full flap 10° ± 1°

Serial Nos. Eligible 502B-0187 and subsequent.

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required:

- a. Operative pre-stall warning system (Dwg. 50130)
- b. 24 volt electrical system.
- c. Slip indicator.

Agricultural Dispersal Equipment The following agricultural dispersal equipment may be installed: None, or any of the following:

- a. Dust spreader (Dwg. 80020)
- b. Standard spray system (Dwg. 80038)
- c. Micronair spray system (Dwg. 80039)
- d. Hopper rinse system (Dwg. 80707, Sh. 1)
- e. Hopper rinse system (Dwg. 80707, Sh. 3)

Optional Equipment	<p>Fire bomber gate and vent installation (Dwg. 80343) Air conditioning system (Dwg. 60586) COM radio or NAV/COM radio (Dwg. 60616) Attitude Gyro (Dwg. 51619) Fuel Flowmeter (Dwg. 60585) Cockpit Heater (Dwg. 51026) Air conditioning system (Dwg. 60740) Turn coordinator (Dwg. 51619) ADF (Dwg. 51619) Transponder (Dwg. 60434) Directional Gyro (Dwg. 51619) Vertical Speed Indicator (Dwg. 51619) Light Package (Dwg. 60038)</p>
Datum	Wing leading edge.
Leveling Means	Screw heads on engine inlet air scoop.
Baggage	One baggage compartment at (+98.0). Max capacity 60 lbs.
Production Basis	PC2SW.
Export Eligibility	Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with FAR Part 21.
NOTE 1	<p>FAA approved Airplane Flight Manual dated December 8, 1992, or later FAA approved revision is required. 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. The empty weight and corresponding center of gravity location must include the following unusable fuel: 39 lbs. at (+33.0).</p>
NOTE 2	<p>The following information on placards pertaining to flight and operating limitations must be displayed:</p> <p>(a) On all Canopy Doors: RESTRICTED.</p> <p>(b) Attached skin of aircraft:</p> <p>(1) Next to Fuel Filler Caps: FUEL 63* U.S. GAL JET A. FUEL TANKS ARE INTERCONNECTED. ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE BEFORE TOP-OFF OF TANK. NO AEROMATIC FUEL.</p> <p>*Substitute "117" when optional 117 gal. tanks are installed. Substitute "108" when optional 108 gal. tanks are installed. Substitute "85" when optional 85 gal. tanks are installed.</p> <p>(2) Next to Oil Filler Cap: OIL TANK 9.0 QT. CAP.</p> <p>(3) Close to Canopy Door: OPEN</p> <p>(4) Next to pitot static buttons: STATIC AIR - KEEP CLEAN.</p> <p>(5) On side of engine air scoop: LEVELING POINT.</p> <p>(6) On baggage door: 60 POUNDS MAXIMUM BAGGAGE. WARNING: FAILURE TO FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT.</p> <p>(c) In full view of pilot:</p> <p>(1) THIS AIRPLANE MUST BE OPERATED IN RESTRICTED CATEGORY IN ACCORDANCE WITH PLACARDS AND MARKINGS IN THE COCKPIT. NO ACROBATIC MANEUVERS, INCLUDING SPINS. DESIGN MANEUVERING SPEED 140 MPH. MAX FLAP DOWN SPEED 115 MPH. MAX CROSSWIND VELOCITY LANDING 15 MPH. ALT. LOSS FROM STALL 220 FT.</p> <p>(2) THE OPERATION OF THIS AIRPLANE IS LIMITED TO DAY AND NIGHT* VFR CONDITIONS. FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED.</p> <p>* Delete the words "AND NIGHT" unless aircraft is equipped with operable lighting package.</p> <p>(3) PUSH STICK FORWARD TO UNLOCK TAILWHEEL.</p>

- (4) PARK BRAKE OPERATION:
ON: DEPRESS PEDALS AND PULL LEVER
OFF: DEPRESS PEDALS
- (5) DO NOT OPERATE ENGINE ABOVE 800 FT-LBS TORQUE ON GROUND RUN-UP OR TAIL WILL COME UP. FLIGHT IN VICINITY OF THUNDERSTORMS PROHIBITED. FLIGHT IN VISIBLE MOISTURE BELOW 40°F PROHIBITED. FLIGHT BELOW 5°F PROHIBITED. USE PRIST WHEN OPERATING BELOW 40°F. MAXIMUM OPERATIONAL ALTITUDE 12,500 FT. MSL.
- (6) WARNING: DO NOT MOVE POWER LEVER INTO REVERSE POSITION WITH ENGINE STOPPED OR CONTROLS WILL BE DAMAGED.
- (7) DO NOT OPERATE PUMP ABOVE 140 MPH.
- (8) WARNING: SULFUR DUSTING IS PROHIBITED UNLESS SPECIAL FIRE PREVENTION MEASURES ARE INCORPORATED IN AIRCRAFT.
- (9) AIR FILTER warning light placard.
- (10) On engine control quadrant at the respective HI and LO idle positions: FLIGHT IDLE and RUN. On Start Control Lever: S.
- (11) On aft end of engine control quadrant next to power lever REV. At the stop detent: IDLE. On power control lever: POWER.
- (12) On prop control lever: P and on aft end of travel: F
- (13) On canopy doors: DO NOT OPEN DOORS IN FLIGHT. IF DOORS WILL NOT OPEN AFTER OVERTURN, KICK OUT WINDOW WITH KNEES OR FEET.
- (14) Below beta light on upper panel: PROP IN BETA.
- (15) Below Warn Lights on upper panel: FUEL FILTER AND CHIP DETECT.
- (16) Emergency Power Lever (if installed)
On top of lever: CAUTION FCU OVERRIDE
UNLOCK - PUSH FOR POWER
- (17) Below Hopper Rinse Fill: HOPPER RINSE TANK FILL (If installed)
- (18) Below Windshield Wash Fill: WINDSHIELD WASHER FILL (If installed)

NOTE 3 Safe-life of Air Tractor Model AT-502B, wing carry-through structure, and attaching structure is limited to 9,454 hours' time-in-service.

NOTE 4 VNE (Never Exceed) may be increased to 176 mph (153 knots) when Hartzell HC-B3TN-3D/T10282NS+4 propeller is installed.

XI - Model AT-401B 1 PCLM (Restricted Category) Approved July 22, 1994

Engine Pratt & Whitney Wasp R1340 AN1 (S3H1 Commercial designation) with carburetor parts list setting 395118-3, A-18639-7 or A-18639-8.

or Pratt & Whitney Wasp R1340 S1H1 with carburetor parts list setting 395118-3, A-18639-7, or A-18639-8.

Fuel 80/87 minimum grade aviation gasoline.

Engine Limits	HP	RPM	M.P.	ALT.
Takeoff (5 minutes)	600	2250	36.0	S.L.
Max. Continuous	550	2200	34.0	S.L.
Max. Continuous	550	2200	32.5	5000

Propeller & Propeller Limits Hamilton Standard 22D40 hub, 6533A-12 blades, constant speed, hydromatic. Diameter 109 inch maximum 107 inch minimum. Pitch settings 12.0 degrees low and 35 degrees high at 42 inch sta.

or Hamilton Standard 22D40 hub, EAC AG200-2 blades, constant speed, hydromatic. Diameter 106 inch maximum 104 inch minimum. Pitch settings 12.0 degrees low and 35 degrees high at 42 inch station.

or Hamilton Standard 12D40 hub, 6101A-12 blades, constant speed. Diameter 109 inch maximum 107 inch minimum. Pitch settings 12.0 degrees low and 26 degrees high at 42 inch station.

	or	Hamilton Standard 23D40 hub, 6533A-18 blades, constant speed, hydromatic, 3-blade. Diameter 103 inch maximum 101 inch minimum. Pitch settings 10.0 degrees low and 35 degrees high at 42 inch station.
	or	Hamilton Standard 12D40 hub, EAC AG100-2 blades, constant speed. Diameter 106 inch maximum 104 inch minimum. Pitch settings 11.0 degrees low and 26 degrees high at 42 inch station.
Airspeed	VNE (Never Exceed)	176 mph (153 knots)
Limits	VA (Maneuvering)	140 mph (122 knots)
(CAS)	VNO (Max. structural cruise)	140 mph (122 knots)
	VFE (Flap extended)	115 mph (100 knots)
C.G. Range	(+16.0) to (+24.0) at 6,000 pounds (+16.0) to (+24.5) at 5,937 pounds and below Straight line variation between points.	
	(+18.0) to (+24.0) at 7,000 pounds	(For S/N 401B-1015, 401B-1021 and subsequent and with P/N 40059-21 Main Landing Gear installed)
	(+18.0) to (+27.5) at 6,475 pounds	
Max Weight	6,000 pounds 7,000 pounds (For S/N 402B-1015, 402B-1021 and subsequent and with P/N 40059-21 Main Landing Gear installed)	
No. of Seats	1 (+74.0) 1 crew (+110.0) when optional loader seat is installed in accordance with Dwg. 11524	
Max Hopper Load	3,250 lbs. (+12.0)	
Fuel Capacity	126 gal. (+33.0) (120 gal. usable capacity, one 63.0 gal. tank in each wing) (170 gal. optional (164 gal. usable)) (216 gal. optional (210 gal. usable))	
Oil Capacity	9.5 gal. total 71 lb. at (-23.0) (8 gal. usable)	
Control	Elevator	Up 28° ± 1° Down 18° ± 1°
Surface	Elevator tab	Up 11° ± 1.5° Down 10° ± 1.5°
Movements	Rudder	Left 21° ± 1° Right 21° ± 1°
	Aileron	Up 20° ± 1° Down 14° ± 1°
	Flaps	--- Down 26° ± 1.5°
	Aileron droop with full flap 10° ± 1°	
Serial Nos. Eligible	401B-0952 and subsequent.	
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required: a. Operative pre-stall warning system (Dwg. 50130) b. 24 volt electrical system. c. Slip indicator.	
Agricultural Dispersal Equipment	The following agricultural dispersal equipment may be installed: None, or any of the following: a. Dust spreader (Dwg. 80020) b. Standard spray system (Dwg. 80038) c. Micronair spray system (Dwg. 80039) d. Hopper rinse tank (Dwg. 80939)	
Optional Equipment	Fire bomber gate and vent installation (Dwg 80343). 3-Piece Windshield (Dwg. 11464) Windshield washer (Dwg. 80216) Windshield wiper (Dwg. 60177) Avionics (Dwg. 60195) Night working lights (Dwg. 60038) Automatic Flagman (Dwg. 80038) Smoker (Dwg. 80610) Loader Seat (Dwg. 11524)	

Datum	Wing leading edge.
Leveling Means	Top of L/H landing gear leg at intersection of fuselage side skin.
Baggage	One baggage compartment at (+94). Max capacity 60 lbs.
Production Basis	PC2SW
Export Eligibility	Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with FAR Part 21.
NOTE 1	FAA approved Airplane Flight Manual dated June 13, 1994, or later FAA approved revision is required. 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. The empty weight and corresponding center of gravity location must include the following unusable fuel: 36 lbs. at (33.0).
NOTE 2	The following information on placards pertaining to flight and operating limitations must be displayed: <ul style="list-style-type: none"> (a) On all Canopy Doors: RESTRICTED. (b) Attached to skin of aircraft: <ul style="list-style-type: none"> (1) Next to Fuel Filler Caps: FUEL 63 U.S. GAL. MINIMUM OCTANE 87. FUEL TANKS ARE INTERCONNECTED. ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE BEFORE TOP-OFF OF TANK. NO AEROMATIC FUEL. (2) Next to oil filler cap: OIL TANK 8.0 GAL. CAP. (3) Next to pitot static buttons: STATIC AIR - KEEP CLEAN. (4) On top of L/H landing gear leg at intersection with fuselage side skin: LEVELING POINT. (5) On baggage door: 60 POUNDS MAXIMUM BAGGAGE. WARNING: FAILURE TO FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT. (c) In full view of pilot: <ul style="list-style-type: none"> (1) THIS AIRPLANE MUST BE OPERATED IN RESTRICTED CATEGORY IN ACCORDANCE WITH PLACARDS AND MARKINGS IN THE COCKPIT, NO ACROBATIC MANEUVERS, INCLUDING SPINS. DESIGN MANEUVERING SPEED 140 MPH. MAX FLAP DOWN SPEED 115 MPH, MAX CROSSWIND VELOCITY LANDING 15 MPH. ALT. LOSS FROM STALL 220 FT. (2) THE OPERATION OF THIS AIRPLANE IS LIMITED TO DAY AND NIGHT* VFR CONDITIONS. FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED. *Delete the words "AND NIGHT" unless aircraft is equipped with operable lighting package. (3) PUSH STICK FORWARD TO UNLOCK TAILWHEEL. (4) PARK BRAKE OPERATION ON: DEPRESS PEDALS AND PULL LEVER OFF: DEPRESS PEDALS (5) DO NOT OPERATE PUMP ABOVE 140 MPH. (6) REDUCE ENGINE RPM TO 2200 OR LESS WHEN OPERATING NEAR HOUSES OR AREAS WHERE EXCESSIVE NOISE SHOULD BE AVOIDED. (7) DO NOT TURN ALTERNATOR OFF IN FLIGHT EXCEPT IN CASE OF EMERGENCY. (8) WARNING: SULFUR DUSTING IS PROHIBITED UNLESS SPECIAL FIRE PREVENTION MEASURES ARE INCORPORATED IN AIRCRAFT. (9) Next to carb heat knob: PULL FOR CARB HEAT. (10) Next to fuel press. light: WARNING LOW FUEL PRESSURE. (11) On canopy doors: DO NOT OPEN DOORS IN FLIGHT. (12) On canopy doors: IF DOORS WILL NOT OPEN AFTER OVERTURN, KICK OUT WINDOW WITH KNEES OR FEET.

(13) Next to chip detector light: CHIP DETECTOR (if installed)

(14) Below hopper rinse fill: HOPPER RINSE TANK FILL

(15) Below windshield wash fill: WINDSHIELD WASHER FILL

NOTE 3 Safe-life of Air Tractor Model AT-401B, wing carry-through structure, and attaching structure is limited to 26,752 hours time in service.

Safe-life of Air Tractor Model AT401B, wing carry-through structure, and attaching structure is limited to 15,511 hours time-in-service, for S/N 402B-1015, 402B-1021 and subsequent with P/N 40059-21 Main Landing Gear installed.

XII - Model AT-402B 1 PCLM (Restricted Category), Approved October 25, 1994

Engine Pratt & Whitney PT6A-15AG, PT6A-27, PT6A-34, or PT6-34AG

Fuel Per Specification CPW 46, PWA 522, or automotive diesel fuels.

Oil Per Specification CPW 202 or PWA 521.

Engine Limits PT6A-15AG or PT6A-27

Engine Limits PT6A-15AG or PT6A-27

Power Setting	SHP	Torque Ft-Lb	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pres PSIG	Oil Temp °C
All Operations	680 ISA +6.7°C	1628	725	38,100 101.5	2200 100.0	80 to 100	10 to 99
Lo Idle			660			40 (MIN)	-40 to 99
Starting			1090 2 seconds				-40(MIN)
Transient		2100	825 2 seconds	38,500 102.6	2420 110.0		0 to 99
Max Reverse	620	1554	725	35,812 95.5	2100 95.5	80 to 100	0 to 99

Engine Limits PT6A-34 or PT6A-34AG

Power Setting	SHP	Torque Ft-Lb	Maximum Observed ITT°C	Ng RPM %	Np RPM %	Oil Pres PSIG	Oil Temp °C
All Operations	680 ISA +15.6°	1628	790	38,100 101.5	2200 100.0	85 to 105	10 to 99
Lo Idle			685			40 (MIN)	-40 to 99
Starting			1090 2 seconds				-40(MIN)
Transient		2100	850 2 seconds	38,500 102.6	2420 110.0		0 to 99
Max Reverse	620	1554	750	35,812 95.5	2100 95.5	85 to 105	0 to 99

Propeller & Propeller Limits Hartzell HC-B3TN-3D/T10282 +4 or HC-B3TN-3D/T10282N+4
 Max dia. 106 inch Min dia. 102 inch
 Pitch settings feather 86° - 88°, low 18°, reverse -8.0° at 30 inch station.

Airspeed Limits (CAS) VNE (Never Exceed) 140 mph (122 knots)
 VA (Maneuvering) 140 mph (122 knots)
 VNO (Max. structural cruise) 140 mph (122 knots)
 VFE (Flap extended) 115 mph (100 knots)
 See NOTE 4 regarding VNE speed.

C.G. Range (+16.0) to (+24.0) at 6,000 pounds.
 (+16.0) to (+27.5) at 5,562 pounds and below.
 Straight line variation between points.
 (+17.5) to (+24.0) at 7,000 pounds. (For S/N 402B-1015, 402B-1021 and subsequent and with P/N 40059-21 Main Landing Gear installed)
 (+17.5) to (+28.0) at 6,400 pounds and below. Straight line variation between points.

Max Weight	6000 pounds. 7000 pounds (For S/N 402B-1015, 402B 1021 and subsequent and with P/N 40059-21 Main Landing Gear installed)
No. of Seats	1 (+74.0) 1 crew (+110.0) when optional loader seat is installed in accordance with Dwg. 11524.
Max Hopper Load	3,250 lbs. (+12.0)
Fuel Capacity	126 gal. (+33.0) (120 gal. usable capacity, one 63.0 gal. tank in each wing.) 234 gallons optional (228 gallons usable) 216 gallons optional (210 gallons usable) 170 gallons optional (164 gallons usable)
Oil Capacity	2.3 gals. (1.5 gals. usable)
Control Surface Movements	Elevator Up 28° ± 1° Down 18° ± 1° Elevator tab Up 11° ± 1.5° Down 10° ± 1.5° Rudder Left 21° ± 1° Right 21° ± 1° Aileron Up 20° ± 1° Down 14° ± 1° Flaps --- Down 20° ± 1.5° Aileron droop with full flap 8° ± 1°
Serial Nos. Eligible	402B-0966 and subsequent.
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification. In addition, the following equipment is required: a. Operative pre-stall warning system (Dwg. 50130) b. 24 volt electrical system. c. Slip indicator.
Agricultural Dispersal Equipment	The following agricultural dispersal equipment may be installed: None, or any of the following: a. Dust spreader (Dwg. 80020) b. Standard spray system (Dwg. 80038) c. Micronair spray system (Dwg. 80039) d. Hopper rinse tank (Dwg. 80939)
Optional Equipment	Fire bomber gate and vent installation (Dwg. 80343) Cockpit heater (Dwg. 51026) Engine driven air conditioner (Dwg. 60906) 3-Piece Windshield (Dwg. 11464) Windshield washer (Dwg. 80216) Windshield wiper (Dwg. 60177) Avionics (Dwg. 60616) Night working lights (Dwg. 60038) Automatic Flagman (Dwg. 80038) Smoker (Dwg. 80610) Attitude Gyro (Dwg. 50950) Turn Coordinator (Dwg. 50950) Fuel Flowmeter (Dwg. 60585) Transponder (Dwg. 60434) Loader Seat (Dwg. 11524) Crophawk Flowmeter (Dwg. 80038) ADF (Dwg. 11524) NAV/COM Radio (Or Com Only) (Dwg. 60616)
Datum	Wing leading edge.
Leveling Means	Top of L/H landing gear leg at intersection fuselage side skin.
Baggage	One baggage compartment at (+94.0). Max capacity 60 lbs.
Production Basis	PC2SW
Export Eligibility	Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with FAR Part 21.

- NOTE 1 FAA approved Airplane Flight Manual dated November 23, 1988, or later FAA approved revision is required. 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. The empty weight and corresponding center of gravity location must include the following unusable fuel: 39 lbs. at (+33.0).
- NOTE 2 The following information on placards pertaining to flight and operating limitations must be displayed:
- (a) On all Canopy Doors: RESTRICTED.
- (b) Attached to skin of aircraft:
- (1) Next to Fuel Filler Caps: FUEL 63* U.S. GAL. JET A. FUEL TANKS ARE INTERCONNECTED. ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE BEFORE TOP-OFF OF TANK. NO AEROMATIC FUEL.
 - (2) Next to Oil Filler Cap: OIL TANK 9.0 QT. CAP.
 - (3) Next to pitot static buttons: STATIC AIR - KEEP CLEAN.
 - (4) On top of L/H landing gear leg at intersection with fuselage side skin: LEVELING POINT.
 - (5) On baggage door: 60 POUNDS MAXIMUM BAGGAGE. WARNING: FAILURE TO FASTEN BAGGAGE DOOR COULD CAUSE DAMAGE TO THE DOOR AND FUSELAGE SKIN AND RESULT IN DIFFICULTY MANEUVERING THE AIRCRAFT.
 - *Substitute "117" when optional 117 gal. tanks are installed.
 - Substitute "108" when optional 108 gal. tanks are installed.
 - Substitute "85" when optional 85 gal. tanks are installed.
- (c) In full view of pilot:
- (1) THIS AIRPLANE MUST BE OPERATED IN RESTRICTED CATEGORY IN ACCORDANCE WITH PLACARDS AND MARKINGS IN THE COCKPIT. NO ACROBATIC MANEUVERS, INCLUDING SPINS. DESIGN MANEUVERING SPEED 140 MPH. MAX FLAP DOWN SPEED 115 MPH. MAX CROSSWIND VELOCITY LANDING 15 MPH. ALT. LOSS FROM STALL 220 FT.
 - (2) THE OPERATION OF THIS AIRPLANE IS LIMITED TO DAY AND NIGHT* VFR FLIGHT CONDITIONS. FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED.
 - *Delete the words "AND NIGHT" unless aircraft is equipped with operable lighting package.
 - (3) PUSH STICK FORWARD TO UNLOCK TAILWHEEL.
 - (4) PARK BRAKE OPERATION: ON: PULL LEVER, DEPRESS PEDAL. OFF: PUSH LEVER FULL FORWARD. WARNING: LEVER MUST BE FULL FORWARD BEFORE TAKEOFF OR LANDING.

For optional Scott Park Brake Valve:

PARK BRAKE OPERATION:
ON: DEPRESS PEDALS AND PULL LEVER
OFF: DEPRESS PEDALS
 - (5) DO NOT OPERATE ENGINE ABOVE 800 FT-LBS TORQUE ON GROUND RUN-UP OR TAIL WILL COME UP. FLIGHT IN VICINITY OF THUNDERSTORMS PROHIBITED. FLIGHT IN VISIBLE MOISTURE BELOW 40°F PROHIBITED. FLIGHT BELOW 5°F PROHIBITED. USE PRIST WHEN OPERATING BELOW 40°F.
 - (6) WARNING: DO NOT MOVE POWER LEVER INTO REVERSE POSITION WITH ENGINE STOPPED OR CONTROLS WILL BE DAMAGED.
 - (7) DO NOT OPERATE PUMP ABOVE 140 MPH.
 - (8) WARNING: SULFUR DUSTING IS PROHIBITED UNLESS SPECIAL FIRE PREVENTION MEASURES ARE INCORPORATED IN AIRCRAFT.
 - (9) FUEL FILTER AND AIR FILTER warning light placards.
 - (10) On engine control quadrant at the respective HI and LO idle positions: FLIGHT IDLE and RUN. On Start Control Lever: S.

- (11) On aft end of engine control quadrant next to power lever REV. At the stop detent: IDLE. On power control lever: POWER.
- (12) On prop control lever: P and on aft end of travel: F
- (13) On canopy doors: DO NOT OPEN DOORS IN FLIGHT. IF DOORS WILL NOT OPEN AFTER OVERTURN, KICK OUT WINDOW WITH KNEES OR FEET.
- (14) Below beta light on upper panel: PROP IN BETA.
- (15) Below hopper rinse fill: HOPPER RINSE TANK FILL (If installed)
- (16) Below windshield washer fill: WINDSHIELD WASHER FILL (If installed)
- (17) On upper panel: CHIP DETECT

NOTE 3 Safe-life of Air Tractor Model AT-402B, wing carry-through structure, and attaching structure is limited to 26,752 hours time-in-service.

Safe-life of Air Tractor Model AT-402B, wing carry-through structure, and attaching structure is limited to 15,511 hours time-in-service. (For S/N 402B-1015, 402B-1021 and subsequent with P/N 40059-21 Main Landing Gear installed.)

NOTE 4 VNE (Never Exceed) may be increased to 176 mph (153 knots) when Hatzell HC-B3TN-3D/T10282NS+4 propeller is installed.

DATA PERTINENT TO ALL MODELS

When operating in the restricted category, operators may approve higher maximum weights as permitted by FAA Advisory Circular No. 20-33B and Civil Aeronautic Manual No. 8. With respect to this action, the following aircraft have demonstrated satisfactory operation in the restricted category under the following conditions:

- (a) Model AT-401 at 7860 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 84 mph CAS, maximum speed 140 mph CAS.
- (b) Model AT-401A at 7860 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 84 mph CAS, maximum speed 140 mph CAS.
- (c) Model AT-401B at 7,860 lbs., 1,300 ft. altitude, outside air temperature 90°, stall speed 84 mph CAS, maximum speed 140 mph CAS.
- (d) Model AT-402 at 7860 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 84 mph CAS, maximum speed 140 mph CAS.
- (e) Model AT-402A at 7860 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 84 mph CAS, maximum speed 140 mph CAS.
- (f) Model AT-402B at 7860 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 84 mph CAS, maximum speed 140 mph CAS.
- (g) Model AT-501 at 8500 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 86 mph CAS, maximum speed 140 mph CAS.
- (h) Model AT-502 S/N 502-0001 through 502-0061, at 8500 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 86 mph CAS, maximum speed 140 mph CAS.
- (i) Model AT-502, S/N 502-0062 and subs., at 9,200 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 89 mph CAS, maximum speed 140 mph CAS.
- (j) Model AT-502A at 10,480 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 95 mph CAS, maximum speed 140 mph CAS.
- (k) Model AT-502B, at 9,400 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 90 mph CAS, maximum speed 140 mph CAS.
- (l) Model AT-503 at 10,480 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 97 mph CAS, maximum speed 148 mph CAS.
- (m) Model AT-503A at 9,200 lbs., 1,300 ft. altitude, outside air temperature 90°F, stall speed 89 mph CAS, maximum speed 140 mph CAS.

Certification Basis for Models AT-401, AT-401A, AT-401B and AT-501: FAR 21.25(a)(1). Aircraft met structural requirements of FAR 23, Basis February 1, 1965, through Amendment 23-9. Flight criteria, propulsion and systems and equipment items met the requirements of Appendix B, CAM 8, November 15, 1951, as amended through January 20, 1956.

Certification Basis for Models AT-502, AT-502A, AT-502B, AT-402, AT-402A, AT-402B, AT-503, and AT-503A: FAR 21.25(a)(1), (b)(1), (b)(2). Aircraft met structural requirements of FAR 23, Basis February 1, 1965, through Amendment 23-9. Flight criteria, propulsion and systems and equipment items met the requirements of Appendix B, CAM 8, November 15, 1951, as amended through January 20, 1956. Turbine engine effective December 28, 1984; FAR 23.33, 23.361, 23.371, 23.903(b), 23.905, 23.907, 23.929, 23.933(a), 23.939, 23.951(c), 23.954, 23.955, 23.961, 23.991(a)(2), 23.993, 23.997(d), 23.1045, 23.1091(c), 23.1093, 23.1111, 23.1121(g), 23.1141(e), and 23.1155.

- END -