

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A00009WI Revision 19 Beechcraft Defense Company 3000 September 23, 2014

TYPE CERTIFICATE DATA SHEET NO. A00009WI

This Data Sheet, which is part of Type Certificate No. A00009WI prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Beechcraft Defense Company, LLC
9709 East Central
Wichita, Kansas 67206

Type Certificate Holder Record: Raytheon Aircraft Company transferred to
Hawker Beechcraft Corporation on March 26, 2007

Hawker Beechcraft Corporation transferred to
Beechcraft Defense Company, LLC on April 12, 2013

**I. Model 3000 (PT, PF, PG, PI Series) (Military T-6A) (Acrobatic Category) (See Note 12 for restrictions)
Approved July 30, 1999**

Engine One (1) Pratt and Whitney of Canada, Ltd. of United Technologies Corp.
Pratt and Whitney Division PT6A-68 (turboprop).

Fuel JP-4, JP-5, JP-8, JET-A, JET-A1, and JET-B.

Anti-Icing Additive per MIL-I-85470 is required in concentration of
.10% - .15% by volume.

Oil (Engine and Gearbox) Pratt and Whitney Service Bulletin No. 18001 lists approved brand oils.

Engine Limits

	Shaft horsepower	N ₁ Gas Generator Speed (%)	Prop Shaft Speed (RPM)	Maximum Permissible Turbine Interstage Turbine (Deg. C)
Take Off	1100	104%	2000	820
Maximum Continuous	1100	104%	2000	820
Ground Idle	-	51% min.	-	750
Starting	-	-	-	1000 (5 sec.)
Transient	1447 (20 sec.)	104%	2200	870 (20 sec.)

All other engine limits as noted in engine TCDS E26NE

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I. Model 3000 (PT, PF, PG, PI Series) (cont'd)

<u>Propeller and Propeller Limits</u>	One Hartzell HC-E4A-2 () Hub with E9612 Blades Diameter: 97 Inches (Maximum): Minimum allowable for repair: 96 inches No further reduction permitted. Pitch Settings at: Low Pitch Stop 15.1° ± .2° Feathered 86 ± .5° Propeller limits as per TCDS P10NE			
<u>Airspeed Limits (KIAS)</u>	Maximum Operating Speed	316		
	Maximum Operating Mach No.	0.67		
	Maximum Flap Extension Speed	147		
	Landing Gear Extended	147		
	Maneuvering Speed	236		
<u>C.G. Range (Landing Gear Extended)</u>	Allowable Forward C. G. Up To 5212 Lbs-F. S. 163.8 Allowable Forward C. G. Up To 6200 Lbs-F. S. 164.8 Allowable Forward C. G. Up To 6500 Lbs-F. S. 166.8 Allowable Aft C. G. Up To 6500 Lbs-F. S. 169.4			
<u>Empty WT C.G. Range</u>	F.S. 163.9 TO F.S. 165.0			
<u>Maximum Weight</u>	Ramp	6550 LBS		
	Takeoff	6500 LBS		
	Landing	6500 LBS		
	Zero Fuel	5500 LBS		
<u>Minimum Crew</u>	One (1) Pilot			
<u>No. of Seats and Loading</u>	Pilot	(F. S. 162.8)		
	Passenger	(F. S. 218.9)		
<u>Maximum Baggage</u>	80 Lbs. (F. S. 271.0)			
<u>Fuel Capacity</u>	TANK	CAP. GAL.	USABLE GAL.	ARM
	LH	92.0	90.0	+169.9
	RH	92.0	90.0	+169.9
	See Note 1 for data on unusable and undrainable fuel.			
	Note: Fuel tanks are interconnected and function as one tank. Fuel is free to flow between tanks. Total usable fuel 90.0 + 90.0 = 180 gallons.			
<u>Oil Capacity</u>	18 Quarts total at F. S. 89.4 See Note 1 for data on undrainable oil.			
<u>Maximum Operating Altitude</u>	31,000 feet			
<u>Control Surface Movements</u>	Rudder	Right 24 °	Left 24 °	
	Rudder Tab	Right 9 °	Left 9 °	
	Elevators	Up 18 °	Down 16 °	
	Elevator Trim Tab	Up 5.5 °	Down 22 °	
	Ailerons	Up 20 °	Down 11 °	
	Aileron Trim	Biased Centering Spring		
	Wing Flap	Takeoff 23 °	Landing 50 °	
	Speedbrake	67.5 °		

I. Model 3000 (PT, PF, PG, PI Series) (cont'd)

<u>Serial Nos. Eligible</u>	PT-4 and after; PF-1 and after; PG-1 through PG-25; PI-1 and after
<u>Datum</u>	Firewall Location F.S. 118.1
<u>Leveling Means</u>	Inclinometer on canopy rail measuring -6.00 degrees
<u>Certification Basis</u>	<p>14 CFR Part 23 effective February 1, 1965 as amended by Amendment 23-1 through 23-47; 14 CFR 23.201, 23.203, 23.207 as amended by Amendment 23-50; 14 CFR Part 34 effective September 10, 1990 as amended by Amendment 34-3 effective February 3, 1999; 14 CFR Part 36 effective December 1, 1969, as amended by Amendment 36-21 effective December 28, 1995; the Noise Control Act of 1972; Exemption No. 6869; and Special Conditions 23-98-03-SC and 23-98-02-SC.</p> <p>Equivalent Safety findings have been granted as follows: 23.562; 23.777(d); 23.785(d); 23.807(b)(5); 23.841(b)(6); 23.1305(c)(5); and 23.1549(b).</p> <p>Application for Type Certificate was dated January 15, 1996. A one (1) year extension of Type Certification date was granted via FAA letter dated January 26, 1999. The Model 3000 Type Certificate was obtained by Raytheon under Delegation Option Procedures under authority of 14 CFR Part 21, Subpart J.</p>
<u>Production Basis</u>	Production Certificate No. PC-8. S/N PT-4, PT-5 and PT-8 not produced under PC-8. Authorized to issue airworthiness certificates under Organization Designation Authorization ODA-230339-CE.
<u>Equipment</u>	<p>The basic required equipment as prescribed in applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. (See Limitations Section of FAA Approved Airplane Flight Manual for Kinds of Operation equipment list.)</p> <p>All pilots and passengers must receive Beechcraft Defense Company (BDC) approved egress training and wear BDC approved flight apparel per the AFM.</p>

II. Model 3000 (PH, PN, PM Series) (Military T-6B, T-6C) (Acrobatic Category) (See Note 12 for restrictions)
Approved August 6, 2009

Engine One (1) Pratt and Whitney of Canada, Ltd. of United Technologies Corp.
Pratt and Whitney Division PT6A-68 (turboprop).

Fuel JP-4, JP-5, JP-8, JET-A, JET-A1, and JET-B.

Anti-Icing Additive per MIL-I-85470 is required in concentration of
.10% - .15% by volume.

Oil (Engine and Gearbox) Pratt and Whitney Service Bulletin No. 18001 lists approved brand oils.

Engine Limits

	Shaft horsepower	N ₁ Gas Generator Speed (%)	Prop Shaft Speed (RPM)	Maximum Permissible Turbine Interstage Turbine (Deg. C)
Take Off	1100	104%	2000	820
Maximum Continuous	1100	104%	2000	820
Ground Idle	-	51% min.	-	750
Starting	-	-	-	1000 (5 sec.)
Transient	1447 (20 sec.)	104%	2200	870 (20 sec.)

All other engine limits as noted in engine TCDS E26NE

Propeller and Propeller Limits

One Hartzell HC-E4A-2 () Hub with E9612 Blades
Diameter: 97 Inches (Maximum):
Minimum allowable for repair: 96 inches
No further reduction permitted.
Pitch Settings at:
Low Pitch Stop 15.1° ± .2°
Feathered 86 ± .5°
Propeller limits as per TCDS P10NE

Airspeed Limits (KIAS)

Maximum Operating Speed 316
Maximum Operating Mach No. 0.67
Maximum Flap Extension Speed 150
Landing Gear Extended 150
Maneuvering Speed 227

Fueled C.G. Range (Landing
Gear Extended)

Allowable Forward C.G. up to 5850 Lbs at F.S. 164.67
Allowable Forward C.G. from 5850 Lbs at 164.67 to 6900 Lbs at F.S. 165.45
Allowable Forward C.G. from 6900 Lbs up to 6950 Lbs at F.S. 165.45
Allowable Aft C.G. up to 6950 Lbs at F.S. 169.35

Zero Fuel C.G. Range (Landing
Gear Extended)

Allowable Forward C.G. Up To 5850 Lbs at F.S. 164.80
Allowable Aft C.G. Up To 5850 Lbs at F.S. 169.22

Empty Weight C.G. Range (Landing
Gear Extended)

Allowable Forward C.G. Up To 5225 Lbs at F.S. 164.92
Allowable Aft C.G. From 4850 Lbs at F.S. 164.92 To 5225 Lbs at F.S. 165.22

II. Model 3000 (PH, PN, PM Series) (cont'd)

<u>Maximum Weight</u>	Ramp	6950 LBS		
	Takeoff	6900 LBS		
	Landing	6900 LBS		
	Zero Fuel	5850 LBS		
	Empty Weight	5225 LBS		
<u>Minimum Crew</u>	One (1) Pilot			
<u>No. of Seats and Loading</u>	Pilot	(F. S. 162.8)		
	Passenger	(F. S. 218.9)		
<u>Maximum Baggage</u>	80 Lbs.	(F. S. 271.0)		
<u>Fuel Capacity</u>	TANK	CAP. GAL.	USABLE GAL.	ARM
	LH	92.0	90.0	+169.8
	RH	92.0	90.0	+169.8
	See Note 1 for data on unusable and undrainable fuel.			
	Note: Fuel tanks are interconnected and function as one tank. Fuel is free to flow between tanks. Total usable fuel 90.0 + 90.0 = 180 gallons.			
<u>Oil Capacity</u>	18 Quarts total at F. S. 89.4			
	See Note 1 for data on undrainable oil.			
<u>Maximum Operating Altitude</u>	31,000 feet			
<u>Control Surface Movements</u>	Rudder	Right 24 °	Left 24 °	
	Rudder Tab	Right 9 °	Left 9 °	
	Elevators	Up 18 °	Down 16 °	
	Elevator Trim Tab	Up 5.5 °	Down 22 °	
	Ailerons	Up 20 °	Down 11 °	
	Aileron Trim	Biased Centering Spring		
	Wing Flap	Takeoff 23 °	Landing 50 °	
	Speedbrake	67.5 °		
<u>Serial Nos. Eligible</u>	PH-2 and after;			
	PN-1 and after;			
	PM-1 and after (T-6C)			
<u>Datum</u>	Firewall Location F.S. 118.1			
<u>Leveling Means</u>	Inclinometer on canopy rail measuring -6.00 degrees			
<u>Certification Basis</u>	14 CFR Part 23 effective February 1, 1965 as amended by Amendment 23-1 through 23-47 with the following exceptions and additions:			
	14 CFR Part 23.301, 23.335, 23.337, 23.341, 23.343, 23.345, 23.347, 23.349, 23.369, 23.371, 23.391, 23.393, 23.399, 23.415, 23.441, 23.443, 23.455, 23.473, 23.499, 23.561, 23.571, 23.572, 23.573, 23.575, 23.607, 23.611, 23.629, 23.657, 23.725, 23.865, as amended by Amendment 23-48;			
	14 CFR Part 23.723, 23.735, 23.785(i), 23.853, 23.867, 23.1303, 23.1307, 23.1309, 23.1311, 23.1321, 23.1326, 23.1351, 23.1361, 23.1365, 23.1401, 23.1431, as amended by Amendment 23-49;			

II. Model 3000 (PH, PN, PM Series) (cont'd)Certification Basis (cont'd)

14 CFR Part 23.71, 23.201, 23.203, 23.207, 23.1511, 23.1521(a)(e), 23.1543, 23.1545, 23.1553, 23.1555, 23.1559, 23.1567, 23.1581, 23.1587(c)(6), as amended by Amendment 23-50;

14 CFR Part 23.779, 23.907, 23.955, 23.963, 23.965, 23.973, 23.975, 23.1041, 23.1043, 23.1045, 23.1141(a)(c)(d)(e), 23.1143, 23.1153, 23.1203(d)(e), 23.1337, as amended by Amendment 23-51;

14 CFR Part 23.901, as amended by Amendment 23-53;

14 CFR Part 23.903, as amended by Amendment 23-54.

14 CFR Part 34 effective September 10, 1990 as amended by Amendment 34-3 effective February 3, 1999;

14 CFR Part 36 effective December 1, 1969, as amended by Amendment 36-1 through 36-27 effective September 6, 2005;

The Noise Control Act of 1972;

Exemption No. 6869; Special Conditions 23-98-03-SC and 23-98-02-SC;

Equivalent Safety findings have been granted as follows:
23.562; 23.777(d); 23.785(d); 23.807(b)(5); 23.841(b)(6); 23.1303(c);
23.1305(c)(5); and 23.1549(b).

Application for Amended Type Certificate was dated May 15, 2005. An extension of Amended Type Certification date was granted via FAA letter dated May 5, 2008. The Model 3000 Amended Type Certificate was obtained by Raytheon under Delegation Option Procedures under authority of 14 CFR Part 21, Subpart J.

Production Basis

Production Certificate No. PC-8. Authorized to issue airworthiness certificates under Organization Designation Authorization ODA-230339-CE.

Equipment

The basic required equipment as prescribed in applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. (See Limitations Section of FAA Approved Airplane Flight Manual for Kinds of Operation equipment list.)

All pilots and passengers must receive Beechcraft Defense Company (BDC) approved egress training and wear BDC approved flight apparel per the AFM.

NOTES

- NOTE 1. Current weight and balance data, loading information and a list of equipment included in empty weight must be provided for each airplane at the time of original certification.
- (a) Basic empty weight includes unusable fuel of 41.7 lb. at (167.7 in.) with 14.5 lb. being undrainable.
 - (b) Basic empty weight includes engine oil of 36.35 lb. at (89.4 in.) with 2.55 lb. being undrainable.
- NOTE 2. All placards required in the Model 3000 (T-6A) FAA Approved Airplane Flight Manual P/N 133-590003-5 or Model 3000 (T-6B/T-6C) FAA Approved Airplane Flight Manual P/N 133-590066-0005 as determined applicable by aircraft serial number must be installed in the appropriate location.

- NOTE 3. A mandatory retirement time for all structural components is contained in the FAA Approved Limitations Section of the Model 3000 Maintenance Manual, P/N 133-590003-7. The limitations may not be changed without FAA engineering approval.
- NOTE 4. Inverted flight is limited to fifteen (15) seconds. Intentional zero G is limited to 5 seconds.
- NOTE 5. Airplane must be operated in accordance with Model 3000 (T-6A) FAA Approved Airplane Flight Manual P/N 133-590003-5 or Model 3000 (T-6B/T-6C) FAA Approved Airplane Flight Manual P/N 133-590066-0005 as determined applicable by aircraft serial number.
- NOTE 6. This aircraft contains a canopy fracturing system and ejection seat system that was FAA approved based on the Equivalent Level of Safety provisions on 14 CFR 21.17. Due to the uniqueness of this equipment, corresponding Operational characteristics, and need for recurring maintenance activity, all ejection seat training, maintenance, and component replacement schedules must be conducted in accordance with the FAA approved Airworthiness Limitations Section of Maintenance Manual P/N 133-590003-7.
- NOTE 7. This aircraft incorporates design features which install components in the fire zone (forward of the firewall) that normally are not installed in a fire zone (i.e. battery, nose gear actuator, tire, etc.). These components required special tests and/or analysis to insure that no additional hazard was caused when exposed to the effects of an engine fire. Any replacement of non-original components in this area must meet original airworthiness requirements.
- NOTE 8. Model 3000 serial number PT-4 and after are defined by drawing 133-000000. To return to a FAA approved configuration, the airplane must be modified in accordance with drawing 133-005001.
- NOTE 9. Model 3000 serial number PF-1 and after are defined by drawing 133-000001. To return to an FAA approved configuration, the airplane must be modified in accordance with drawing 133-005001; and AFM supplements 133-590003-49, 133-590003-51, 133-590003-55 and 133-590003-57 are required to be inserted in the AFM (133-590003-5).
- NOTE 10. PF-3 is eligible for delivery with restrictions which require changing the FAA approved category from Acrobatic to Normal per Service Instructions T-6A-0001. Airplane Flight Manual Supplement 133-590003-61 is required with this change. These restrictions will be in effect until the airplane is modified per Service Instructions T-6A-0002.
- NOTE 11. Model 3000 serial number PG-1 through PG-25 are defined by drawing 133-000006. To return to a FAA approved configuration, the airplane must be modified in accordance with drawing 133-005001.
- NOTE 12. Restrictions to Acrobatic Category are defined below and in Airplane Flight Manual Supplement P/N 133-590003-65 for airplanes equipped with the Lori oil cooler 117-389011-1 installed per drawing 133-005001 (Reference Note 14)

Additional Prohibited Maneuvers:

Intentional Zero-G or Negative G flight during or on recovery from Approved Maneuvers

Slow Roll

Stall Turn (Hammerhead)

Vertical Roll

Sustained Vertical Nose Down

Knife Edge

- NOTE 13. Prior to issuance of a U.S. Standard Airworthiness Certificate, the airplane must be modified in accordance with drawing 133-005001 for Model 3000 (T-6A) or drawing 133-005003 for Model 3000 (T-6B/T-6C) as determined applicable by aircraft serial number. In accordance with 14 CFR Part 23.1529, Instructions for Continued Airworthiness acceptable to the Administrator must be available at delivery of first aircraft or issuance of a standard certificate of airworthiness.
- NOTE 14. For aircraft equipped with Stewart Warner Oil Cooler P/N 133-389029-1 (10662E) installed per drawing 133-930002, and aircraft complying with SI T-6A-0026, Revision 1, the restrictions in AFM P/N 133-590003-65 and in note 12 herein do not apply.
- NOTE 15. Model 3000 serial number PG-26 through PG-45 are defined by drawing 133-000004. Serials PG-26 through PG-45 are not eligible for FAA approval.
- NOTE 16. Installation of Kit 133-5004 Enhanced ECS System requires installation of Kit 133-5005 Crew Oxygen System. Installation of the crew oxygen system requires FAA approval.
- NOTE 17. Company name change effective 3-26-07. The following serial numbers are manufactured under the name of Hawker Beechcraft Corporation: PT-358 through PT-518 and PN-1 through PN-168.
- NOTE 18. Model 3000 serial number PH-2 and after are defined by drawing 133-000010. To return to a FAA approved configuration, the airplane must be modified in accordance with drawing 133-005003.
- NOTE 19. Model 3000 serial number PN-1 and after are defined by drawing 133-000073. To return to a FAA approved configuration, the airplane must be modified in accordance with drawing 133-005003; and AFM supplement 133-590066-0019 is required to be inserted in the AFM (133-590066-0005).
- NOTE 20. Model 3000 serial numbers PI-1 and after are defined by drawing 133-000079. To return to a FAA approved configuration, the airplane must be modified in accordance with drawing 133-005001.
- NOTE 21. Model 3000 serial numbers PM-1 and after are defined by drawing 133-000078. To return to a FAA approved configuration, the airplane must be modified in accordance with drawing 133-005003.
- NOTE 22. Company name change effective 4/12/2013. The following serial numbers are manufactured under the name of Beechcraft Defense Company, LLC: PH-2 and after; PI-18 and after; PM-31 and after; PN-169 and after; PT-519 and after.
- NOTE 23. Model 3000 serial number PM-25 through PM-36, defined by drawing 133-000078 and field service kit 133-4034-0001, Kit – Weapon System Installation, are not eligible for FAA approval.

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