

<p style="text-align: center;">U.S. DEPARTMENT OF TRANSPORTATION</p> <p style="text-align: center;">FEDERAL AVIATION ADMINISTRATION</p> <p style="text-align: center;">TYPE CERTIFICATE DATA SHEET</p> <p style="text-align: center;">E4EA</p>	<p>TCDS NUMBER E4EA</p> <p>REVISION: 24*</p> <p>DATE: June 21, 2007</p>																																																											
	<p>PRATT & WHITNEY CANADA</p> <p>MODELS:</p> <table style="width: 100%; border: none;"> <tr> <td>PT6A-6</td> <td>PT6A-25</td> <td>PT6A-40</td> <td>PT6A-61</td> </tr> <tr> <td>PT6A-6A</td> <td>PT6A-25A</td> <td>PT6A-41</td> <td>PT6A-61A</td> </tr> <tr> <td>PT6A-6B</td> <td>PT6A-25C</td> <td>PT6A-41AG</td> <td>PT6A-65B</td> </tr> <tr> <td>PT6A-6/C20</td> <td>PT6A-27</td> <td>PT6A-42</td> <td>PT6A-65R</td> </tr> <tr> <td>PT6A-11</td> <td>PT6A-28</td> <td>PT6A-42A</td> <td>PT6A-65AR</td> </tr> <tr> <td>PT6A-11AG</td> <td>PT6A-29</td> <td>PT6A-45</td> <td>PT6A-65AG</td> </tr> <tr> <td>PT6A-15AG</td> <td>PT6A-34</td> <td>PT6A-45A</td> <td>PT6A-110</td> </tr> <tr> <td>PT6A-20</td> <td>PT6A-34B</td> <td>PT6A-45B</td> <td>PT6A-112</td> </tr> <tr> <td>PT6A-20A</td> <td>PT6A-34AG</td> <td>PT6A-45R</td> <td>PT6A-114</td> </tr> <tr> <td>PT6A-20B</td> <td>PT6A-35</td> <td>PT6A-50</td> <td>PT6A-114A</td> </tr> <tr> <td>PT6A-21</td> <td>PT6A-36</td> <td>PT6A-60</td> <td>PT6A-116</td> </tr> <tr> <td></td> <td>PT6A-38</td> <td>PT6A-60A</td> <td>PT6A-121</td> </tr> <tr> <td></td> <td></td> <td>PT6A-60AG</td> <td>PT6A-135</td> </tr> <tr> <td></td> <td></td> <td></td> <td>PT6A-135A</td> </tr> <tr> <td></td> <td></td> <td></td> <td>PT6A-52</td> </tr> </table> <p>PT6B-9 PT6B-35F PT6D-114A</p>	PT6A-6	PT6A-25	PT6A-40	PT6A-61	PT6A-6A	PT6A-25A	PT6A-41	PT6A-61A	PT6A-6B	PT6A-25C	PT6A-41AG	PT6A-65B	PT6A-6/C20	PT6A-27	PT6A-42	PT6A-65R	PT6A-11	PT6A-28	PT6A-42A	PT6A-65AR	PT6A-11AG	PT6A-29	PT6A-45	PT6A-65AG	PT6A-15AG	PT6A-34	PT6A-45A	PT6A-110	PT6A-20	PT6A-34B	PT6A-45B	PT6A-112	PT6A-20A	PT6A-34AG	PT6A-45R	PT6A-114	PT6A-20B	PT6A-35	PT6A-50	PT6A-114A	PT6A-21	PT6A-36	PT6A-60	PT6A-116		PT6A-38	PT6A-60A	PT6A-121			PT6A-60AG	PT6A-135				PT6A-135A			
PT6A-6	PT6A-25	PT6A-40	PT6A-61																																																									
PT6A-6A	PT6A-25A	PT6A-41	PT6A-61A																																																									
PT6A-6B	PT6A-25C	PT6A-41AG	PT6A-65B																																																									
PT6A-6/C20	PT6A-27	PT6A-42	PT6A-65R																																																									
PT6A-11	PT6A-28	PT6A-42A	PT6A-65AR																																																									
PT6A-11AG	PT6A-29	PT6A-45	PT6A-65AG																																																									
PT6A-15AG	PT6A-34	PT6A-45A	PT6A-110																																																									
PT6A-20	PT6A-34B	PT6A-45B	PT6A-112																																																									
PT6A-20A	PT6A-34AG	PT6A-45R	PT6A-114																																																									
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			PT6A-52																																																									

Engines of models described herein conforming with this data sheet (which is part of Type Certificate Number E4EA) and other approved data on file with the Federal Aviation Administration, meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Federal Aviation Regulations, provided they are installed, operated, and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

TYPE CERTIFICATE (TC) HOLDER: Pratt & Whitney Canada Corp.
(Formerly Pratt & Whitney Canada, Inc., Pratt & Whitney Aircraft of Canada, Ltd., and United Aircraft of Canada, Ltd.)
Longueuil, Quebec, Canada J4G 1A1

I. MODEL TYPE (see pages 2, 3, 4, 5, 6, 7)	<p>PT6A-6, -6A, -6B, -6/C20, -11, -11AG, -15AG, -20, -20A -20B, -21, -25, -25A, -25C, -27, -28, -29, -34, -34B, -34AG, -35, -36, -110, -112, -114, -114A, -116, -121, -135, -135A, PT6D-114A</p> <p>Free turbine turbo-prop / 3 axial plus one centrifugal stage compressor / single annular combustion chamber, single-stage gas generator turbine / single-stage power turbine</p>
II. MODEL TYPE (see pages 7, 8, 9, 10)	<p>PT6A-38, -40, -41, -41AG, -42, -42A, -45, -45A, -45B, -45R, -50, -60, -60A, -60AG, -61, -61A, -52</p> <p>Free turbine turbo-prop / 3 axial plus one centrifugal stage comp / single annular combustion chamber / single stage gas generator turbine / two stage power turbine</p>
III. MODEL TYPE (see pages 10-11)	<p>PT6A-65B, -65R, -65AR, -65AG</p> <p>Free turbine turbo-prop / 3 axial plus one centrifugal stage comp / single annular combustion chamber / single stage gas generator turbine / two stage power turbine</p>

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PAGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				
REV.	24	22	22	22	22	22	21	23	23	22	22	22	23	24	23	23	23	23	23	23	22	23				

LEGEND: "--" INDICATES "SAME AS PRECEDING MODEL"
 "---" NOT APPLICABLE
 NOTE: , SIGNIFICANT CHANGES ARE BLACK-LINED IN THE LEFT MARGIN.

IV. MODEL TYPE (see pages 11-12)

PT6B-9, -35F

Free turbine turboshaft (free turbine turboprop -35F) / 3 axial plus one centrifugal stage comp / single annular combustion chamber / single stage gas generator turbine / single stage power turbine

I. MODELS	PT6A-6	PT6A-6A	PT6A-6B	PT6A-11, -11AG	PT6A-20, -20A, - 20B,-6/C20
REDUCTION GEAR RATIO	.0668:1	--	--	--	--
RATINGS					
Maximum continuous at sea level					
Equivalent shaft hp.	525	--	--	528	579
Shaft hp.	500	--	--	500	550
Jet thrust, lb.	62	--	--	70(75,-11AG)	72
Output rpm	2,200	--	--	--	--
Gas generator rpm	38,100	--	--	--	--
Takeoff (5 min.) at sea level					
Equivalent shaft hp.	578	--	--	528	579
Shaft hp.	550	--	--	500	550
Jet thrust, lb.	70	--	--	--(75, 11AG)	72
Output rpm	2,200	--	--	--	--
Gas generator rpm	38,100	--	--	--	--
Maximum reverse					
Shaft hp.	---	500	--	475	500
Output rpm (max)	---	2,100	--	--	--
Output Shaft	Flanged 4.250" B.C., 8 holes .594 ± .005" diameter (See P&WC Installation Drawing)	--	--	--	--
FUEL (See NOTE 8)	Fuels conforming to P&WC Spec. CPW204 and CPW46. For PT6-AG engines CPW381 also.	--	--	--	--
OIL	See NOTE 9	--	--	--	--
OIL TANK CAPACITY, gal.	2.3	--	--	--	--
USABLE OIL TANK CAPACITY, gal.	1.5	--	--	--	--
USABLE OIL WHEN INVERTED, gal.	---	---	---	---	---
PRINCIPAL DIMENSIONS, in.					
Length	61.89	--	--	--	--
Nominal diameter	18.29	--	--	--	--
Maximum radius (excluding exhaust ports)	10.85	--	--	11.50	-10.85
WEIGHT (DRY) (includes basic engine, fuel and ignition systems but ex- cludes propeller governor (-6 and -20models only) and ignition power source)	280	284	--	339 340(-11AG)	286(20, 6/C20) 289(20A, 20B)

I. MODELS (cont.)	PT6A-6	PT6A-6A	PT6A-6B	PT6A-11, -11AG	PT6A-20, -20A, - 20B, -6/C20
CENTER OF GRAVITY (dry weight) (in.)					
Forward of mount plane	4.20	4.40	--	3.18	4.14(20, 6/C20 4.58(20A, 20B)
Aft of forward mount plane	---	---	---	---	---
Below engine centerline	0.34	--	--	0.26	0.45(20, 6/C20 20A, 20B)
Right of engine centerline	0.32	--	--	0.36	0.07(20, 6/C20 0.08(20A, 20B)
	PT6A-21,-25, -25A	PT6A-25C	PT6A-15AG, -27, -28	PT6A-29	PT6A-34,-34AG, -34B, -36
REDUCTION GEAR RATIO	.0668:1	.0663:1	--	--	--
RATINGS					
Maximum continuous at sea level					
Equivalent shaft hp.	580	783	715	778	783
Shaft hp.	550	750	680	750	--
Jet thrust, lb.	75	82	90	71	82
Output rpm	2,200	--	--	--	--
Gas generator rpm	38,100	--	--	--	--
Takeoff (5 min.) at sea level					
Equivalent shaft hp	580	783	715	778	783
Shaft hp.	550	750	680	750	--
Jet thrust, lb.	75	82	90	71	82
Output rpm	2,200	--	--	--	--
Gas generator rpm	38,100	--	--	--	--
Maximum reverse					
Shaft hp	500	720	620	750	720
Output rpm (max)	2,100	--	--	--	--
Output Shaft	Flanged 4.250" B.C., 8 holes .594 ± .005" diameter (See P&WC Installation Drawing)	--	--	--	--
FUEL (See NOTE 8)	Fuels con- forming to P&WC Spec. CPW204 & CPW46. For PT6-AG engines CPW381 also.	--	--	--	--
OIL	See NOTE 9	--	--	--	--

I. MODELS (Cont.)	PT6A-21, -25, -25A	PT6A-25C	PT6A-15AG, -27, -28	PT6A-29	PT6A-34, -34AG, -34B, -36
OIL TANK CAPACITY, gal	2.8(-25, -25A)	--	2.3	--	--
USABLE OIL TANK CAPACITY, gal.	1.5	--	--	--	--
USABLE OIL WHEN INVERTED, gal.	.25(-25, -25A)	--	---	---	---
PRINCIPAL DIMENSIONS, in.					
Length	61.89((62.91,-25,-25A)	62.91	61.89	--	--
Nominal diameter	18.29(23.00, -25, -25A)	23.00	18.29	--	--
Maximum radius (excluding exhaust ports)	10.85(16.00, -25, -25A)	16.00	11.50	--	--
WEIGHT (DRY) (includes basic engine, fuel and ignition systems but excludes propeller governor (-6, -20, and PT6D-114A models only) and ignition power source)	337 (-21) 362 (-25) 352 (-25A)	355	337	--	340 (353 -34B)
CENTER OF GRAVITY (dry weight) (in.)					
Forward of mount plane	3.04(-21) 3.00(-25, -25A)	3.00	3.04	--	-- (3.38 -34B)
Aft of forward mount plane	---	---	---	---	---
Below engine centerline	0.32(-21) 0.47(-25, -25A)	0.47	0.32	--	-- (0.37 -34B)
Right of engine centerline	0.20(-21) 0.29(-25, -25A)	0.29	0.20	--	-- (0.38 -34B)

	PT6A-110	PT6A-112	PT6A-114	PT6A-114A	PT6A-116
REDUCTION GEAR RATIO RATINGS	.0576:1	--	--	--	--
Maximum continuous at sea level					
Equivalent shaft hp	502	528	632	725	736
Shaft hp	475	500	600	675	700
Jet thrust, lb.	68	70	79	124	89
Output rpm	1,900	--	--	--	--
Gas generator rpm	38,100	--	--	--	--
Takeoff (5 min.) at sea level					
Equivalent shaft hp	502	528	632	725	736
Shaft hp.	475	500	600	675	700
Jet thrust, lb.	68	70	79	124	89
Output rpm	1,900	--	--	--	--
Gas generator rpm	38,100	--	--	--	--

I. MODELS (cont.)	PT6A-110	PT6A-112	PT6A-114	PT6A-114A	PT6A-116
Maximum reverse					
Shaft hp.	455	475	600	675	672
Output rpm (max)	1,825	--	--	--	--
Output Shaft	Flanged 4.250" B.C., 8 holes .594± .005: diameter (See PWC Installation Drawing)	--	--	--	--
FUEL (See NOTE 8)	Fuels con- forming to P&WC Spec. CPW204 & CPW46.	--	--	--	--
OIL	See NOTE 9	--	--	--	--
OIL TANK CAPACITY, gal.	2.3	--	--	--	--
USABLE OIL TANK CAPACITY, gal.	1.5	--	--	--	--
PRINCIPAL DIMENSIONS, in.					
Length, in.	61.89	--	61.89		--
Nominal diameter	18.29	--	18.29		18.06
Maximum radius (excluding exhaust ports)	11.50	--	11.73		11.50
WEIGHT (DRY) (includes basic engine, fuel and ignition systems but ex- cludes propeller governor (-6, -20, and PT6D-114A models only) and ignition power source)	343	--	359	360	348
CENTER OF GRAVITY (dry weight) (in.)					
Forward of mount plane	3.80	--	3.88	--	3.87
Aft of forward mount plane	---	---	---	--	---
Below engine centerline	0.26	--	--	--	0.25
Right of engine centerline	0.34	--	0.38	--	0.35
	PT6A-121	PT6A-135,- 135A	PT6D-114A	PT6A-35	
REDUCTION GEAR RATIO	.0576:1	--	.1875	.0663:1	
RATINGS					
Maximum continuous at sea level					
Equivalent shaft hp.	647	787	729	787	
Shaft hp.	615	750	680	750	
Jet thrust, lb.	80	93	124	93	
Output rpm	1,900	--	6,188	2,190	
Gas generator rpm	38,100	--	38,100	--	
Takeoff (5 min.) at sea level					
Equivalent shaft hp.	647	787	729	787	
Shaft hp.	615	750	680	750	
Jet thrust, lb.	80	93	124	93	
Output rpm	1,900	--	6,188	2,190	
Gas generator rpm	38,100	--	--	--	

I. MODELS (cont.)	PT6A-121	PT6A-135, -135A	PT6D-114A	PT6A-35	
Maximum reverse Shaft hp.	591	720	680	720	
Output rpm (max)	1,825	--	5,940	2,100	
Output Shaft	Flanged 4.250" B.C., 8 holes .594 ± .005" diameter (See PWC Installation Drawing	--	--	--	
FUEL (See NOTE 8)	Fuels con- forming to P&WC Spec. CPW204 & CPW46.	--	--	--	
OIL	See NOTE 9	--	--	--	
OIL TANK CAPACITY, gal.	2.3	--	--	--	
USABLE OIL TANK CAPACITY, gal.	1.5	--	--	--	
PRINCIPAL DIMENSIONS, in.					
Length	61.89	--	52.8	61.89	
Nominal diameter	18.29	--	18.29	--	
Maximum radius (excluding exhaust ports)	11.50	--	11.73	--	
WEIGHT (DRY) (includes basic engine, fuel and ignition systems but excludes propeller governor (-6, -20 and PT6D-114A models only) and ignition power source)	343	347	297	334	
CENTER OF GRAVITY (dry weight) (in.)					
Forward of mount plane	3.8	3.87	0.19	3.87	
Aft of forward mount plane	---	---	---	---	
Below engine centerline	0.26	0.25	0.31	0.25	
Right of engine centerline	0.34	0.35	0.25	0.35	
	PT6A-38	PT6A-40	PT6A-41, -41AG, -42 -42A	PT6A-45	PT6A-45A, -45B
REDUCTION GEAR RATIO	.0663:1	--	--	.0568:1	--
RATINGS					
Maximum continuous at sea level					
Equivalent shaft hp.	801	749	903	1,070	--
Shaft hp.	750	700	850	1,020	--
Jet thrust, lb.	127	122	134	127	--
Output rpm	2,000	--	--	1,700	--
Gas generator rpm	38,100	39,000	38,100	38,100	39,000
Takeoff (5 min.) at sea level					
Equivalent shaft hp.	801	749	903	1,174	1,229
Shaft hp.	750	700	850	1,120	1,173
Jet thrust, lb.	127	122	134	136	--
					140(-45B)
Output rpm	2,000	--	--	1,700	--
Gas generator rpm	38,100	39,000	38,100	38,100	39,000

II. MODELS	PT6A-38	PT6A-40	PT6A-41, -41AG -42, -42A	PT6A-45	PT6A-45A, - 45B
Maximum reverse Shaft hp.	700	--	800	900	--
Output rpm (max)	1,900	--	--	1,650	--
Output Shaft	Flanged 4.250" B.C., 8 holes .594 ± .005" diameter (See PWC Installation Drawing)	--	--	--	--
FUELS (See NOTE 8)	Fuels con- forming to PWC Spec. CPW204 & CPW46. For PT6-AG engines CPW381 also.	--	--	--	--
OIL	See NOTE 9	--	--	--	--
OIL TANK CAPACITY, gal.	2.5	--	--	--	--
USABLE OIL TANK CAPACITY, gal.	1.5	--	--	--	--
PRINCIPAL DIMENSIONS, in.					
Length	66.47	--	--	72.62	--
Nominal diameter	18.29	--	--	--	--
Maximum radius (excluding exhaust ports)	12.84	--	--	--	--
WEIGHT (DRY) (includes basic engine, fuel and ignition systems but ex- cludes propeller governor (-6, -20 and PT6D-114A models only) and ignition power source)	405	419	--	445	--
CENTER OF GRAVITY (dry weight)(in.)					
Forward of mount plane	2.49	--	--	5.38	5.38
Aft of forward mount plane	---	---	---	---	---
Below engine centerline	0.32	--	--	0.12	0.12
Right of engine centerline	0.19	--	--	0.27	0.27

II. MODELS**REDUCTION GEAR RATIO****RATINGS**

Maximum continuous at sea level

Equivalent shaft hp.

Shaft hp.

Jet thrust, lb.

Output rpm

Gas generator rpm

Takeoff (5 min.) at sea level

Equivalent shaft hp.

Shaft hp.

Jet thrust, lb.

Output rpm

Gas generator rpm

Maximum reverse

Shaft hp.

Output rpm (max)

Output Shaft

FUEL (See NOTE 8)

OIL

OIL TANK CAPACITY, gal.

USABLE OIL TANK CAPACITY,
gal.

PRINCIPAL DIMENSIONS, in.

Length

Nominal diameter

Maximum radius

(excluding exhaust ports)

WEIGHT (DRY)

(includes basic engine, fuel
and ignition systems but ex-
cludes propeller governor (-6, -20,
and PT6D-114A models only) and
ignition power source)

	PT6A-45R	PT6A-50	PT6A-60, -60A	PT6A-61, -61A	PT6A-60AG	PT6A-52
REDUCTION GEAR RATIO	.0568:1	.0438:1	.0568:1	.0663:1		.0663:1
RATINGS						
Maximum continuous at sea level						
Equivalent shaft hp.	1,070	1,022	1,113	902	1,081	898
Shaft hp.	1,020	973	1,050	850	1,020	850
Jet thrust, lb.	127	124	157	132	154	120
Output rpm	1,700	1,210	1,700	2,000	1,700	2000
Gas generator rpm	39,000	38,100	39,000	--	--	--
Takeoff (5 min.) at sea level						
Equivalent shaft hp.	1,254	1,174	1,113	902	1,113	898
Shaft hp.	1,197	1,120	1,050	850	1,050	850
Jet thrust, lb.	141	136	157	132	157	120
Output rpm	1,700	1,210	1,700	2,000	1,700	2000
Gas generator rpm	39,000	38,500	39,000	--	--	--
Maximum reverse						
Shaft hp.	900	1,120	900	800	900	800
Output rpm (max)	1,650	1,210	1,650	1,900	1,650	1900
Output Shaft	Flanged 4.250" B.C., 8 holes .594 ± .005" diameter (See PWC Installation Drawing)	Flanged 5.125" B.C., 8 holes .594 ± .005" diameter (See PWC Installation Drawing)	Flanged 4.250" B.C., 8 holes .594 ± .005" diameter (See PWC Installation Drawing)	--	--	Flanged 4.250" B.C., 8 holes .594 ± .005" diameter (See PWC Installation Drawing)
FUEL (See NOTE 8)	Fuels con- forming to P&WC Spec. CPW204 & CPW 46. For PT6-AG engines CPW381 also.	--	--	--	--	See PWC SB 13044 for approved fuel types.
OIL	See NOTE 9	--	--	--	--	--
OIL TANK CAPACITY, gal.	2.5	3.0	2.5	--	--	--
USABLE OIL TANK CAPACITY, gal.	1.5	1.0	1.5	--	--	--
PRINCIPAL DIMENSIONS, in.						
Length	72.62	79.89	72.09	66.76	72.09	66.76
Nominal diameter	18.29	--	18.29	--	--	--
Maximum radius	12.84	15.44	12.84	--	--	--
(excluding exhaust ports)						
WEIGHT (DRY)	459	622	487	443	489	449
(includes basic engine, fuel and ignition systems but ex- cludes propeller governor (-6, -20, and PT6D-114A models only) and ignition power source)						

II. MODELS (continued)

	PT6A-45R	PT6A-50	PT6A-60, -60A	PT6A-61, -61A	PT6A-60AG	PT6A-52
CENTER OF GRAVITY (dry weight) (in.)						
Forward of mount plane	5.38	---	5.22	2.630	5.22	2.51
Aft of forward mount plane	---	See NOTE 17	---	---	---	---
Below engine centerline	0.12	See NOTE 17	.300	--	--	.260
Right of engine centerline	0.27	See NOTE 17	.28	.29	.28	.330

III. MODELS	PT6A-65B	PT6A-65R	PT6A-65AR	PT6A-65AG	
REDUCTION GEAR RATIO	.0568:1	--	--	--	
RATINGS					
Maximum continuous at sea level					
Equivalent shaft hp.	1,249	--	1,298	--	
Shaft hp.	1,173	--	1,220	--	
Jet thrust, lb.	189	--	194	--	
Output rpm	1,700	--	--	--	
Gas generator rpm	39,000	--	--	--	
Takeoff (5 min.) at sea level					
Equivalent shaft hp.	1,249	1,459	1,509	1,381	
Shaft hp.	1,173	1,376	1,424	1,300	
Jet thrust, lb.	189	209	214	202	
Output rpm	1,700	--	--	--	
Gas generator rpm	39,000	--	--	--	
Alternative takeoff (5 min. at sea level)					
Equivalent shaft hp.	---	1,308	--	---	
Shaft hp.	---	1,230	--	---	
Jet thrust, lb.	---	195	--	---	
Output rpm	---	1,700	--	---	
Gas generator rpm	---	39,000	--	---	
Maximum reverse					
Shaft hp.	900	--	--	--	
Output rpm (max)	1,650	--	--	--	
Output Shaft	Flanged 4.250" B.C., 8 holes .594 ± .005" diameter (See PWC Installation Drawing)	--	--	--	
FUEL (See NOTE 8)	Fuels con- forming to P&WC Spec. CPW204 & CPW46. For PT6- AG engine CPW381 also.	--	--	--	
OIL	See NOTE 9	--	--	--	
OIL TANK CAPACITY, gal.	2.5	--	--	--	
USABLE OIL TANK CAPACITY, gal.	1.5	--	--	--	
PRINCIPAL DIMENSIONS, in.					
Length	74.79	--	--	--	
Nominal diameter	18.29	--	--	--	
Maximum radius	12.84	--	--	--	

III. MODELS (continued)

WEIGHT (DRY)
 (includes basic engine, fuel and ignition systems but excludes propeller governor (-6,-20, and PT6D-114A models only) and ignition power source)

CENTER OF GRAVITY
 (dry weight) (in.)

Forward of mount plane
 Aft of forward mount plane
 Below engine centerline
 Right of engine centerline

	PT6A-65B	PT6A-65R	PT6A-65AR	PT6A-65ag	
	495	496	501	--	
	3.75	--	--	--	
	---	---	---	---	
	.29	--	--	--	
	.17	--	--	--	

IV. MODELS

REDUCTION GEAR RATIO
RATINGS

Maximum continuous at sea level

Equivalent shaft hp.
 Shaft hp.
 Jet thrust, lb.
 Output rpm
 Gas generator rpm

Takeoff (5 min.) at sea level

Equivalent shaft hp.
 Shaft hp.
 Jet thrust, lb.
 Output rpm
 Gas generator rpm

Maximum reverse

Shaft hp.
 Output rpm (max)

OUTPUT SHAFT

FUEL (See NOTE 8)

OIL

OIL TANK CAPACITY, gal.

USABLE OIL TANK CAPACITY, gal.

PRINCIPAL DIMENSIONS, in.

Length
 Nominal diameter
 Maximum radius
 (excluding exhaust ports)

WEIGHT (DRY)

(includes basic engine, fuel and ignition systems but excludes propeller governor (-6,-20, and PT6A-114A models only) and ignition power source)

	PT6B-9	PT6B-35F			
	.1889:1	.1875:1			
	---	684			
	500	650			
	124	---			
	6,230	6,188			
	38,100	--			
	---	684			
	550	650			
	136	---			
	6,230	6,188			
	38,100	--			
	---	---			
	---	---			
	SAE Aero Std. 84d Spline 1.5 in P.D.	36 teeth, 1.5 in. P.D. See Installation Manual			
	Fuels conforming to P&WC Spec. CPW204 & CPW46.	--			
	See NOTE 9	--			
	2.3	--			
	1.5	--			
	58.68	--			
	18.06	--			
	10.85	12.6			
	255	305			

IV. MODELS (continued)
CENTER OF GRAVITY
 (dry weight) (in.)

Forward of mount plane
 Aft of forward mount plane
 Below engine centerline
 Right of engine centerline

	PT6B-9	PT6B-35F			
Forward of mount plane	---	---			
Aft of forward mount plane	22.08	23.56 RH/23.3 LH*			
Below engine centerline	0.13	.52 RH/.63 LH			
Right of engine centerline	0.52	.16 RH/.15 LH			

CERTIFICATION BASIS

Applicable to the following engines and serial numbers: FAR 21.29, CAR 13. (Except Serial numbers shown below which were certified under FAR 21.21, FAR 33-5 NOTE 19)

<u>MODEL</u>	<u>S/N</u>	<u>DATE OF APPLICATION</u>	<u>DATE TYPE CERTIFICATE NO. E4EA ISSUED/REVISED</u>
PT6A-6	All	June 4, 1962	December 31, 1963
PT6A-6A	All	April 6, 1965	May 28, 1965
PT6A-6B	All	November 30, 1967	December 20, 1967
PT6B-9	All	June 4, 1962	May 28, 1965
PT6A-11	All	August 19, 1977	September 16, 1977
PT6A-11AG	All	January 10, 1979	May 17, 1979
PT6A-15AG	All	January 9, 1978	January 27, 1978
PT6A-20	All	April 9, 1965	October 29, 1965
PT6A-20A	All except 024103-024160	February 19, 1973	March 9, 1973
PT6A-20B	All	August 20, 1973	October 2, 1973
PT6A-6/C20	All	February 19, 1973	March 9, 1973
PT6A-21	All	December 2, 1974	December 10, 1974
PT6A-25	All except 058013-058018 058025-058040 058042-058047 058049-058055 058059-058064 058068-058073 058077-058084 058089-058204	May 5, 1976	May 6, 1976
PT6A-25A	All	December 13, 1976	December 28, 1976
PT6A-25C	All	March 5, 1990	June 8, 1990
PT6A-27	All except 044878-040879 040883-040884 040894-040895 040899-040921 040929-040934 040937-040943 040946-040949 040982-040988 040993-040999 041006-041007 041015-041021 041027-041032 041036 041041-041044 041050-041053 041060-041063 041067-041098 041105-041110 041113-041146 041152-041156 041162-041175 041180-041194 041199-041201	November 15, 1966	December 20, 1967

PT6A-28	All except 050676-050925 050928-050934	January 27, 1969	March 11, 1969
PT6A-29	All	October 6, 1967	October 28, 1968
PT6A-34	All except 056071-056075 056080-056081 056086-056090 056098-056107	April 29, 1971	November 11, 1971
PT6A-34B	054011, 054012 only prior to 054007	July 20, 1976	August 4, 1976
PT6A-34AG	All	February 3, 1977	February 14, 1977
PT6A-35	All	October 24, 2001	May 29, 2002
PT6B-35F	All	August 10, 1979	March 26, 1982
PT6A-36	All	December 13, 1973	December 13, 1973
PT6A-38	079156, 079157 only prior to 079153	May 12, 1975	May 30, 1975
PT6A-40	All	April 19, 1983	July 13, 1983
PT6A-41	All	August 30, 1973	October 2, 1973
PT6A-41AG	All	December 21, 1978	May 17, 1979
PT6A-42	All	July 11, 1979	October 12, 1979
PT6A-42A	All	September 21, 1998	December 4, 1998
PT6A-45	All	May 12, 1975	May 30, 1975
PT6A-45A	All	March 25, 1976	April 22, 1976
PT6A-45B	All	March 2, 1979	March 29, 1979
PT6A-45R	All	June 25, 1980	August 1, 1980
PT6A-50	All	September 21, 1976	October 22, 1976
PT6A-60	All	April 20, 1982	March 15, 1983
PT6A-60A	All	April 19, 1983	November 7, 1983
PT6A-60AG	All	October 1, 1996	October 10, 1996
PT6A-61	All	April 20, 1982	March 15, 1983
PT6A-61A	All	January 6, 1984	May 1, 1985
PT6A-65B	All	April 20, 1982	September 17, 1982
PT6A-65R	All	April 20, 1982	September 17, 1982
PT6A-65AR	All	January 6, 1984	May 1, 1985
PT6A-65AG	All	July 23, 1987	August 19, 1987
PT6A-110	All	August 8, 1980	February 15, 1981
PT6A-112	All	October 12, 1978	October 30, 1978
PT6A-114	All	December 21, 1982	May 21, 1984
PT6A-114A	All	October 4, 1989	March 19, 1990
PT6A-116	All	October 4, 1984	May 1, 1985
PT6A-121	All	April 12, 1982	August 3, 1982
PT6A-135	All	September 9, 1977	September 12, 1977
PT6A-135A	All	February 3, 1982	April 29, 1982
PT6D-114A	All	October 30, 1996	September 22, 1997
PT6A-52	All	May 26, 2006	May 31, 2007

IMPORT REQUIREMENTS:

To be considered eligible for installation on U.S. registered aircraft, each engine to be exported to the United States shall be accompanied by a Certificate of Airworthiness for export or certifying statement endorsed by the exporting cognizant civil airworthiness authority which contains the following language:

- (1) This engine conforms to its United States type design (Type Certificate Number E4EA) and is in a condition for safe operation.
- (2) This engine has been subjected by the manufacturer to a final operational check and is in a proper state of airworthiness.

Reference FAR Section 21.500, which provides for the airworthiness acceptance of aircraft engines or propellers manufactured outside of the U.S. for which a U.S. type certificate has been issued.

Additional guidance is contained in FAA Advisory Circular 21.23, Airworthiness Certification of Civil Aircraft, Engines, Propellers and Related Products, Imported into the United States.

NOTES

NOTE 1.

Maximum permissible temperatures:

	PT6A-20, -20A, -20B, -6/C20 PT6A-6, -6A, -6B, PT6A-28, -29	PT6B-9	PT6A-11, -11AG
	Measured Rated Turbine Temperature as Indicated by the Average of 24 Gas Temp. Thermocouples	Measured Rated Inter-Turbine Temperature as Indicated by the Average of 8 or 10 Gas Temp. Thermocouples	--
Takeoff	1821°F (994°C) 1382°F(750°C) (PT6A-20,-20A,-20B,-6/C20)	1382°F (750°C)	1292°F (700°C)
Maximum Continuous	1745°F (952°C) 1382°F(750°C) (PT6A-20,-20A,-20B,-6/C20)	1382°F (750°C) 1319°F (715°C) (PT6B)	1292°F (700°C)
Starting Transient (2 sec.)	1900°F (1038°C) 1994°F(1090°C) (PT6A-20,-20A,-20B,-6/C20)	1994°F (1090°C)	--

	PT6A-21	PT6A-25, -25A	PT6A-15AG, -27, -112, -121
	Measured Rated Inter-Turbine Temperature as Indicated by the Average of 8 or 10 Gas Temp. Thermocouples	--	--
Takeoff	1283°F (695°C)	1283°F (695°C)	1336°F (725°C)
Maximum Continuous	1283°F (695°C)	1283°F (695°C)	1336°F (725°C)
Starting Transient (2 sec.)	1994°F (1090°C)	--	1994°F (1090°C)

	PT6A-34, -34B, -34AG, -25C	PT6A-35,-36,-114,-114A,- 116,-135,-135A,-PT6B- 35F,PT6D-114A	PT6A-110
	Measured Rated Inter-Turbine Temperature as Indicated by the Average 8 or 10 Gas Temp. Thermocouples	Measured Rated Inter-Turbine Temperature as Indicated by the Average of 8 Gas Temp. Thermocouples	--
Takeoff	1454°F (790°C)	1481°F (805°C)	1265°F (685°C)
Maximum Continuous	1454°F (790°C)	1481°F (805°C)	1265°F (685°C)
Starting Transient (2 sec.)	1994°F (1090°C)	--	--

	PT6A-38	PT6A-41, -41AG	PT6A-45	PT6A-42, -42A, -45A,-45B, -50, -40
	Measured Rated Inter-Turbine Temperature as Indicated by the Average of 8 Gas Temp. Thermocouples	--	-- (8 or 10)	--
Takeoff	1301°F (705°C)	1382°F (750°C)	1400°F (760°C)	1472°F (800°C)
Maximum Continuous	1301°F (705°C)	1382°F (750°C)	1400°F (760°C)	1472°F (800°C)
Starting Transient (5 sec.)	1832°F (1000°C)	--	--	--
Alternate Takeoff	---	---	---	---

NOTE 1.(continued)	PT6A-45R	PT6A-60	PT6A-61	PT6A-60A, -61A, -60AG, -52
	Measured Rated Inter-Turbine Temperature as Indicated by the Average of 8 Gas Temp. Thermocouples	Measured Rated Inter-Turbine Temperature as Indicated by the Average of 8 or 10 Gas Temp. Thermocouples	--	--
Takeoff	1553°F (845°C)	1472°F (800°C)	--	1508°F(820°C)
Maximum Continuous	1494°F (812°C)	1472°F (800°C)	--	1508°F (820°C) 1472°F(775°C)(-60AG)
Starting Transient (5 sec.)	1832°F (1000°C)	--	--	--
Alternate Takeoff	1472°F (800°C)	---	---	---

	PT6A-65B	PT6A-65R	PT6A-65AR	PT6A-65AG
	Measured Rated Inter-Turbine Temperature as Indicated by the Average of 8 or 10 Gas Temp. Thermocouples	--	--	--
Takeoff	1508°F(820°C)	1553°F(845°C)	1571°F (855°C)	1508°F (820°C)
Maximum Continuous	1490°F (810°C)	1539°F (835°C)	1544°F (840°C)	1508°F (820°C)
Starting Transient	1832°F (1000°C)	--	--	--
Alternate Takeoff	---	1490°F (810°C)	1508°F (820°C)	---

All except:PT6A-40,-41,-42,-42A,-45,-45A,-45B,-45R,-60, -60A,-60AG,-61,-61A,-65AG,-65AR,-65B, and -65R models, Oil Temperature Continuous minus 40°F (-40°C) to 210°F (99°C) except for MIL-L-7808 (where approved; See NOTE 9) for which the maximum allowable temperature is 185°F (85°C). Limited periods of 10 minutes of 220°F (104°C) are allowable, except on A-25, A-25A, A-25C, A-11 and A-11AG (5 minute maximum), and A-50 (15 minutes maximum).

PT6A-40,-41,-42,-42A, and -61A, Oil Temperature Continuous minus 40°F(-40°C) to 220°F(104°C). Maximum ground operation 230°F(110°C).

PT6A-45,-45A,-45B,-45R,-52, -60,-60A,-60AG, -61, -65AG,-65AR,-65B,-65R, Oil Temperature Continuous minus 40°F(-40°C) to 230°F(110°C).

Fuel temperature maximum fuel pump inlet of 135°F (57°C). Fuel temperature minimum fuel pump inlet of -65°F (-54°C) or 12 centistokes.

NOTE 2. Fuel and Oil Pressure Limits:

Fuel: Minimum pressure at inlet to the engine fuel system shall not be less than 5 p.s.i. above true vapor pressure of the fuel. For emergency operation, with airframe boost pump inoperative, it must be such that vapor liquid ratio does not exceed 0.1 for continuous operation and does not exceed 0.3 for more than 10 hours in a pump overhaul life.

Oil: Operating range

PT6A-6, -6A, -6B, -20, -20A, -20B, -6/C20, PT6B-9

28000 rpm gas generator speed and above:

65-85 p.s.i.g., 80 (max. B-9)

Below 28000 rpm gas generator speed:

40 p.s.i.g. (min.)

PT6A-11, -11AG, -15AG, -21, -27, -28, -29, -50, -110, -112, -121

27000 rpm gas generator speed and above, with an oil temperature of 140-158°F:

80-100 p.s.i.g.

Below 27000 rpm gas generator speed:

40 p.s.i.g. (min) 60 (-50)

NOTE 2. Oil: Operating range
(Cont.)

PT6A-25, -25A, -25C

27000 rpm gas generator speed and above, with an oil temperature of 140-160°F:

65-85 p.s.i.g. (75-95(A-25C))

Below 27000 rpm gas generator speed:

40 p.s.i.g. (min)

PT6A-34, -34B, -34AG, -35, -135, -135A, -36, -114, -114A, -116, PT6B-35F, PT6D-114A

27000 rpm gas generator speed and above, with an oil temperature of 140-158°F:

85-105 p.s.i.g. (75-100(B-35F))

Below 27000 rpm gas generator speed:

40 p.s.i.g. (min)

PT6A-38, -40, -41, -41AG, -42, -42A

27000 rpm gas generator speed and above, with an oil temperature of 140-160°F:

85-135 p.s.i.g. (PT6A-38)

105-135 p.s.i.g. (PT6A-41, -41AG)

100-135 p.s.i.g. (PT6A-40, -42, -42A)

Below 27000 rpm gas generator speed:

60 p.s.i.g. (min)

PT6A-45, -45A, -45B, -45R, -52, -60, -61, -65B, -65R, -60A, -60AG, -61A, -65AR, -65AG

27000 rpm gas generator speed and above, with an oil temperature of 140-160°F:

90-135 p.s.i.g.

Below 27000 rpm gas generator speed:

60 p.s.i.g. (min)

NOTE 3. The engine ratings are based on static sea level condition 29.92 in Hg pressure, compressor intake screen installed, no external accessory loads and no airbled. These ratings are available up to the following compressor inlet air (dry) temperatures.

	Maximum Continuous	Takeoff		Maximum Continuous	Takeoff
PT6A-6, -6A, -6B	64°F	70°F	PT6A-45R	92°F	73, 52(1)°F
PT6A-20, -20A, -20B, -6/C20	70	70	PT6A-50	90	59, 93(2)
PT6A-11, -PT6A-11AG	108 90	108 90	PT6A-60, -60A	77	77
PT6A-21	91	91	PT6A-60AG	63	79
PT6A-25, -25A	93	93	PT6A-61, -61A	115	115
PT6A-25C	87	87			
PT6A-15AG, -27	71	71	PT6A-65B	101	101
PT6A-28	70	70	PT6A-65R	101	82, 76(1)
PT6A-29	73	73	PT6A-65AR	101	82, 84(1)
PT6A-34, -34B, -34AG	86	86	PT6A-65AG	101	71
PT6A-35, -135A	93	93			
PT6A-36	97	97	PT6A-110	101	101
PT6A-38	102	102	PT6A-112	133	133
PT6A-40	135	135	PT6A-114	136	136
PT6A-41, -41AG, -42, -42A	106(86, -42A)	106	PT6A-114A	115	115

	Maximum Continuous	Takeoff		Maximum Continuous	Takeoff
PT6A-45	79	59	PT6A-116	105	105
PT6A-45A	79	46	PT6A-121	91	91
PT6A-45B	84	52	PT6A-135	85	85
			PT6B-9	72	77
			PT6B-35F	110	110
			PT6D-114A	104	104
			PT6A-52	142	142

1. Alternative Takeoff
2. Takeoff with Augmentation Fluid

NOTE 4. Accessory Drive Provisions: (All Models except -50)

The following accessory drive provisions are available and are included in the basic engine weight.

Driven by Gas Generator Turbine	Rotating Facing Drive Pad	Speed Ratio (to Turbine)	Maximum Torque		Maximum Overhang (in. - lbs.)
			Continuous	Static	
Tachometer, Accessory Gearbox	CC	0.112	7	100	10
Starter and/or Generator	C	0.293	170	1600 250 (38, 40, 41, 42, 42A,45, 45A, 45B, 45R, 52, 60, 60A, 60AG, 61, 61A, 65B, 65R, 65AR, 65AG, 114, 114A, B- 35F, D-114A)	150
Vacuum Pump	CC	0.103	60	800	25
Hydraulic Pump	CC	0.203	150	800	25
Aircraft Accessory Drive	C	0.321	135	800	25

Driven by Power Turbine	Rotating Facing Drive Pad	Speed Ratio (to Turbine)	Maximum Torque		Maximum Overhang (in. - lbs.)
			Continuous	Static	

Tachometer (Tachometer and overspeed governor for PT6A-6,-6A,-6B and-20 only)	C	0.1264(PT6A-15AG, -25C,-27,-28,-29,-34,- 34B,-34AG,-35,-36,- 38,-40,-41,-41AG,- 42,-42A,-52, -61,- 61A) 0.1263 (B-35F); 0.1273(PT6A-6,-6A,- 6B,-11,-11AG,-20,- 20A,-20B,-6/C20,-21,- 25,-25A,-110,-112 114, 114A, -116, 121,- 135,-135A); 0.1405 (45, 45A, 45B, 45R, 60, 60A, 60AG, 65B, 65R, 65AR, 65AG)	7	100	10
--	---	---	---	-----	----

NOTE 4. (Cont'd)					
Driven by Power Turbine	Rotating Facing Drive Pad	Speed Ratio (to Turbine)	Maximum Torque		Maximum Overhang (in. - lbs.)
			Continuous	Static	
Propeller Governor and Overspeed Governor*	C	0.1264(PT6A-15AG, -25C,-27,-28,-29,-34,-34B,- 34AG,-35,-36,-38,-40,-41,- 41AG,-42,-42A,-52,-61,-61A) 0.1273(PT6A-6,-6A,-6B,-11,- 11AG,-20,-20A,-20B,-6/C20,- 21,-25,-25A,-110,-112 114, 114A, -116, 121,-135,- 135A); 0.1405(PT6A-45, 45A, 45B, 45R, 60, 60A, 60AG, 65B, 65R, 65AR, 65AG)	50	850	25
* May be an optional drive, which is not included in the basic engine weight, is included.					
The hydraulic pump drive requires the aircraft accessory drive to complete the train.					

<p>Cabin pressurization may be provided by the approved combination of the Beech Aircraft Corporation Gearbox No. 50-9903 with the Godfrey Engineering type 9 cabin supercharger, mounted directly on the accessories gearbox.</p> <p>PT6A-38,-40,-41,-41AG,-42,-42A are approved for operation with an accessory mounted on the reduction gearbox and belt driven from the propeller assembly provided that the accessory is mounted and driven in accordance with the location dimensions and weight prescribed in Sheet 5 of Drawing Number 3018500, revision dated August 20, 1973.</p> <p>C = Clockwise CC = Counterclockwise</p>
--

Accessory Drive Provisions: (PT6A-50 only)

Driven by Gas Generator Turbine	Rotating Facing Drive Pad	Speed Ratio (to Turbine)	Maximum Torque		Maximum Overhang (in. - lbs.)
			Continuous	Static	
Tachometer Accessory Gearbox	CC	0.112	7	100	10
Starter and/or Generator	C	0.293	170	1600	230
Hydraulic Pump*	CC	0.204	150	800	30
Driven by Power Turbine					
Tachometer	CC	0.1400	7	100	10
Alternator	C	0.529	120	1600	105
Prop. Governor	CC	0.1400	100	1700	40
Prop. Overspeed Governor	CC	0.1400	50	850	25

NOTE 5. External airbleed shall not exceed 5.25%, except as specified in specific installation manuals. A maximum of 1.5 lbs. Per minute may be bled during starting. Bleed air meets the requirements of Paragraph 3.18 of MIL-E-5007C.

NOTE 6. Maximum Allowable Torque:
The Maximum allowable steady state and acceleration torque, as measured by the torquemeter, are:

<u>Model</u>	<u>Continuous lb. Ft.</u>	<u>Transient Acceleration lb. Ft.</u>
PT6A-11, 11AG	1194	1500
PT6A-6, 6A, 6B, 20, 20A, 20B, 6/C20, 21 25, 25A	1315	1500
PT6A-15AG, 27	1628	2100
PT6A-28	1786	2100
PT6A-29, 34, 34B, 34AG, 35, 36, 25C	1970	2100
PT6A-38	1970	2750
PT6A-40	2230	2750
PT6A-41, 41AG, 42, 42A	2230	2750
PT6A-45, 45A, 45B	3625	5100
PT6A-45R	3625	5100
PT6A-50	4860	5900
PT6A-135, 135A	2080	2400
PT6B-9	464	---
PT6A-112	1480	1900
PT6A-110	1313	1700
PT6A-60, 60A, 60AG	3625	5100
PT6A-61, 61A	2230	2750
PT6A-65B	3625	5100
PT6A-65R	4250 (3800 Alternative Takeoff)	5100
PT6A-114, 114A	1980	2400
PT6A-121	1710	2200
PT6B-35F	570	658
PT6A-65AR	4400(3800 Alternative Takeoff)	5100
PT6A-116	1940	2400
PT6A-65AG	3800	5100
PT6D-114A	610	740
PT6A-52	2230	2750

NOTE 7. The maximum output shaft overspeed limit is 110 percent (except 100% for PT6A-38, 41, 41AG, 42 and 42A only) at all ratings and may be employed for sustained periods in emergencies. The normal steady state output shaft operating limit speeds are defined as 2200 rpm (100%) for the PT6A-6, 6A, 6B, 6/C20, 11, 11AG, -15AG, -20, -20A, -20B, -21, -25, -25A, -25C, -27, -28, -29, -34, -34B, -34AG, -36, 2190 rpm (99.6%) for the PT6A-35, 2000 rpm (90.7%) for the PT6A-38, -40, -41, -41AG, -42, -42A, -52, -61, and -61A, 1900 rpm (100%) for the PT6A-45, -45A, -45B, -45R, -65B, -65R, -60, -60A, -60AG, -65AR, -65AG, -135, 135A, 110, 112, 114, 114A, 121, and 116, 1210 rpm (100%) for the PT6A-50, 6230 rpm (100%) for the PT6B-9 and 6188 rpm (100%) for the PT6B-35F and PT6D-114A and is the normal steady state operating limit. The normal steady state operating limit speed rises linearly as power is decreased, reaching a maximum of 105% at idle power for the PT6B-9.

100% gas generator speed is defined as 37,468 rpm. Unlimited and limited gas generator speeds are:

Model	Unlimited Speed, rpm	Limited Speed, rpm	Duration
PT6A-6,-6A,-6B,-11,-11AG,-20,-20A,-20B,-6/C20,-21,-25,-25A,-25C,-27,-28,-29,-34,-34B,-34AG,-36,-38,-41	38,100 (101.7%)	38,500 (102.8%)	10 Sec
PT6A-35,-110,-112,-114,-114A,-116,-121,-135,-135A,PT6D-114A	38,100 (101.7%)	38,500 (102.8%)	2 Sec
PT6A-50	38,500 (102.8%)	---	---
PT6A-40,-42,-42A	38,100 (101.7%)	39,000 (104.1%)	10 Sec
PT6A-45,-45A,-45B,-45R,-52,-60,-60A,-60AG,-61,-61A,-62,-65B,-65R,-65AR,-65AG	39,000 (104.1%)	---	---

NOTE 8. Emergency use of MIL-G-5572, Grades 80/07, 91/98, 100/130 and 115/145 is permitted for a total time period not exceeding 150 hours during any overhaul period. It is not necessary to purge the unused fuel from the system when switching fuel type.

NOTE 9. The following oils are eligible for these engines: PWC PT6 Engine Service Bulletin Nos. 1001, 1601, 3001, 4001, 12001 and 13001 list approved brand oils.

NOTE 10. These engines meet FAA requirements for operation in icing conditions when the intake system conforms with the PWC Installation Manual instruction for inertial separation of snow and icing particles; when the alternative approved alcohol system is used, flight in visible moisture is restricted as specified in the PWC Installation Manual. These engines also meet FAA requirements for adequate disk integrity and rotor blade containment and do not require external armoring.

NOTE 11. For reversing application the PT6A-6A and PT6A-20 engines must be equipped with Woodward Propeller Governor Type X210XXX.

NOTE 12. Fuel controls approved for each engine model are listed in the applicable Parts Catalog.

NOTE 13. The above models incorporate the following characteristics:

<u>Model</u>	<u>Characteristics</u>
PT6A-6	Basic model
PT6A-6A	Incorporates provisions for reversing propeller.
PT6A-6B	Incorporates provisions for reversing propeller, PT6A-20 mechanism.
PT6B-9	Single stage reduction gearing. (Output shaft speed 6,230 r.p.m.)
PT6A-20	Maximum continuous rating equal to takeoff. Provisions for reversing.
PT6A-20A	Similar to PT6A-20 except for exhaust port configuration and optional propeller reversing system.
PT6A-20B	Similar to PT6A-20 except for optional propeller reversing system.
PT6A-11	Similar to PT6A-21 except derated.

NOTE 13.
(Cont.)

<u>Model</u>	<u>Characteristics</u>
PT6A-11AG	Similar to PT6A-11, intended for agricultural aviation. Permissible rotor component lives, overhaul, inspection intervals and fuel requirements are listed in PWC Engine Service Bulletin Nos. 12102, 12103, and 12144 respectively.
PT6A-15AG	Similar to PT6A-27, intended for agricultural aviation. Permissible rotor component lives, overhaul inspection intervals and fuel requirements are listed in PWC Engine Service Bulletin Nos. 12102, 12103, and 12144 respectively.
PT6A-6/C20	Similar to PT6A-20 except this configuration previously PT6A-6 converted to PT6A-20 by service bulletin.
PT6A-21	Similar to PT6A-27 except derated.
PT6A-25	Similar to PT6A-27 except for modifications required for inverted flight optional torque controller, and aluminum alloy castings.
PT6A-25A	Similar to PT6A-25 except for magnesium alloy major castings in place of aluminum alloy.
PT6A-25C	Similar to PT6A-25A except for A-34 hot section; T-3B first stage compressor blades and long inducer propeller; A-100 large bore reduction gears; and A-25A installation features. Ratings and limits are the same as the A-34.
PT6A-27	Features higher ratings, revised engine parts and integrated propeller reversing control.
PT6A-28	Similar to PT6A-27 except for higher inter-turbine temperature limit.
PT6A-29	Features higher ratings, revised first stage reduction gearing.
PT6A-34	Similar to PT6A-27 except incorporates a compressor turbine similar to PT6T-3 for higher ratings.
PT6A-34B	Similar to PT6A-34, except for aluminum alloy major castings in place of magnesium alloy.
PT6A-34AG	Similar to PT6A-34, intended for agricultural aviation. Permissible rotor component lives, overhaul, inspection intervals and fuel requirements are listed in P&WACL Engine Service Bulletin Nos. 1302, 1303, and 1344 respectively.
PT6A-35	Similar to PT6A-135 but incorporating the reduction gearbox of the PT6A-34.
PT6A-36	Similar to PT6A-34 except for increased turbine inlet temperature limits.
PT6A-38	Similar to PT6A-41 except derated.
PT6A-40	Similar to PT6A-42 except for increased flat rating and manual fuel control override.
PT6A-41	Features an enlarged compressor and two stage power turbine for higher ratings.
PT6A-41AG	Similar to PT6A-41, intended for agricultural aviation.
PT6A-42	Similar to PT6A-41 except for increased cruise rating and increased inter-turbine temperature limits with improved compressor and reduced loss exhaust ducts.
PT6A-42A	Same as PT6A-42 except for addition of fuel control unit with manual override, compressor wash ring, accessory gearbox chip detector, P3 filter drain, and oil filler neck with check valve.
PT6A-45	Similar to PT6A-41 except for increased ratio reduction gearbox and higher ratings.
PT6A-45A	Similar to PT6A-45 except for increased takeoff rating and increased inter-turbine temperature limits.
PT6A-45B	Similar to PT6A-45A except for increased augmentation fluid flow for takeoff rating to a higher air inlet temperature.
PT6A-45R	Similar to PT6A-45B except for provision for automatic power increase from alternate takeoff power to takeoff power.
PT6A-50	Similar to PT6A-45A except for new reduction gearbox.
PT6A-112	Similar to PT6A-27 except incorporates PT6A-41 fuel system concepts and PT6A-135 reduction gearbox.
PT6A-114	Similar to PT6A-135 with a single port exhaust and PT6A-41 fuel system concepts and PT6A-135 reduction gearbox.
PT6A-114A	Throttle push version of -114 incorporating the -135A compressor, and a new strengthened propeller shaft.
PT6A-135	Similar to PT6A-36 except for new reduction gearbox and higher cruise rating.
PT6A-135A	Similar to PT6A-135 except for increased thermodynamic capability compressor.
PT6A-110	Similar to PT6A-11 except for incorporation of PT6A-135 reduction gearbox.
PT6A-65B	Similar to PT6A-45 except for additional axial compressor stage and increased diameter gas producer turbine wheel.
PT6A-65R	Identical to PT6A-65B except for reserve takeoff rating.

NOTE 13.
(Cont'd)

<u>Model</u>	<u>Characteristics</u>
PT6A-65AR	Upated maximum continuous power PT6A-65R.
PT6A-65AG	Similar to PT6A-65, intended for Agricultural Aviation. Ratings similar to the 65AR without automatic reserve power.
PT6A-60	Upated PT6A-42, featuring new first stage compressor gas producer turbine from PT6A-65 and gearbox from PT6A-45.
PT6A-60A	Upated altitude performance PT6A-60.
PT6A-60AG	Similar to PT6A-60A, but with derated max continuous power, and intended for agricultural aviation.
PT6A-61	Similar to PT6A-60 except for PT6A-42 gearbox.
PT6A-61A	Updated altitude performance PT6A-61.
PT6A-116	Similar to PT6A-135 except for reduced takeoff and maximum continuous power and torque limit with PT6A-121 externals.
PT6A-121	Similar to PT6A-21 except for a PT6A-135 reduction gearbox and a PT6A-112 power turbine.
PT6B-35F	Combines the aerodynamic components of the PT6A-135, the mechanical layout of the PT6A-34 and the PT6T-3 generator and exhaust case. Intended for remote drive propeller applications.
PT6D-114A	Based on the PT6A-114A with the main difference being the deletion of the second stage reduction gearing and output shaft. Intended for integration with a combining gearbox incorporated power turbine governors and a propeller output shaft.
PT6A-52	Similar to the PT6A-61 with the PT6A-60A thermal rating.

- NOTE 14.** Certain engine parts are life limited. These limits are listed in P&WC Engine Service Bulletin Nos. 1002, 1302, 1402, 1602,, 3002, 4002, 12002, 12102, 13002, and 13202 as revised. Permissible overhaul and inspection intervals are listed in PWC Engine Service Bulletin Nos. 1003, 1303, 1403, 1603, 1703, 1803, 3003, 3303, 4003, 12003, 12103, 13003, 13203, and 13303 as revised.
- NOTE 15.** Fuel anti-icing additives conforming to specifications 3GP526A PFA 55MB, MIL-I-27686E may be used, at a concentration not exceeding 0.15% by volume.
- NOTE 16.** For PT6A-34, PT6A-34B, PT6A-36, PT6A-45, PT6A-45A and PT6A-45B power may be restored in hot day conditions by means of water or water/methanol injection when accomplished in accordance with the requirements of the PWC Installation Manual.
- NOTE 17.** For PT6A-50 C.G. location (dry weight) is 27.69 in. behind forward mounting ring, 0.27 in. below horizontal centerline and 0.15 in. left of vertical centerline.
- NOTE 18.** Augmentation fluid, when used, must meet the requirements of PWC Specification CPW No. 328.
- NOTE 19.** This Type Certificate Data Sheet reflects the certification basis and approval for those serial numbered model PT6A, PT6B and PT6D series engines listed under "Certification Basis". Two Type Certificates have been issued for administrative purposes: E4EA under FAR 21.29 for engines produced in Canada and E2NE under FAR 21.21 for engines produced in the United States. The type design for each model engine, regardless of where produced, is identical. The information on this Type Certificate Data Sheet applies to all Pratt & Whitney model PT6A, PT6B and PT6D series engines, including:
- (A) Those serial numbered engines listed on and certificated under FAA Type Certificate E2NE, originally issued to Pratt & Whitney Aircraft Division of United Technologies Corporation, East Hartford, Connecticut, U.S.A. and reissued to Pratt & Whitney of Canada Ltd. (Formerly United Aircraft of Canada, LTd.), Longueuil, Quebec, Canada.
- (B) Those serial numbered engines listed above under "Certification Basis," certificated under this Type Certificate, E4EA, issued to Pratt & Whitney Canada Corp, Longueuil, Quebec, Canada.
- NOTE 20.** Service Bulletins, structural repair manuals, vendor manuals, aircraft flight manuals, and overhaul and maintenance manuals, which contain a statement that the document is Transport Canada approved, are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

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