



WOOD GROUP PRATT AND WHITNEY
GG4C-1D PERFORMANCE EVALUATION



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ACCEPTANCE TEST LIMITS

CUSTOMER:	WGPW	DATE:	05-Sep-08
ENGINE MODEL:	GG4	TEST SITE:	Plattsburgh
SUB-MODEL:	C-1D	WG TEST REP.:	Todd Munsell
E/S/N:	686656		

PARAMETER		OBSERVED VALUES	OEM LIMITS	
			OEM MAX.	OEM MIN.
Maximum EGT:	Steady State	1240 °F obs	1250 °F obs	N/A
	Idle Spread	182 °F	200 °F	N/A
	EGT Delta	130 °F obs	135 °F obs	N/A
N1		6334 rpm obs	7160 rpm obs	N/A
N2		8476 rpm obs	9350 rpm obs	N/A
Idle Main Oil Pressure		36 psig	N/A	35 psig
Maximum Continuous Oil Pressure		44 psig	50 psig	40 psig
Oil Consumption		0.0 gal/hr	0.2 gal/hr	N/A
Oil Temperature-Stabilized		199 °F	215 °F	185 °F
Breather Pressure-Stabilized		0.35 in. Hg	3.0 in. Hg	N/A
Fuel Inlet Pressure		34.44 psia	50 psia	5 psig
VIBRATION LIMITS-INLET:				
All Pick-ups above 6300 N2 obs.		1.32 mils (p/p)	2.0 mils (p/p)	N/A
All Pick-ups upto 6300 N2 obs.		0.3 mils (p/p)	4.0 mils (p/p)	N/A
VIBRATION LIMITS-DIFFUSER:				
All Pick-ups above 6300 N2 obs.		0.83 mils (p/p)	2.0 mils (p/p)	N/A
All Pick-ups upto 6300 N2 obs.		0.18 mils (p/p)	4.0 mils (p/p)	N/A
VIBRATION LIMITS-EXHAUST:				
All Pick-ups above 6300 N2 obs.		0.50 mils (p/p)	2.0 mils (p/p)	N/A
All Pick-ups upto 6300 N2 obs.		0.5 mils (p/p)	4.0 mils (p/p)	N/A
BLEED VALVE LIMITS-CLOSING				
Bleed Valve Right		80 psig	80 psig	75 psig
Bleed Valve Top		99 psig	100 psig	95 psig
Bleed Valve Left		117 psig	120 psig	115 psig
BLEED VALVE LIMITS-OPENING				
Bleed Valve Right		78 psig	80 psig	74 psig
Bleed Valve Top		97 psig	99 psig	93 psig
Bleed Valve Left		115 psig	117 psig	111 psig

September 8, 2008

Engineering Analysis Approval: _____

Date: _____



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FULL ACCEPTANCE TEST DATA

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WGPW		MODEL: GG4C-1D		E/S/N: 686656		DATE: 05-Sep-08	
PARAMETER	EPR	1.113	2.894	2.779	2.680	2.573	2.477
Time	hr:min	18:07	17:50	17:52	17:55	17:58	18:00
Dry Bulb	F	84	84	84.25	84	85	85
Wet Bulb	F	79	79	79.25	79	80	80
Baro	inHg	29.85	29.85	29.85	29.85	29.85	29.85
Cell Dep.	insH ₂ O	-0.360	-3.158	-2.853	-3.075	-2.825	-2.908
P ref	psia	14.66	14.58	14.59	14.59	14.59	14.59
T2	°C	28.89	28.89	29.02	28.89	29.30	29.44
T2	°F	84	84	84.25	84	85	85
PT2	psia	14.66	14.56	14.57	14.56	14.57	14.57
Ps3	psia	17.16	58.08	56.59	55.29	53.59	52.19
Ps4	psia	38.46	174.58	168.29	162.49	155.99	150.39
PT7	psia	16.32	42.13	40.48	39.02	37.48	36.08
PT7	in Hg	33.21	85.73	82.38	79.41	76.27	73.42
Fuel Press	psig	34	8	7	8	10	11
Fuel Tmp	°F	82	79	79	79	79	80
N1	rpm	2967	6334	6224	6123	6017	5921
N2	rpm	6035	8476	8407	8341	8274	8208
Main Oil Temp	°F	181	190	198	199	199	198
Main Oil Press	psig	36.20	44.10	43.60	43.10	42.90	42.50
Breather Press	in Hg	0.12	0.35	0.35	0.33	0.31	0.31
Inlet Vibration	p/p	0.30	0.53	1.15	0.91	1.01	1.32
Diffuser Vibration	p/p	0.18	0.37	0.83	0.83	0.71	0.72
Exhaust Vibration	p/p	0.50	0.44	0.40	0.33	0.39	0.44
Fuel Flow Uncorr	pph	594	3817	3583	3368	3155	2957
EGT Avg.	°F	685	1240	1198	1163	1142	1090
EGT Spread	°F	182	130	123	116	112	111
EGT 1	°F	601	1219	1171	1141	1107	1072
EGT 2	°F	644	1216	1182	1146	1108	1072
EGT 3	°F	681	1218	1182	1145	1202	1071
EGT 4	°F	780	1332	1285	1249	1211	1174
EGT 5	°F	783	1250	1205	1164	1122	1088
EGT 6	°F	623	1202	1162	1133	1099	1063

CORRECTED, CALCULATED DATA

EPR		1.113	2.894	2.779	2.680	2.573	2.477
N1	rpm	2899	6189	6080	5982	5875	5780
N2	rpm	5896	8282	8212	8150	8079	8012
FUEL FLOW	pph	599	3880	3639	3423	3205	3005
EGT	°C	334	628	605	587	575	547
EGT	°R	1093	1621	1581	1549	1526	1477
P _{S3} /P _{T2}		1.17	3.99	3.88	2.94	2.91	2.88
P _{S4} /P _{T2}		2.62	11.99	11.55	11.16	10.71	10.33



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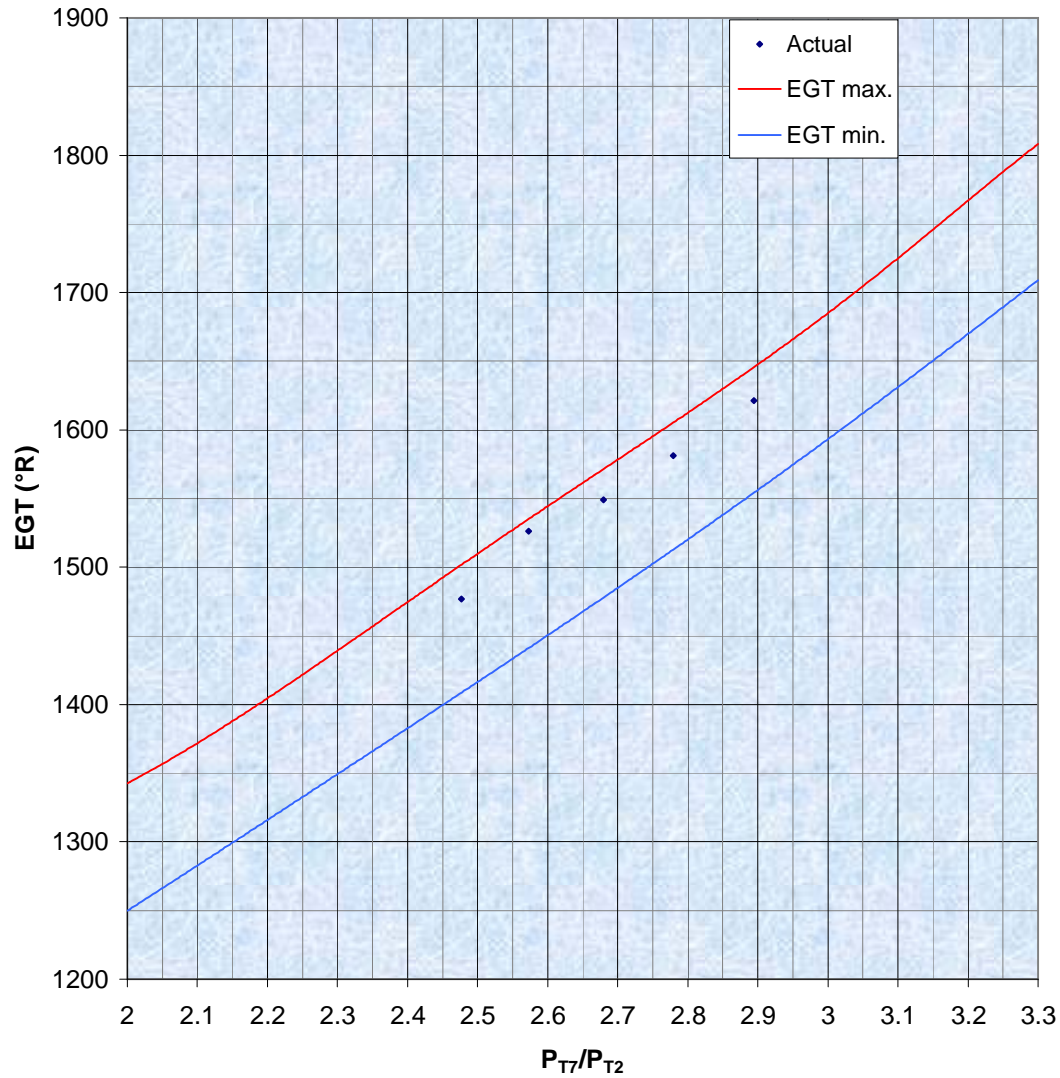
WGPW

MODEL: GG4C-1D

E/S/N: 686656

DATE: 05-Sep-08

Generator Match Limits (GG4C-1D)



Reference: Pratt & Whitney GG4C Overhaul Manual P/N 729003, Section 1-00-1 Figure 703A



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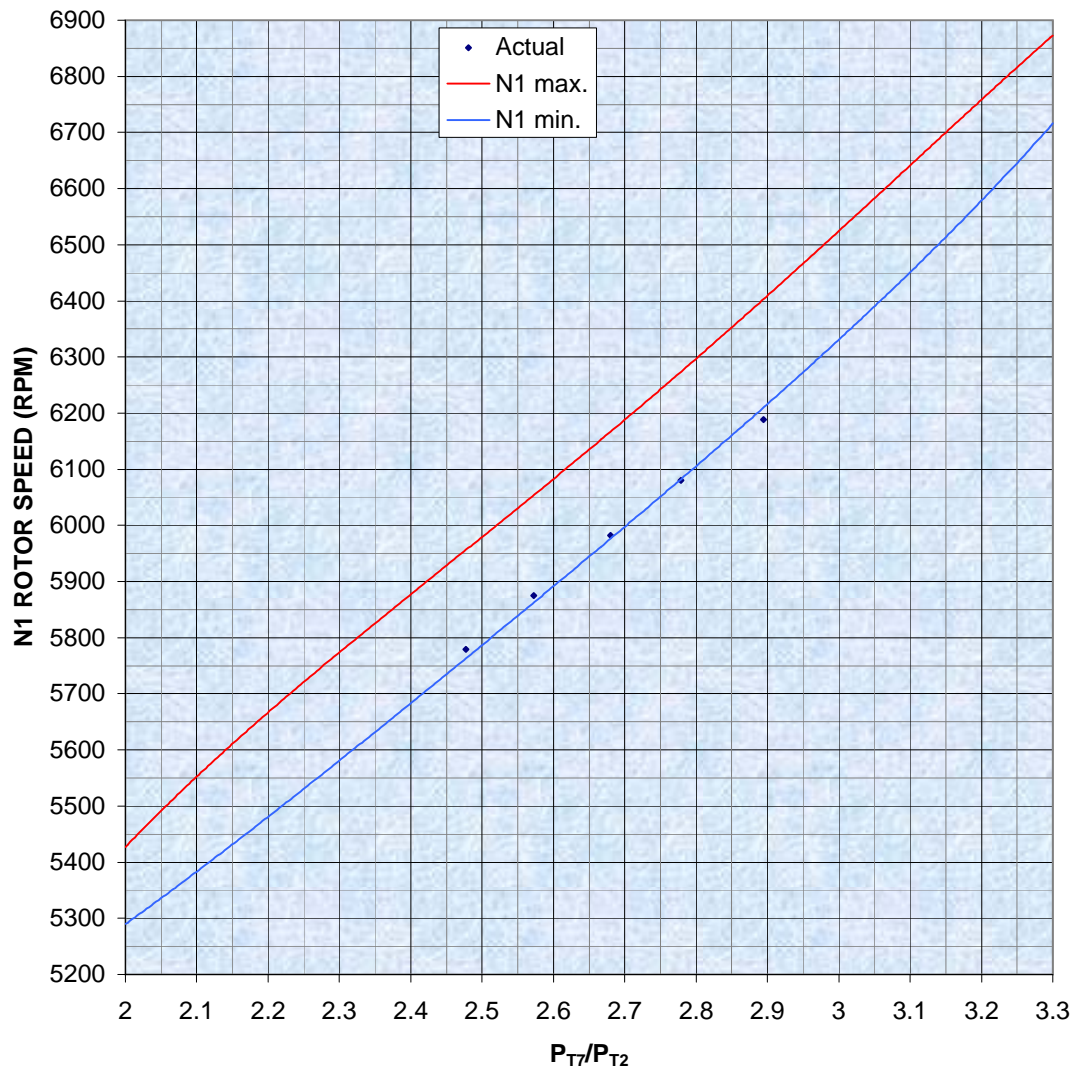
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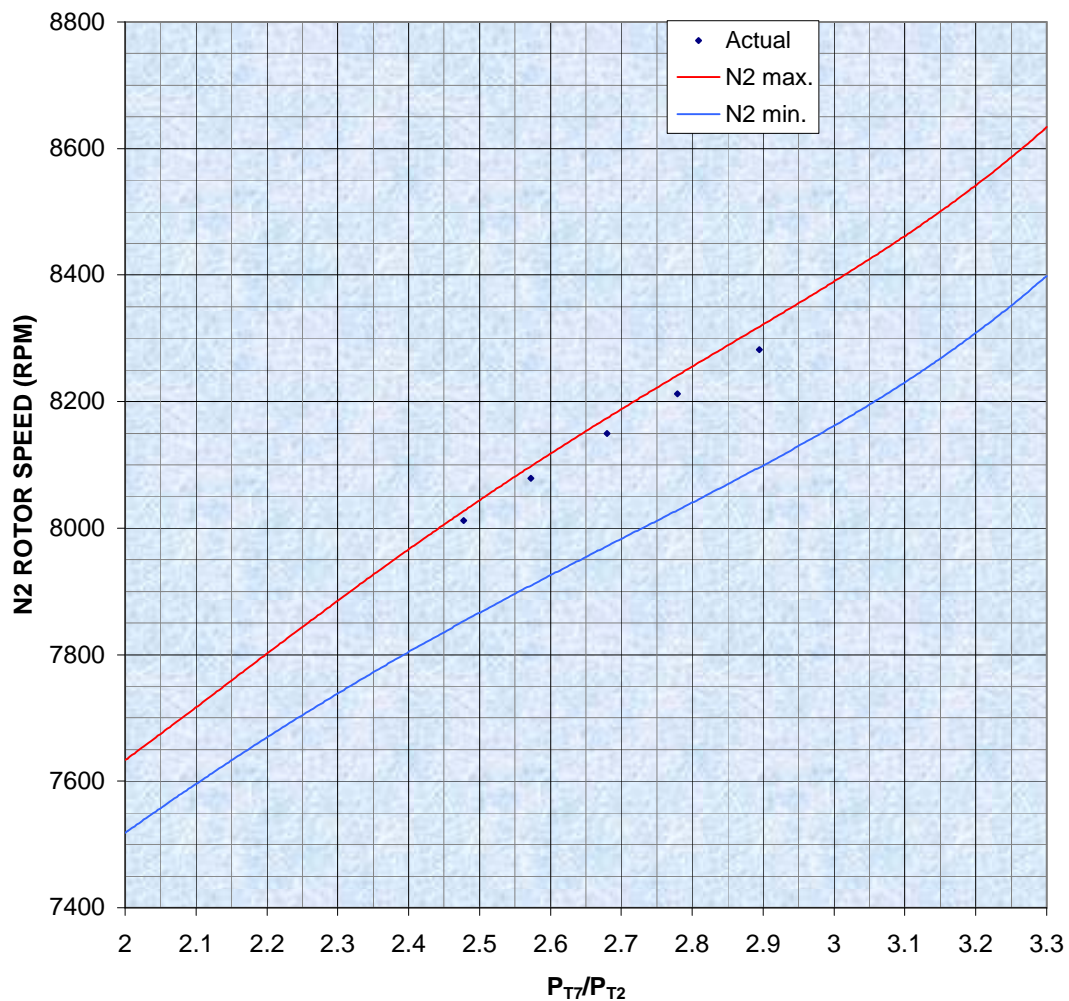
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Reference: Pratt & Whitney GG4C Overhaul Manual P/N 729003, Section 1-00-1 Figure 703



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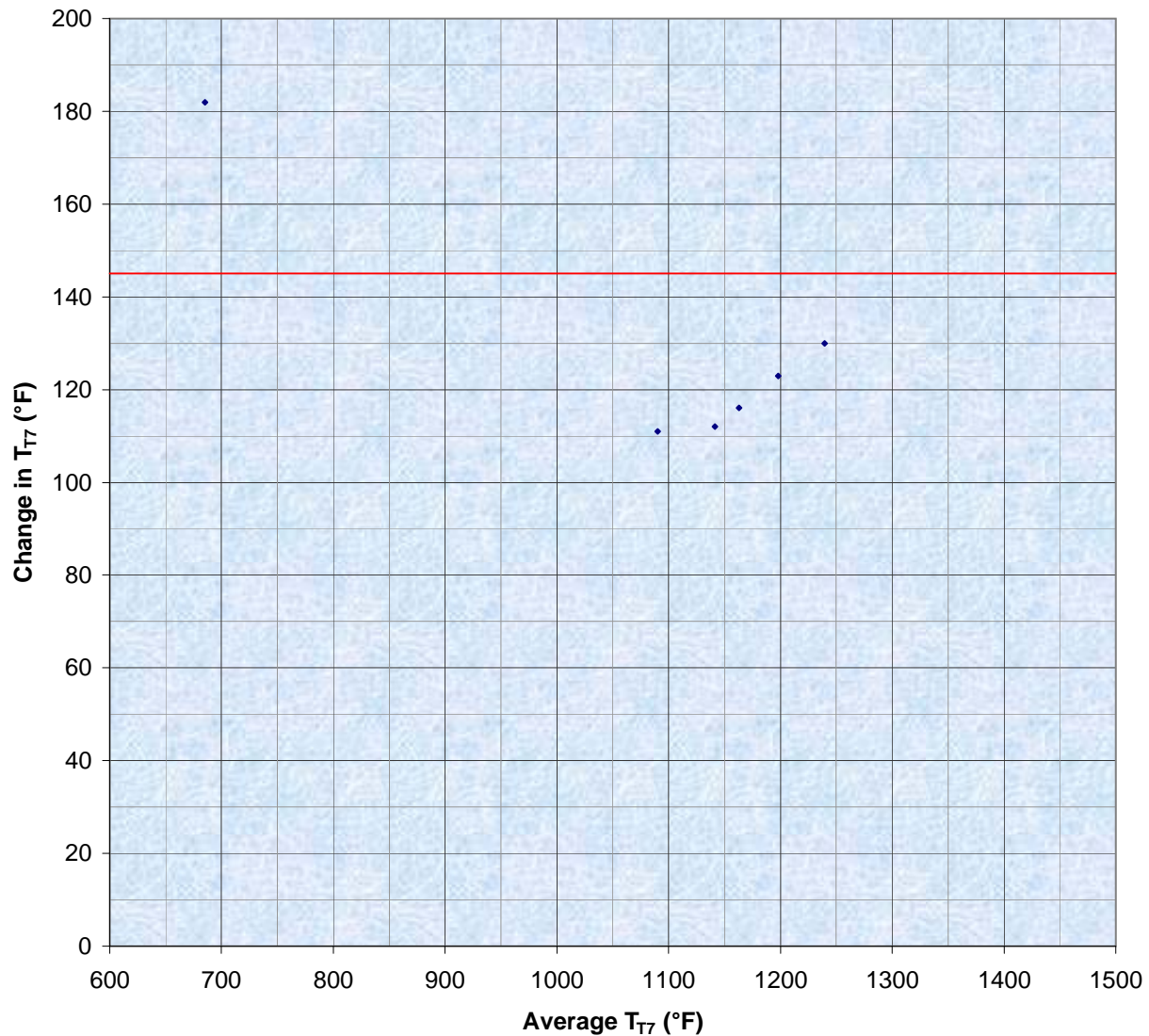
WGPW

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Exhaust Gas Temperature Spread Check



Reference: Pratt & Whitney GG4C Overhaul Manual P/N 729003, Section 1-00-1 Figure 707



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