



TEST CELL RESULTS

W. O.: 800725

MODEL: JT8D-219

ESN: P726122V

DATE TESTED: 4-Apr-14



ENGINE WORK CARD

WARNING: This routine work form does not in any way supersede the OEM's manual requirements. This form is intended to be used in conjunction with the OEM's manuals.

TITLE: ENGINE TEST RESULTS - JT8D-200																				
WORK ORDER 800725		ENGINE MODEL JT8D-219		ENGINE SERIAL NUMBER [REDACTED]																
TEST SPECIFICATIONS:		MANUAL USED [REDACTED]	TYPE OF TEST: <u>PRE-INDUCTION</u>																	
TEST LIMITS (CHECK ONE):		<input checked="" type="checkbox"/> HEAVY MAINTENANCE	<input type="checkbox"/> OVERHAUL	<input type="checkbox"/> OTHER: _____																
ITEM	OPERATION AND REFERENCED PROCEDURE	ACCEPTED	REJECTED	DOES NOT APPLY																
1	MAIN OIL PRESSURE	FJTP 21 INSP																		
2	MAIN OIL TEMPERATURE.	FJTP 21 INSP																		
3	OIL CONSUMPTION.	FJTP 21 INSP																		
4	BREATHER PRESSURE	FJTP 21 INSP																		
5	MAXIMUM EXHAUST GAS TEMPERATURE (EGT)	FJTP 21 INSP																		
6	EXHAUST GAS TEMPERATURE (EGT) SPREAD.	FJTP 21 INSP																		
7	FRONT VIBRATION LIMITS.	FJTP 21 INSP																		
8	REAR VIBRATION LIMITS.	FJTP 21 INSP																		
9	TURBINE COOLING PRESSURE.	FJTP 21 INSP																		
10	MAXIMUM LOW COMPRESSOR SPEED.	FJTP 21 INSP																		
11	MAXIMUM HIGH COMPRESSOR SPEED.	FJTP 21 INSP																		
12	E.P.R. vs. THRUST RELATIONSHIP.	FJTP 21 INSP																		
13	ACCELERATION TIME.	FJTP 21 INSP																		
14	ANTI-SURGE BLEED CHECK.	FJTP 21 INSP																		
15	AUTOMATIC RESERVE THRUST INCREMENT.	FJTP 21 INSP																		
16	SPEED DATA PLATE. OBSERVED: R.P.M.: <u>11,101</u> PERCENT: <u>90.66</u> %	FJTP 21 INSP																		
17	RE-STAMP OF DATA PLATE REQUIRED IF ENGINE QUALIFIES BASED ON WORK PERFORME			NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>																
18	<table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">COMMENTS:</td> <td style="width: 20%;">TAKE-OFF LIMIT</td> <td style="width: 20%;">TAKE-OFF - ACTUAL</td> <td style="width: 30%;">TAKE-OFF MARGIN</td> </tr> <tr> <td>RED LINE</td> <td><u>590</u> °C (OBSERVED)</td> <td><u>572</u> °C (OBSERVED)</td> <td><u>18</u> °C</td> </tr> <tr> <td>EHM (for Pt7/Pt2)</td> <td><u>543</u> °C (CORRECTED)</td> <td><u>542</u> °C (CORRECTED)</td> <td><u>1</u> °C</td> </tr> <tr> <td>CIT: <u>78</u> °F</td> <td colspan="3"></td> </tr> </table>				COMMENTS:	TAKE-OFF LIMIT	TAKE-OFF - ACTUAL	TAKE-OFF MARGIN	RED LINE	<u>590</u> °C (OBSERVED)	<u>572</u> °C (OBSERVED)	<u>18</u> °C	EHM (for Pt7/Pt2)	<u>543</u> °C (CORRECTED)	<u>542</u> °C (CORRECTED)	<u>1</u> °C	CIT: <u>78</u> °F			
COMMENTS:	TAKE-OFF LIMIT	TAKE-OFF - ACTUAL	TAKE-OFF MARGIN																	
RED LINE	<u>590</u> °C (OBSERVED)	<u>572</u> °C (OBSERVED)	<u>18</u> °C																	
EHM (for Pt7/Pt2)	<u>543</u> °C (CORRECTED)	<u>542</u> °C (CORRECTED)	<u>1</u> °C																	
CIT: <u>78</u> °F																				

FJ TURBINE POWER, INC FAA [REDACTED] ENGINE TEST FROM PAGE 26
THIS DATA HAS BEEN CORRECTED BY USING CORRECTED PT2 PER CMS TABLE NO. 1424 EQUATION 2
(CURVE 1891-2)

MODEL: JT8D-219 S/N: P726122V WO: 800725 CUST: FJ TURBINE POWER
 IDLE.

CIT

26
78

 °C / °F EGT

393
740

 °C / °F T7 TIME @ TEMP

0

 THRUST

1099

 LBS CORR. EPR

1.031

CORRECTED DATA

N1 %

26.22

 N1 RPM

2,157

 N2 %

54.54

 N2 RPM

6,681

N1	2118
Fn	1093
N2	6561
EGT	370 °C
Wf	972
TSFC	0.889

CORR. PT2

30.09

 HGA
 PT2 AVG (CELL)

0.00

 "H2O
 PT7

31.01

 HGA

TIMER

MAIN OIL

45

 PSIG MAIN FUEL

29

 PSIG
 BREATHER

0.1

 "HG FUEL FLOW

1005

 PPH
 OIL IN

154
68

 °F / °C FUEL IN

81

 °F
 OIL OUT

168

 °F PS4

14.7

 PSIA PS3

41.7

 HGA
 CELL TEMP

78

 °F BAROMETER

30.09

 "HG

VIBRATION

COMP	0.1
TURB	0.4

CORR. Ps3/Pt2

1.387

 CORR. Ps4/Pt2

0.995

 PCP

20.3

 PSIA
 PS3

20.5

 PSIA
 PCP RATIO

1.381

4/4/2014

FJ TURBINE POWER, INC FAA [REDACTED] ENGINE TEST FROM PAGE 26
THIS DATA HAS BEEN CORRECTED BY USING CORRECTED PT2 PER CMS TABLE NO. 1424 EQUATION 2
(CURVE 1891-2)

MODEL: JT8D-219 S/N: P726122V WO: 800725 CUST: FJ TURBINE POWER
C. BAND.

CIT

26
78

 °C / °F EGT

497
927

 °C / °F T7 TIME @ TEMP

0

 THRUST

14596

 LBS CORR. EPR

1.650

CORRECTED DATA

N1 %

81.96

 N1 RPM

6,739

N2 %

92.29

 N2 RPM

11,304

N1	6618
Fn	15133
N2	11101
EGT	470 °C
Wf	7370
TSFC	0.487

CORR. PT2

30.05

 HGA
PT2 AVG (CELL)

-1.20

 "H2O
PT7

49.59

 HGA

TIMER

MAIN OIL

47

 PSIG MAIN FUEL

25

 PSIG
BREATHER

0.5

 "HG FUEL FLOW

7611

 PPH
OIL IN

185
85

 °F / °C FUEL IN

79

 °F
OIL OUT

288

 °F PS4

197.9

 PSIA PS3

164.3

 HGA
CELL TEMP

78

 °F BAROMETER

30.11

 "HG

VIBRATION

COMP	0.8
TURB	0.5

CORR. Ps3/Pt2

5.468

CORR. Ps4/Pt2

13.409

PCP

112.8

 PSIA
PS3

80.7

 PSIA
PCP RATIO

0.570

4/4/2014

FJ TURBINE POWER, INC [REDACTED] **ENGINE TEST FROM PAGE 26**
 THIS DATA HAS BEEN CORRECTED BY USING CORRECTED PT2 PER CMS TABLE NO. 1424 EQUATION 2
 (CURVE 1891-2)

MODEL: JT8D-219 **S/N:** P726122V **WO:** 800725 **CUST:** FJ TURBINE POWER
 IDLE.

CIT

26
78

 °C/°F EGT

389
734

 °C/°F T7 TIME @ TEMP

0

 THRUST

1127

 LBS CORR. EPR

1.031

N1 %

26.37

 N1 RPM

2,168

 N2 %

54.78

 N2 RPM

6,710

CORRECTED DATA

N1	2129
Fn	1120
N2	6590
EGT	366 °C
Wf	971
TSFC	0.867

CORR. PT2

30.11

 HGA
 PT2 AVG (CELL)

0.00

 "H20
 PT7

31.04

 HGA

TIMER

MAIN OIL

44

 PSIG MAIN FUEL

29

 PSIG
 BREATHER

0.1

 "HG FUEL FLOW

1005

 PPH
 OIL IN

209
98

 °F/°C FUEL IN

80

 °F
 OIL OUT

240

 °F PS4

14.6

 PSIA PS3

41.9

 HGA
 CELL TEMP

78

 °F BAROMETER

30.11

 "HG

VIBRATION

COMP	0.1
TURB	0.5

CORR. Ps3/Pt2

1.393

 CORR. Ps4/Pt2

0.987

 PCP

21.6

 PSIA
 PS3

20.6

 PSIA
 PCP RATIO

1.479

4/4/2014

FJ TURBINE POWER, INC [REDACTED] JT8D-200 ENGINE TEST FROM PAGE 26
THIS DATA HAS BEEN CORRECTED BY USING CORRECTED PT2 PER CMS TABLE NO. 1424 EQUATION 2
(CURVE 1891-2)

MODEL: JT8D-219 S/N: P726122V WO: 800725 CUST: FJ TURBINE POWER
TAKEOFF.

CIT

26
78

 °C / °F EGT

572
1062

 °C / °F T7 TIME @ TEMP

0

 THRUST

20556

 LBS CORR. EPR

1.989

CORRECTED DATA

N1 % <table border="1" style="display: inline-table;"><tr><td>92.39</td></tr></table>	92.39	N1 RPM <table border="1" style="display: inline-table;"><tr><td>7,597</td></tr></table>	7,597	<table border="1" style="display: inline-table;"><tr><td>N1</td><td>7445</td></tr><tr><td>Fn</td><td>21118</td></tr><tr><td>N2</td><td>11708</td></tr><tr><td>EGT</td><td>542</td></tr><tr><td>Wf</td><td>10815</td></tr><tr><td>TSFC</td><td>0.512</td></tr></table> °C	N1	7445	Fn	21118	N2	11708	EGT	542	Wf	10815	TSFC	0.512	CORR. PT2 <table border="1" style="display: inline-table;"><tr><td>30.03</td></tr></table> HGA	30.03
92.39																		
7,597																		
N1	7445																	
Fn	21118																	
N2	11708																	
EGT	542																	
Wf	10815																	
TSFC	0.512																	
30.03																		
N2 % <table border="1" style="display: inline-table;"><tr><td>97.38</td></tr></table>	97.38	N2 RPM <table border="1" style="display: inline-table;"><tr><td>11,928</td></tr></table>	11,928		PT2 AVG (CELL) <table border="1" style="display: inline-table;"><tr><td>-1.50</td></tr></table> "H2O	-1.50												
97.38																		
11,928																		
-1.50																		
TIMER			PT7 <table border="1" style="display: inline-table;"><tr><td>59.74</td></tr></table> HGA	59.74														
59.74																		
MAIN OIL <table border="1" style="display: inline-table;"><tr><td>47</td></tr></table> PSIG	47	MAIN FUEL <table border="1" style="display: inline-table;"><tr><td>21</td></tr></table> PSIG	21															
47																		
21																		
BREATHER <table border="1" style="display: inline-table;"><tr><td>0.5</td></tr></table> "HG	0.5	FUEL FLOW <table border="1" style="display: inline-table;"><tr><td>11163</td></tr></table> PPH	11163	VIBRATION														
0.5																		
11163																		
OIL IN <table border="1" style="display: inline-table;"><tr><td>187</td></tr><tr><td>86</td></tr></table> °F / °C	187	86	FUEL IN <table border="1" style="display: inline-table;"><tr><td>79</td></tr></table> °F	79	COMP <table border="1" style="display: inline-table;"><tr><td>0.8</td></tr></table>	0.8	CORR. Ps3/Pt2 <table border="1" style="display: inline-table;"><tr><td>6.901</td></tr></table>	6.901										
187																		
86																		
79																		
0.8																		
6.901																		
OIL OUT <table border="1" style="display: inline-table;"><tr><td>307</td></tr></table> °F	307	PS4 <table border="1" style="display: inline-table;"><tr><td>262.4</td></tr></table> PSIA	262.4	TURB <table border="1" style="display: inline-table;"><tr><td>0.8</td></tr></table>	0.8	CORR. Ps4/Pt2 <table border="1" style="display: inline-table;"><tr><td>17.789</td></tr></table>	17.789											
307																		
262.4																		
0.8																		
17.789																		
CELL TEMP <table border="1" style="display: inline-table;"><tr><td>78</td></tr></table> °F	78	PS3 <table border="1" style="display: inline-table;"><tr><td>206.7</td></tr></table> HGA	206.7		PCP <table border="1" style="display: inline-table;"><tr><td>145.9</td></tr></table> PSIA	145.9												
78																		
206.7																		
145.9																		
BAROMETER <table border="1" style="display: inline-table;"><tr><td>30.11</td></tr></table> "HG	30.11			PS3 <table border="1" style="display: inline-table;"><tr><td>101.8</td></tr></table> PSIA	101.8													
30.11																		
101.8																		
			PCP RATIO <table border="1" style="display: inline-table;"><tr><td>0.555</td></tr></table>	0.555														
0.555																		

4/4/2014

FJ TURBINE POWER, INC

FAA REPAIR STATION F7JR192Y

JT8D

Page 24

MODEL JT8D-219 S/N P726122V W.O. 800725

CUSTOMER

FJ TURBINE

T7
1. 1084 F

COND

TAKEOFF

2. 1101 F

3. 1054 F CALCULATED AVG.
1063 F

4. 1059 F

5. 1093 F

6. 991 F

EGT SPREAD
EGT LO 991 -0- EGT HI 1101 -00- EGT SPREAD 110 -0-
CHN216 CHN217

7. 1066 F

8. 1053 F

DATE 04/04/14

FJ TURBINE POWER, INC [REDACTED] **ENGINE TEST FROM PAGE 26**
 THIS DATA HAS BEEN CORRECTED BY USING CORRECTED PT2 PER CMS TABLE NO. 1424 EQUATION 2
 (CURVE 1891-2)

MODEL: JT8D-219 S/N: P726122V WO: 800725 CUST: FJ TURBINE POWER
 (DLE)

CIT

26	°C
78	°F

 EGT

392	°C
737	°F

 T7 TIME @ TEMP

0

 THRUST

1091

 LBS CORR. EPR

1.030

N1 %

25.80

 N1 RPM

2,121

 N2 %

53.97

 N2 RPM

6,611

CORRECTED DATA

N1	2083
Fn	1084
N2	6492
EGT	368 °C
Wf	898
TSFC	0.828

CORR. PT2

30.11

 HGA
 PT2 AVG (CELL)

0.00

 "H20
 PT7

31.00

 HGA

TIMER

MAIN OIL

44

 PSIG MAIN FUEL

29

 PSIG
 BREATHER

0.1

 "HG FUEL FLOW

929

 PPH
 OIL IN

224	°F
107	°C

 FUEL IN

80

 °F
 OIL OUT

249

 °F

VIBRATION

COMP	0.1
TURB	0.3

CORR. Ps3/Pt2

1.380

 CORR. Ps4/Pt2

0.987

 PCP

21.5

 PSIA
 PS3

20.4

 PSIA
 PCP RATIO

1.473

PS4

14.6

 PSIA PS3

41.5

 HGA
 CELL TEMP

78

 °F BAROMETER

30.11

 "HG

4/4/2014

BLEED VALVE SCHEDULE

MIN LIMIT	67.7	CHN223	PS4	-.20	PSIG
MAX LIMIT	73.2	CHN224	PS3	6.10	PSIG
OPEN @	69.6	CHN225	PS3	42.6	HGA
CLOSED @	70.2	CHN226			

DATE 04/04/14

MODEL JT8D-219 S/N P726122V W.O. 800725 CUSTOMER FJ TURBINE

ACCELERATION TIME CHECK

N2 RPM PERCENT 95.91

PERCENT RPM

0 10 20 30 40 50 60 70 80 90 100

TIME 5.0

DATE 04/04/14

TIME OF DAY 10:18:48

PAGE 30