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Volume II

LEVEL

FASTENER HOLE QUALITY

STRUCTURES DESIGN DEPARTMENT
GENERAL DYNAMICS FORT WORTH DIVISION
FORT WORTH, TEXAS 76101

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Final Report June 1976 – August 1978

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JOHN M. POTTER
Project Engineer

LARRY G. KELLY, Chief
Structural Integrity Branch

FOR THE COMMANDER

RALPH L. KUSTER, JR., Col, USAF
Chief, Structures & Dynamics Division

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Equivalent Initial flaw size, fastener hole quality, clearance fit, transition fit, F-16 randomized spectrum, B-1 spectrum, axial scratch, mismatch, localized yielding, improved drilling, improved assembly.

(Equivalent Initial Flaw Size)

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

This report describes the development of the EIFS concept as a potential design tool and the generation of EIFS data as a function of several manufacturing and design variables. Several factors or mechanisms that strongly affected the fatigue behavior of fastener holes have been identified and corrected to achieve a 100% improvement in fatigue life. Some of these improvements are being implemented in the F-16 production program and the improved drilling will be implemented in the C5A-H Mod. Program.

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VOLUME II

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I INTRODUCTION

During the performance of Air Force Flight Dynamics Laboratory Contract F33615-76-C-3113 approximately 600 coupon fatigue specimens, both no-load and low-load transfer, were manufactured, fatigue tested and fatigue cracks fractographically read. This document contains the individual fatigue test data sheets and equivalent initial flaw size values which were the result of analyses subsequently performed. Also included are listings of crack depths at one-half life intervals for most specimens.

Section I is made up of "Fatigue Test Data" sheets which contain all pertinent information e.g., time of test termination or time to failure, to facilitate fatigue testing and fractographic analysis. All data are grouped by task and individual specimen designations are deciphered in Table 1-1. Miscellaneous notes are also included in the data sheets.

Equivalent initial flaw size and crack depth values. at one-half life intervals, are found in Section II listed by task. These listings are computer generated in a manner described in Volume I. All EIFS and crack depth values are ranked in ascending order and listed with their corresponding cumulative probabilities.

It should be noted that no equivalent initial flaw size values are listed for holes filled with Taper-lok fasteners. Insufficient crack growth in these specimens precluded fractography, except for final crack depth values in some cases, thus making EIFS values unattainable.

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TABLE I-I SPECIMEN DESIGNATIONS WITH SPECIFIC MANUFACTURING AND TEST CONDITIONS

TASK	SPECIMEN DESIGNATION	LOAD TRANSFER %		HOLE PRODUCTION TECHNIQUE					SPECTRA		COMMENTS
				CLEARANCE-FIT DRILLED			TRANSITION-FIT DRILLED/REAMED				
		0	15	PROPER	IMPROPER	IMPROVED	PROPER	IMPROPER	FIGHTER	BOMBER	
I	WPF	X		X					X		
	WIF	X			X				X		
	WPB	X		X						X	
	WIB	X			X					X	
	QPF	X					X		X		
	QIF	X						X	X		
	QPB	X					X			X	
	QIB	X						X		X	
	ZWPF	X				X			X		
II	XWPF		X	X					X		
	XWPB		X	X						X	
	XQPF		X				X		X		
	XQPB		X				X			X	
III	YWPF		X			X			X		
	YWPB		X			X				X	
	HYWPF		X			X			X		40.8 ksi
	HYWPB		X			X				X	40.8 ksi
	LYWPF		X			X			X		30.6 ksi
	LYWPB		X			X				X	30.6 ksi
	XWIF		X		X				X		
	VWPF		X			X					**
IV	ST	X					X		X		
	TYPF	X					X		X		
V	CW	X		*					X		*NA
	TL	X		*					X		*NA

**V = Improved Drilling/Assembly

KEY TO SPECIMEN DESIGNATIONS:

W - Winslow Drilled
Q - Quackenbush Drilled/Reamed
P - Proper Techniques
I - Improper Techniques
CW - Cold-Worked Holes
TL - Taper Loked Holes
F - Fighter Spectra
B - Bomber Spectra
H - High Stress Level
L - Low Stress Level
ST - AF 1410 Steel
TY - Titanium

II FRACTOGRAPHIC DATA SHEETS

2.1 TASK I
2.1.1 WPF

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-6

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.5019

AVERAGE THICKNESS: .3786

AREA: .5686

BASELINE STRESS: 34ksi

MAX. LOAD: 19333.1

1 Life

CYCLES AT TERMINATION/~~FAILURE~~:

2 Lives/1,531,494 L.P.'s

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0954	
39	15600	.0863	
38	15200	.0764	
37	14800	.0687	
36	14400	.0617	
35	14000	.0555	
34	13600	.0502	
33	13200	.0451	
32	12800	.0407	
31	12400	.0368	
30	12000	.0336	
29	11600	.0297	
28	11200	.0269	
27	10800	.0243	
26	10400	.0215	
25	10000	.0188	
24	9600	.0162	
23	9200	.0142	
22	8800	.0125	
21	8400	.0109	
20	8000	.0097	
19	7600	.0085	
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-7

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5027

AVERAGE THICKNESS: .3781

AREA: .5682

BASELINE STRESS: 34ksi

MAX. LOAD: 19,317.8#

1 Life

CYCLES AT ~~TERMINATION~~/FAILURE: *

2 Lives/_____

@ 1,417,246 L.P. ~ 14,806.42 FLT-HRS *

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38 * →	[redacted]	.35627	.00057
37	14800	35570	.10020
36	14400	25550	07794
35	14000	17756	02703
34	13600	15053	02001
33	13200	13052	01825
32	12800	11227	01603
31	12400	09624	01460
30	12000	08164	01217
29	11600	06947	01035
28	11200	05912	00808
27	10800	05104	00667
26	10400	04437	00587
25	10000	03850	00500
24	9600	03350	00484
23	9200	02866	00479
22	8800	02387	00357
21	8400	02030	00395
20	8000	01635	00313
19	7600	01322	00218
18	7200	01104	00128
17	6800	00976	00129
16	6400	00847	00152
15	6000	00695	00120
14	5600	00575	00119
13	5200	00456	00107
12	4800	00349	00080
11	4400	00269	00056
10	4000	00213	00053
9	3600	00160	00053
8	3200	00117	00043
7	2800	00074	
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-8

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.5015

AVERAGE THICKNESS: .3773

AREA: .5665

BASELINE STRESS: 34 ksi

MAX. LOAD: 19,261.5

CYCLES AT TERMINATION/~~FAILURE~~:

2 Lives / 1531494 L.P.'s

1 Life

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0724	
39	15600	.0685	
38	15200	.0650	
37	14800	.0548	
36	14400	.0500	
35	14000	.0456	
34	13600	.0415	
33	13200	.0382	
32	12800	.0356	
31	12400	.0327	
30	12000	.0296	
29	11600	.0267	
28	11200	.0243	
27	10800	.0223	
26	10400	.0200	
25	10000	.0178	
24	9600	.0160	
23	9200	.0143	
22	8800	.0129	
21	8400	.0113	
20	8000	.0101	
19	7600	.0088	
18	7200	.0075	
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-9

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.5014

AVERAGE THICKNESS: .3756

AREA: .5639

BASELINE STRESS: 34 ksi

MAX. LOAD: 19,173.5 #

CYCLES AT TERMINATION/~~FAILURE~~:

2 Lives / 1,531,494 L.P.'s

1 Life

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0702 / .3646	.0054
39	15600	.0648	.0042
38	15200	.0606	.0036
37	14800	.0570	.0039
36	14400	.0531	.0039
35	14000	.0492	.0031
34	13600	.0461	.0032
33	13200	.0429	.0033
32	12800	.0396	.0024
31	12400	.0372	.0027
30	12000	.0345	.0028
29	11600	.0317	.0027
28	11200	.0290	.0023
27	10800	.0267	.0022
26	10400	.0245	.0023
25	10000	.0222	.0020
24	9600	.0202	.0017
23	9200	.0185	.0017
22	8800	.0168	.0015
21	8400	.0153	.0013
20	8000	.0140	.0015
19	7600	.0125	.0015
18	7200	.0110	.0012
17	6800	.0098	.0011
16	6400	.0087	.0012
15	6000	.0075	.0010
14	5600	.0065	.0009
13	5200	.0056	.0009
12	4800	.0047	.0008
11	4400	.0039	.0009
10	4000	.0030	.0007
9	3600	.0023	.0003
8	3200	.0020 / .0070	
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

$a/2c = .19$

$a/2c = .29$

(2)

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-10

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

VERAGE WIDTH: 1.5082

VERAGE THICKNESS: .3748

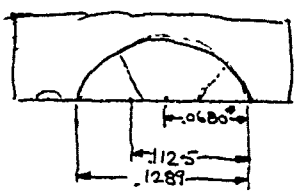
REA: .5609

ASELINE STRESS: 34 KSI

AX. LOAD: 19,070.6#

YCLES AT TERMINATION/[redacted]:

Static load - 32 K#



SPECIMEN NUMBER: WPF-11

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

ERAGE WIDTH: 1.5013

ERAGE THICKNESS: .3732

EA: .5603

SELINE STRESS: 35 KSI

X. LOAD: 19,049.7#

CLES AT [redacted]/FAILURE: @ 1,455,528 L.P.

15,206.36 Further

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH* IN.	INCREMENT IN.
40	16000	.0410 / .1289	.0040
39	15600	.0370	.0025
38	15200	.0345	.0023
37	14800	.0322	.0022
36	14400	.0300	.0022
35	14000	.0278	.0023
34	13600	.0255	.0018
33	13200	.0237	.0017
32	12800	.0220	.0020
31	12400	.0200	.0018
30	12000	.0182	.0016
29	11600	.0166	.0015
28	11200	.0151	.0013
27	10800	.0138	.0015
26	10400	.0123	.0012
25	10000	.0111	.0013
24	9600	.0098	.0014
23	9200	.0082	.0011
22	8800	.0071	.0010
21	8400	.0061	.0010
20	8000	.0051	.0011
19	7600	.0040	.0008
18	7200	.0032	.0006
17	6800	.0026	.0006
16	6400	.0020 / .0068	
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		
40	16000		
39	[redacted]	.3550	.0601
38	15200	.2924	.0359
37	14800	.2570	.0257
36	14400	.2313	.0225
35	14000	.2088	.0200
34	13600	.1888	.0180
33	13200	.1708	.0160
32	12800	.1548	.0146
31	12400	.1402	.0131
30	12000	.1271	.0123
29	11600	.1148	.0112
28	11200	.1036	.0102
27	10800	.0934	.0096
26	10400	.0838	.0086
25	10000	.0752	.0071
24	9600	.0681	.0064
23	9200	.0617	.0060
22	8800	.0567	.0090
21	8400	.0467	.0051
20	8000	.0416	.0034
19	7600	.0382	.0032
18	7200	.0350	.0032
17	6800	.0318	.0030
16	6400	.0288	.0032
15	6000	.0256	.0034
14	5600	.0222	.0027
13	5200	.0195	.0031
12	4800	.0164	.0032
11	4400	.0132	.0034
10	4000	.0098	.0027
9	3600	.0071	.0020
8	3200	.0051	.0016
7	2800	.0035	.0010
6	2400	.0025	.0008
5	2000	.0017	.0005
4	1600	.0012	.0004
3	1200	.0008	.0003
2	800	.0005	
1	400		

2 Lives
$\%_{tc}$ = .32

1 Life

2 Lives/_____

$\%_{to}$ = .29

2 Lives

1 Life

2 Lives/_____

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-12

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

VERAGE WIDTH: 1.5027

VERAGE THICKNESS: .3786

REA: .5689

ASELINE STRESS: 34ksi

AX. LOAD: 19,342.6

1 Life

YCLES AT TERMINATION/FAILURE:

2 Lives/ 1531494 L.P.'s

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0485	
39	15600	.0470	
38	15200	.0394	
37	14800	.0361	
36	14400	.0325	
35	14000	.0287	
34	13600	.0261	
33	13200	.0233	
32	12800	.0206	
31	12400	.0182	
30	12000	.0166	
29	11600	.0140	
28	11200	.0122	
27	10800	.0108	
26	10400	.0093	
25	10000	.0085	
24	9600	.0075	
23	9200	.0064	
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

$a/a_0 = .24$

SPECIMEN NUMBER: WPF-13

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

VERAGE WIDTH: 1.5018

VERAGE THICKNESS: .3734

REA: .5607

ASELINE STRESS: 34 ksi

AX. LOAD: 19,063.8 #

1 Life

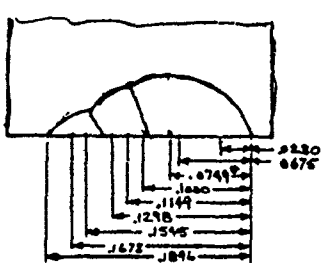
YCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 30.8K#

$a/a_0 = .47$

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0452 / .1896	.0046
39	15600	.0406	.0032
38	15200	.0374	.0026
37	14800	.0348	.0028
36	14400	.0320	.0029
35	14000	.0291	.0026
34	13600	.0265	.0023
33	13200	.0242	.0022
32	12800	.0220	.0021
31	12400	.0199	.0019
30	12000	.0180	.0015
29	11600	.0165	.0015
28	11200	.0150	.0017
27	10800	.0133	.0013
26	10400	.0120	.0015
25	10000	.0105	.0013
24	9600	.0092	.0010
23	9200	.0082	.0009
22	8800	.0073	.0009
21	8400	.0064	.0007
20	8000	.0057	.0008
19	7600	.0049	.0006
18	7200	.0043	.0004
17	6800	.0039	.0006
16	6400	.0033	.0005
15	6000	.0028	.0003
14	5600	.0025	.0004
13	5200	.0021 / .0095	
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		



FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-14

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5000

AVERAGE THICKNESS: .3733

AREA: .5599

BASELINE STRESS: 34 ksi

MAX. LOAD: 19,036.6#

CYCLES AT TERMINATION/[redacted]:

2 Lives/153,494 L.F.

1 Life

SPECIMEN NUMBER: WPF-15

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.5018

AVERAGE THICKNESS: .3744

AREA: .5622

BASELINE STRESS: 34ksi

MAX. LOAD: 19,114.8#

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

1 Life

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	0444 / .1407	0027
39	15600	0417	0022
38	15200	0385	0028
37	14800	0357	0024
36	14400	0333	0020
35	14000	0313	0024
34	13600	0289	0017
33	13200	0272	0019
32	12800	0253	0013
31	12400	0240	0016
30	12000	0224	0019
29	11600	0205	0018
28	11200	0187	0017
27	10800		0017
26	10400	0153	0015
25	10000	0138	0013
24	9600	0125	0013
23	9200	0112	0012
22	8800	0100	0012
21	8400	0088	0010
20	8000	0078	0012
19	7600	0066	0009
18	7200	0057	0010
17	6800	0047	0008
16	6400	0039	0006
15	6000	0033	0006
14	5600	0027	0004
13	5200	0023	0002
12	4800	0021 / 0137	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		
40	16000	0061	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2 Lives
$a/c = .32$

$a/c = .15$

2 Lives
$a/c = .43$

$a/c \rightarrow .0143$

(15)

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-16

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.5010

AVERAGE THICKNESS: .3749

AREA: .5627

BASELINE STRESS: 34 KSI

MAX. LOAD: 19,131.8 #

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

1 Life

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0688 / .2296	.0038
39	15600	.0650	.0035
38	15200	.0615	.0033
37	14800	.0582	.0030
36	14400	.0552	.0032
35	14000	.0516	.0030
34	13600	.0480	.0031
33	13200	.0449	.0029
32	12800	.0423	.0026
31	12400	.0394	.0023
30	12000	.0371	.0022
29	11600	.0349	.0023
28	11200	.0326	.0018
27	10800	.0308	.0019
26	10400	.0289	.0021
25	10000	.0268	.0020
24	9600	.0248	.0019
23	9200	.0229	.0020
22	8800	.0209	.0017
21	8400	.0192	.0015
20	8000	.0177	.0019
19	7600	.0158	.0017
18	7200	.0141	.0016
17	6800	.0125	.0016
16	6400	.0109	.0014
15	6000	.0095	.0015
14	5600	.0080	.0013
13	5200	.0067	.0016
12	4800	.0051	.0013
11	4400	.0038	.0009
10	4000	.0029	.0007
9	3600	.0022 / .075	
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

a/2c = .30

a/2c = .03

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-17

SPECTRUM: Fighter

TEST DATE: 1

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.5001

AVERAGE THICKNESS: .3747

AREA: .5620

BASELINE STRESS: 34 KSI

MAX. LOAD: 19,108.0 #

CYCLES AT [redacted]/FAILURE: *

2 Lives/_____

1 Life

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	[redacted]	.01323 2c = .05195	
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

a/2c = .25

* @ 1,113,701 L.P.'s = 11,635.18 FLT-HRS.

SPECIMEN FAILURE WAS DUE TO AN ELECTRICAL ERROR WHICH RESULTED IN A 100% COMPRESSIVE LOAD

(6)

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-18

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.5017

AVERAGE THICKNESS: .3760

AREA: .5646

BASELINE STRESS: 34 ksi

MAX. LOAD: 19,196.4 #

CYCLES AT TERMINATION/~~FAILURE~~:

2 Lives / 1,531,494 L.P.'s

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0485 / .1711 (.1497)	.0036
39	15600	.0449	.0031
38	15200	.0418	.0031
37	14800	.0387	.0025
36	14400	.0362	.0023
35	14000	.0339	.0026
34	13600	.0313	.0023
33	13200	.0290	.0022
32	12800	.0268	.0020
31	12400	.0248	.0018
30	12000	.0230	.0020
29	11600	.0210	.0016
28	11200	.0194	.0017
27	10800	.0177	.0017
26	10400	.0160	.0015
25	10000	.0145	.0013
24	9600	.0132	.0014
23	9200	.0118	.0014
22	8800	.0104	.0012
21	8400	.0092	.0011
20	8000	.0081	.0009
19	7600	.0072	.0007
18	7200	.0065	.0005
17	6800	.0060	.0007
16	6400	.0053	.0006
15	6000	.0047	.0007
14	5600	.0040	.0004
13	5200	.0036	.0004
12	4800	.0032	.0004
11	4400	.0028	.0003
10	4000	.0025 / .0052	
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2 Lives
$\%_{zc} = .28$

1 Life
$\%_{zc} = .18$

SPECIMEN NUMBER: WPF-19

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.5017

AVERAGE THICKNESS: .3741

AREA: .5617

BASELINE STRESS: 34 ksi

MAX. LOAD: 19,097.8

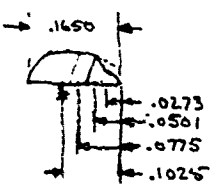
CYCLES AT TERMINATION/FAILURE:

2 Lives / 1,531,494 L.P.'s

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0936 / .1650	.0042
39	15600	.0393	.0033
38	15200	.0360	.0028
37	14800	.0332	.0023
36	14400	.0309	.0025
35	14000	.0284	.0022
34	13600	.0262	.0023
33	13200	.0239	.0025
32	12800	.0214	.0021
31	12400	.0193	.0016
30	12000	.0177	.0018
29	11600	.0159	.0014
28	11200	.0145	.0019
27	10800	.0126	.0016
26	10400	.0110	.0017
25	10000	.0093	.0010
24	9600	.0083	.0010
23	9200	.0073	.0009
22	8800	.0064	.0007
21	8400	.0057	.0007
20	8000	.0050	.0005
19	7600	.0045	.0006
18	7200	.0039	.0004
17	6800	.0035	.0003
16	6400	.0032	.0004
15	6000	.0028	.0004
14	5600	.0024 / .0072	
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2 Lives
$\%_{zc} = .27$

1 Life
$\%_{zc} = .33$



FRACTOGRAPHIC DATA

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-20

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.5004 ___ ___ ___

AVERAGE THICKNESS: .3735 ___ ___ ___

AREA: .5603

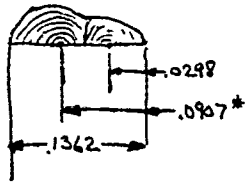
BASELINE STRESS: 34ksi

MAX. LOAD: 19,050.2#

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

1 Life



Blk #	FLIGHT HRS.	CRACK LENGTH IN*	INCREMENT IN.
40	16000	0290 / .1362	0024
39	15600	0266	0024
38	15200	0242	0025
37	14800	0217	0024
36	14400	0193	0025
35	14000	0178	0019
34	13600	0159	0016
33	13200	0143	0015
32	12800	0128	0014
31	12400	0114	0015
30	12000	0099	0014
29	11600	0085	0012
28	11200	0073	0010
27	10800	0065	0008
26	10400	0055	0007
25	10000	0048	0009
24	9600	0039	0005
23	9200	0034	0004
22	8800	0030	0005
21	8400	0025	0003
20	8000	0022	0003
19	7600	0019 / .0047	
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2 Lives $a/c = .21$

1 Life $a/c = .40$

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-21

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

VERAGE WIDTH: 1.5017 ___ ___ ___

VERAGE THICKNESS: .3756 ___ ___ ___

REA: .5640

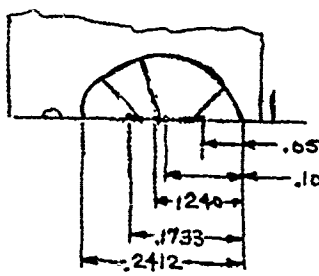
ASELINE STRESS: 34 ksi

AX. LOAD: 19,176.0#

YCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD – 30 K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	0845 / .2412	0076
39	15600	0769	0062
38	15200	0707	0053
37	14800	0654	0050
36	14400	0604	0043
35	14000	0561	0043
34	13600	0518	0040
33	13200	0478	0035
32	12800	0443	0035
31	12400	0408	0029
30	12000	0379	0028
29	11600	0351	0030
28	11200	0321	0027
27	10800	0294	0024
26	10400	0270	0021
25	10000	0249	0022
24	9600	0227	0022
23	9200	0205	0018
22	8800	0187	0017
21	8400	0170	0016
20	8000	0154	0017
19	7600	0137	0016
18	7200	0121	0014
17	6800	0107	0014
16	6400	0093	0012
15	6000	0081	0011
14	5600	0070	0008
13	5200	0062	0011
12	4800	0051	0006
11	4400	0045	0006
10	4000	0039	0006
9	3600	0033	0003
8	3200	0030	0004
7	2800	0026	0003
6	2400	0023	0003
5	2000	0020	0002
4	1600	0018	0003
3	1200	0015 / .0048	
2	800		
1	400		

2 Lives $a/c = .35$

1 Life $a/c = .31$

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-22

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

VERAGE WIDTH: 1.5014 ___ ___ ___

VERAGE THICKNESS: .3766 ___ ___ ___

REA: .5654

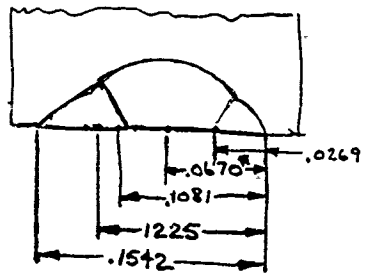
ASELINE STRESS: 34KSC

AX. LOAD: 19,223.6#

YCLES AT TERMINATION/[redacted]:

2 Lives/____

1 Life



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH* IN.	INCREMENT IN
40	16000	.0422 /.1542	.0039
39	15600	.0383	.0030
38	15200	.0353	.0024
37	14800	.0329	.0026
36	14400	.0303	.0023
35	14000	.0280	.0027
34	13600	.0253	.0022
33	13200	.0231	.0019
32	12800	.0212	.0020
31	12400	.0192	.0019
30	12000	.0173	.0017
29	11600	.0156	.0017
28	11200	.0139	.0015
27	10800	.0124	.0013
26	10400	.0111	.0011
25	10000	.0100	.0011
24	9600	.0089	.0010
23	9200	.0079	.0011
22	8800	.0065	.0009
21	8400	.0059	.0007
20	8000	.0052	.0009
19	7600	.0043	.0005
18	7200	.0038	.0005
17	6800	.0033	.0004
16	6400	.0029	.0004
15	6000	.0025	.0003
14	5600	.0022	.0002
13	5200	.0020 /.005	
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2 Lives
a/2c = .27

1 Life
a/2c = .40

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-23

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

VERAGE WIDTH: 1.5050 ___ ___ ___

VERAGE THICKNESS: 3766 ___ ___ ___

REA: .5667

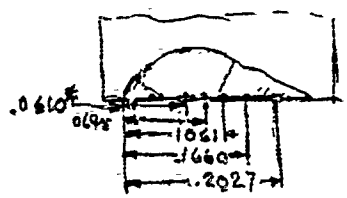
ASELINE STRESS: 34ksi

AX. LOAD: 19267.8#

YCLES AT TERMINATION/[redacted]:

2 Lives/____

1 Life



Blk #	FLIGHT HRS.	CRACK LENGTH* IN.	INCREMENT IN.
40	16000	.0473 /.2057	.0033
39	15600	.0440	.0030
38	15200	.0410	.0031
37	14800	.0379	.0029
36	14400	.0350	.0023
35	14000	.0327	.0024
34	13600	.0303	.0020
33	13200	.0283	.0023
32	12800	.0260	.0020
31	12400	.0240	.0018
30	12000	.0222	.0017
29	11600	.0205	.0015
28	11200	.0190	.0015
27	10800	.0175	.0015
26	10400	.0160	.0015
25	10000	.0145	.0014
24	9600	.0131	.0013
23	9200	.0118	.0013
22	8800	.0106	.0010
21	8400	.0096	.0011
20	8000	.0085	.0010
19	7600	.0075	.0010
18	7200	.0065	.0011
17	6800	.0054	.0009
16	6400	.0045	.0007
15	6000	.0038	.0006
14	5600	.0032	.0004
13	5200	.0028 /.0182	
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

a/2c = .15

(9)

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-24

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

ERAGE WIDTH: 1.5026

VERAGE THICKNESS: .3657

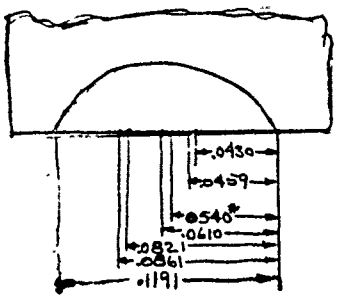
REA: .5495

ASE ..E STRESS: 34 ksi

AX. LOAD: 18,683 #

YCLES AT TERMINATION/~~FAILURE~~:

2 Lives/_____



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH* IN.	INCREMENT IN.
40	16000	.0337 / .1191	.0037
39	15600	.0300	.0023
38	15200	.0277	.0026
37	14800	.0252	.0021
36	14400	.0231	.0019
35	14000	.0212	.0017
34	13600	.0195	.0020
33	13200	.0175	.0018
32	12800	.0157	.0017
31	12400	.0140	.0013
30	12000	.0127	.0013
29	11600	.0114	.0014
28	11200	.0100	.0010
27	10800	.0090	.0011
26	10400	.0079	.0011
25	10000	.0068	.0010
24	9600	.0058	.0009
23	9200	.0049	.0008
22	8800	.0041	.0007
21	8400	.0034	.0005
20	8000	.0029	.0004
19	7600	.0025	.0003
18	7200	.0022	.0003
17	6800	.0019 / .0056	
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2 Lives
a/2c = .28

1 Life
a/2c = .34

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-25

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

VERAGE WIDTH: 1.5022

VERAGE THICKNESS: .3733

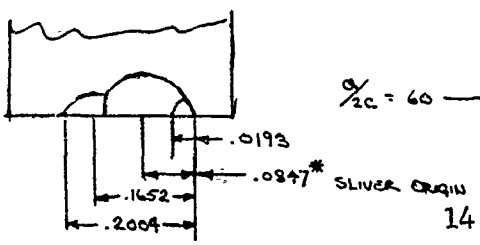
REA: .5607

ASELINE STRESS: 34 ksi

AX. LOAD: 19,063.8 #

YCLES AT TERMINATION/~~FAILURE~~:

Static Load - 30.2K½ Lives/_____



Blk #	FLIGHT HRS.	CRACK LENGTH* IN.	INCREMENT IN.
40	16000	.0463 / .2004	.0041
39	15600	.0422	.0032
38	15200	.0390	.0030
37	14800	.0360	.0028
36	14400	.0332	.0028
35	14000	.0304	.0025
34	13600	.0279	.0024
33	13200	.0255	.0025
32	12800	.0230	.0023
31	12400	.0207	.0016
30	12000	.0191	.0019
29	11600	.0172	.0019
28	11200	.0153	.0017
27	10800	.0136	.0016
26	10400	.0120	.0013
25	10000	.0107	.0014
24	9600	.0093	.0011
23	9200	.0082	.0012
22	8800	.0070	.0007
21	8400	.0063	.0008
20	8000	.0055	.0005
19	7600	.0050	.0005
18	7200	.0045	.0006
17	6800	.0039	.0005
16	6400	.0034	.0004
15	6000	.0030	.0005
14	5600	.0025	.0003
13	5200	.0022	.0003
12	4800	.0019	.0001
11	4400	.0018	.0002
10	4000	.0017	.0002
9	3600	.0015	
8	3200	.0012 / .003	
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2 Lives
a/2c = .23

a/2c = .60

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-26

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

VERAGE WIDTH: 1.5018

VERAGE THICKNESS: .3699

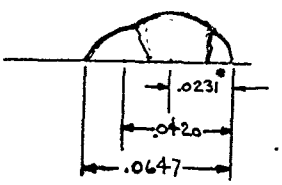
REA: .5555

ASELINE STRESS: 34ksi

AX. LOAD: 18,887 #

YCLES AT TERMINATION/~~FAILURE~~:

STATIC LOAD 32.3K# 2 Lives/____



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH* IN.	INCREMENT IN.
40	16000	.0194 / .0647	.0015
39	15600	.0179	.0018
38	15200	.0161	.0013
37	14800	.0148	.0015
36	14400	.0133	.0013
35	14000	.0120	.0012
34	13600	.0108	.0010
33	13200	.0098	.0009
32	12800	.0089	.0007
31	12400	.0082	.0007
30	12000	.0075	.0007
29	11600	.0068	.0006
28	11200	.0062	.0007
27	10800	.0055	.0006
26	10400	.0049	.0003
25	10000	.0046	.0005
24	9600	.0041	.0004
23	9200	.0037	.0005
22	8800	.0032	.0004
21	8400	.0028	.0005
20	8000	.0023	.0004
19	7600	.0019	.0002
18	7200	.0017 / .0043	
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2 Lives → a/2c = .30

1 Life → a/2c = .40

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-27

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

VERAGE WIDTH: 1.5018

VERAGE THICKNESS: .3704

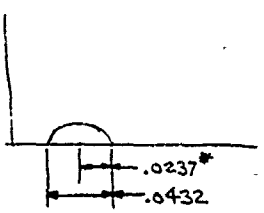
REA: .5562

ASELINE STRESS: 34 ksi

AX. LOAD: 18,710.8 #

YCLES AT TERMINATION/~~FAILURE~~:

STATIC LOAD - 32.4 K# 2 Lives/____



Blk #	FLIGHT HRS.	CRACK LENGTH* IN.	INCREMENT IN.
40	16000	.0160 / .0432	.0015
39	15600	.0145	.0014
38	15200	.0131	.0010
37	14800	.0121	.0011
36	14400	.0110	.0010
35	14000	.0100	.0010
34	13600	.0090	.0009
33	13200	.0081	.0006
32	12800	.0075	.0007
31	12400	.0068	.0008
30	12000	.0060	.0005
29	11600	.0055	.0006
28	11200	.0049	.0003
27	10800	.0046	.0005
26	10400	.0041	.0006
25	10000	.0035	.0005
24	9600	.0030	.0002
23	9200	.0028	.0004
22	8800	.0024	.0004
21	8400	.0020	.0004
20	8000	.0016 / .0045	
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2 Lives → a/2c = .37

1 Life → a/2c = .36

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-28

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

VERAGE WIDTH: 1.5015 ___ ___ ___

VERAGE THICKNESS: .3771 ___ ___ ___

REA: .5662

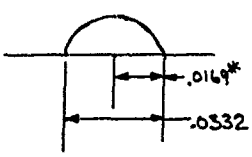
ASELINE STRESS: 34 ksi

AX. LOAD: 19,250.8 #

YCLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD - 33.2 k#



Blk #	FLIGHT HRS.	CRACK LENGTH IN. *	INCREMENT IN.
40	16000	.0129 / .0332	.0009
39	15600	.0120	.0010
38	15200	.0110	.0011
37	14800	.0099	.0009
36	14400	.0090	.0008
35	14000	.0082	.0005
34	13600	.0077	.0007
33	13200	.0070	.0002
32	12800	.0068	.0009
31	12400	.0059	.0005
30	12000	.0054	.0006
29	11600	.0048	.0004
28	11200	.0044	.0006
27	10800	.0038	.0003
26	10400	.0035	.0002
25	10000	.0033	.0004
24	9600	.0029	.0003
23	9200	.0026	.0002
22	8800	.0024	.0003
21	8400	.0021	.0004
20	8000	.0017	.0001
19	7600	.0016	.0002
18	7200	.0014	.0001
17	6800	.0013	.0001
16	6400	.0012	.0002
15	6000	.0010	.0002
14	5600	.0008	.0001
13	5200	.0007	.0001
12	4800	.0006 / .0017	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2 Lives → Blk 40
$a/_{2c}$ = .59
1 Life → Blk 12
$a/_{2c}$ = .65

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-29

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.4995 ___ ___ ___

AVERAGE THICKNESS: .3775 ___ ___ ___

AREA: .5675

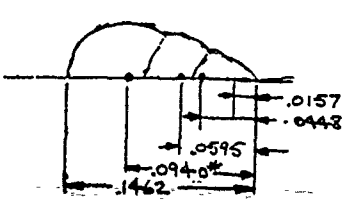
BASELINE STRESS: 34 ksi

MAX. LOAD: 19,296.4 #

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 32.5 K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0339 / .1462	.0052
39	15600	.0307	.0026
38	15200	.0281	.0022
37	14800	.0259	.0022
36	14400	.0237	.0023
35	14000	.0214	.0021
34	13600	.0193	.0018
33	13200	.0175	.0017
32	12800	.0158	.0016
31	12400	.0142	.0013
30	12000	.0129	.0016
29	11600	.0113	.0013
28	11200	.0100	.0011
27	10800	.0089	.0010
26	10400	.0079	.0010
25	10000	.0069	.0007
24	9600	.0062	.0004
23	9200	.0054	.0006
22	8800	.0050	.0008
21	8400	.0042	.0004
20	8000	.0038	.0006
19	7600	.0032	.0004
18	7200	.0028	.0003
17	6800	.0025	.0004
16	6400	.0021	.0002
15	6000	.0019	.0002
14	5600	.0017	.0002
13	5200	.0015	.0002
12	4800	.0013 / .0025	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2 Lives → Blk 40
$a/_{2c}$ = .23
1 Life → Blk 12
$a/_{2c}$ = .52

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-30

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.5019

AVERAGE THICKNESS: .3716

AREA: .5581

BASELINE STRESS: 34 ksi

MAX. LOAD: 18,975.4 #

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 33.1K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	0173	0023
39	15600	0150	0011
38	15200	0139	0011
37	14800	0127	0012
36	14400	0116	0011
35	14000	0105	0007
34	13600	0098	0010
33	13200	0088	0008
32	12800	0080	0006
31	12400	0074	0006
30	12000	0068	0008
29	11600	0060	0005
28	11200	0055	0004
27	10800	0049	0002
26	10400	0047	0005
25	10000	0042	0003
24	9600	0039	0002
23	9200	0037	0004
22	8800	0033	0002
21	8400	0031	0002
20	8000	0029	0002
19	7600	0027	0003
18	7200	0024	0003
17	6800	0021	0002
16	6400	0019	0001
15	6000	0018	
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-31

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5017

AVERAGE THICKNESS: .3786

AREA: .5685

BASELINE STRESS: 34 ksi

MAX. LOAD: 19,329 #

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 33.0K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.02235	.00133
39	15600	02102	00129
38	15200	01973	00123
37	14800	01850	00130
36	14400	01720	00143
35	14000	01577	00123
34	13600	01454	00104
33	13200	01350	00115
32	12800	01235	00101
31	12400	01134	00092
30	12000	01042	00082
29	11600	00962	00090
28	11200	00872	00060
27	10800	00812	00066
26	10400	00746	00058
25	10000	00688	00063
24	9600	00626	00048
23	9200	00577	00054
22	8800	00523	00041
21	8400	00482	00052
20	8000	00430	00045
19	7600	00385	00035
18	7200	00350	00035
17	6800	00315	00033
16	6400	00282	00032
15	6000	00250	00023
14	5600	00227	00032
13	5200	00195	00028
12	4800	00167	00019
11	4400	00148	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(13)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-32

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.5036

AVERAGE THICKNESS: .3719

AREA: .5591

BASELINE STRESS: 34 ksi

MAX. LOAD: 19,009.4#

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 30.6K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0478	.0034
39	15600	.0444	.0036
38	15200	.0408	.0036
37	14800	.0372	.0028
36	14400	.0344	.0027
35	14000	.0317	.0029
34	13600	.0288	.0027
33	13200	.0261	.0020
32	12800	.0241	.0020
31	12400	.0221	.0019
30	12000	.0202	.0017
29	11600	.0185	.0017
28	11200	.0168	.0016
27	10800	.0152	.0014
26	10400	.0139	.0015
25	10000	.0124	.0012
24	9600	.0112	.0013
23	9200	.0099	.0010
22	8800	.0089	.0011
21	8400	.0078	.0009
20	8000	.0069	.0008
19	7600	.0061	.0007
18	7200	.0054	.0006
17	6800	.0043	.0011
16	6400	.0037	.0007
15	6000	.0030	.0007
14	5600	.0028	
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-33

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.5016

AVERAGE THICKNESS: .3769

AREA: .5659

BASELINE STRESS: 34 ksi

MAX. LOAD: 19240.6#

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 31 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0313	.0027
39	15600	.0286	.0034
38	15200	.0252	.0027
37	14800	.0225	.0024
36	14400	.0201	.0022
35	14000	.0179	.0024
34	13600	.0155	.0018
33	13200	.0137	.0017
32	12800	.0120	.0020
31	12400	.0100	.0011
30	12000	.0089	.0010
29	11600	.0079	.0007
28	11200	.0072	.0011
27	10800	.0061	.0006
26	10400	.0055	.0006
25	10000	.0049	.0006
24	9600	.0043	.0005
23	9200	.0038	.0005
22	8800	.0033	.0003
21	8400	.0030	.0005
20	8000	.0025	.0003
19	7600	.0022	.0002
18	7200	.0020	
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-34

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.5019 ___ ___ ___

AVERAGE THICKNESS: .3789 ___ ___ ___

AREA: .5690

BASELINE STRESS: 34 KSI

MAX. LOAD: 19346.0 #

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

Static Load – 31.9 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0411	.0029
39	15600	.0382	.0031
38	15200	.0351	.0029
37	14800	.0322	.0024
36	14400	.0298	.0023
35	14000	.0275	.0023
34	13600	.0252	.0021
33	13200	.0231	.0020
32	12800	.0211	.0018
31	12400	.0193	.0017
30	12000	.0176	.0017
29	11600	.0159	.0017
28	11200	.0142	.0014
27	10800	.0128	.0015
26	10400	.0113	.0013
25	10000	.0100	.0010
24	9600	.0090	.0010
23	9200	.0080	.0009
22	8800	.0071	.0011
21	8400	.0060	.0009
20	8000	.0051	.0007
19	7600	.0044	.0005
18	7200	.0039	.0006
17	6800	.0033	.0005
16	6400	.0028	.0004
15	6000	.0024	.0003
14	5600	.0021	.0002
13	5200	.0019	.0002
12	4800	.0017	.0002
11	4400	.0015	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-35

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) [redacted] 4 5

AVERAGE WIDTH: [redacted] 1.5005 ___ ___

AVERAGE THICKNESS: .3738 ___ ___ ___

AREA: .5608

BASELINE STRESS: 34 KSI

MAX. LOAD: 19,067.2 #

1 Life

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0472	.0047
39	15600	.0425	.0037
38	15200	.0388	.0032
37	14800	.0359	.0032
36	14400	.0322	.0029
35	14000	.0293	.0028
34	13600	.0265	.0024
33	13200	.0247	.0021
32	12800	.0220	.0024
31	12400	.0196	.0021
30	12000	.0175	.0021
29	11600	.0154	.0017
28	11200	.0137	.0017
27	10800	.0120	.0017
26	10400	.0103	.0011
25	10000	.0092	.0010
24	9600	.0082	.0010
23	9200	.0072	.0008
22	8800	.0064	.0007
21	8400	.0057	.0008
20	8000	.0049	.0006
19	7600	.0043	.0004
18	7200	.0039	.0005
17	6800	.0034	.0005
16	6400	.0029	.0001
15	6000	.0028	.0005
14	5600	.0023	.0003
13	5200	.0020	.0001
12	4800	.0019	.0004
11	4400	.0015	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-36 [redacted]

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.4996 ___ ___ ___

AVERAGE THICKNESS: .3752 ___ ___ ___

AREA: .5626

BASELINE STRESS: 34ksi

MAX. LOAD: 19,128.4#

1 Life

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0195	.0014
39	15600	.0181	.0013
38	15200	.0168	.0017
37	14800	.0151	.0012
36	14400	.0139	.0012
35	14000	.0127	.0013
34	13600	.0114	.0010
33	13200	.0104	.0010
32	12800	.0094	.0011
31	12400	.0083	.0005
30	12000	.0078	.0008
29	11600	.0070	.0008
28	11200	.0062	.0006
27	10800	.0056	.0007
26	10400	.0049	.0005
25	10000	.0045	.0006
24	9600	.0039	.0007
23	9200	.0032	.0002
22	8800	.0030	.0003
21	8400	.0027	.0005
20	8000	.0022	.0004
19	7600	.0018	
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-37

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.5001 ___ ___ ___

AVERAGE THICKNESS: .3792 ___ ___ ___

AREA: .5688

BASELINE STRESS: 34ksi

MAX. LOAD: 19,339.2#

1 Life

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD - 33.0k#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0227	.0015
39	15600	.0207	.0018
38	15200	.0189	.0017
37	14800	.0172	.0016
36	14400	.0158	.0014
35	14000	.0142	.0012
34	13600	.0130	.0011
33	13200	.0119	.0011
32	12800	.0108	.0011
31	12400	.0097	.0010
30	12000	.0087	.0010
29	11600	.0077	.0008
28	11200	.0069	.0007
27	10800	.0062	.0009
26	10400	.0053	.0004
25	10000	.0049	.0007
24	9600	.0042	
23	9200	.0039	
22	8800	.0035	
21	8400	.0031	
20	8000	.0029	
19	7600	.0025	
18	7200	.0021	
17	6800	.0020	
16	6400	.0019	
15	6000	.0018	
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(16)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-38

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.5015 ___ ___ ___

AVERAGE THICKNESS: .3777 ___ ___ ___

AREA: .5671

BASELINE STRESS: 34ksi

MAX. LOAD: 19,281.4#

1 Life

CYCLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD – 32.8K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0201	.0015
39	15600	.0186	.0014
38	15200	.0172	.0010
37	14800	.0162	.0010
36	14400	.0152	.0011
35	14000	.0141	.0010
34	13600	.0131	.0009
33	13200	.0122	.0009
32	12800	.0113	.0011
31	12400	.0102	.0008
30	12000	.0094	.0009
29	11600	.0085	.0007
28	11200	.0079	.0007
27	10800	.0072	.0003
26	10400	.0069	.0006
25	10000	.0063	.0004
24	9600	.0059	.0007
23	9200	.0052	.0003
22	8800	.0049	.0004
21	8400	.0045	.0004
20	8000	.0041	.0003
19	7600	.0038	.0004
18	7200	.0034	.0005
17	6800	.0029	.0001
16	6400	.0028	.0003
15	6000	.0025	.0004
14	5600	.0021	.0002
13	5200	.0019	.0001
12	4800	.0018	.0003
11	4400	.0015	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WPF-39

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.5010 ___ ___ ___

AVERAGE THICKNESS: .3710 ___ ___ ___

AREA: .5568

BASELINE STRESS: 34ksi

MAX. LOAD: 18,931.2#

1 Life

CYCLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD – 32.3K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0219	.0019
39	15600	.0200	.0017
38	15200	.0183	.0013
37	14800	.0170	.0014
36	14400	.0156	.0014
35	14000	.0142	.0014
34	13600	.0128	.0010
33	13200	.0118	.0011
32	12800	.0107	.0012
31	12400	.0095	.0010
30	12000	.0085	.0005
29	11600	.0080	.0009
28	11200	.0071	.0005
27	10800	.0066	.0006
26	10400	.0060	.0005
25	10000	.0055	.0009
24	9600	.0051	.0003
23	9200	.0048	.0005
22	8800	.0043	.0003
21	8400	.0040	.0002
20	8000	.0038	.0005
19	7600	.0033	.0003
18	7200	.0030	.0001
17	6800	.0029	.0001
16	6400	.0028	.0004
15	6000	.0024	
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: WF -40

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.4997

AVERAGE THICKNESS: .3773

AREA: .5658

BASELINE STRESS: 34ksi

MAX. LOAD: 19,237.2#

CYCLES AT TERMINATION/~~FAILURE~~:

2 Lives/_____

31.7K~~K~~

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0289	.0030
39	15600	.0259	.0022
38	15200	.0237	.0022
37	14800	.0215	.0016
36	14400	.0199	.0019
35	14000	.0180	.0020
34	13600	.0160	.0018
33	13200	.0147	.0012
32	12800	.0130	.0014
31	12400	.0116	.0014
30	12000	.0102	.0011
29	11600	.0091	.0011
28	11200	.0080	.0009
27	10800	.0071	.0007
26	10400	.0064	.0008
25	10000	.0056	.0006
24	9600	.0050	.0003
23	9200	.0047	.0007
22	8800	.0040	.0005
21	8400	.0035	.0005
20	8000	.0030	.0003
19	7600	.0027	.0006
18	7200	.0021	.0002
17	6800	.0019	
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives → $a/c = .40$

SPECIMEN NUMBER: WPF -41

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5000

AVERAGE THICKNESS: .3750

AREA: .5625

BASELINE STRESS: 34ksi

MAX. LOAD: 19,125.0#

CYCLES AT TERMINATION/~~FAILURE~~:

2 Lives/_____

STATIC LOAD - 32.4 ksi

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0106 / .0264	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(18)

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-42

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.5044 ___ ___ ___

AVERAGE THICKNESS: .3770 ___ ___ ___

AREA: .5672

BASELINE STRESS: 34ksi

MAX. LOAD: 19,284.8#

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

1 Life

STATIC LOAD - 33.9K#

2 Lives

$a/c = .45$

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0024/.0053	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-43

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.5018 ___ ___ ___

AVERAGE THICKNESS: .3782 ___ ___ ___

AREA: .5679

BASELINE STRESS: 34Ksi

MAX. LOAD: 19,308.6#

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

1 Life

STATIC LOAD - 33.3K#

2 Lives

$a/c = .46$

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0066/.0144	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2.1.2 WIF

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-1

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

VERAGE WIDTH: 1.5002 ___ ___ ___

VERAGE THICKNESS: .3779 3766 3806 3765

REA: .5669

ASELINE STRESS: 34 Ksi

AX. LOAD: 19275.5 #

1 Life

YCLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD – 28.1 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1310	.0093
39	15600	.1217	.0069
38	15200	.1148	.0098
37	14800	.1050	.0101
36	14400	.0949	.0092
35	14000	.0857	.0092
34	13600	.0765	.0076
33	13200	.0689	.0070
32	12800	.0619	.0059
31	12400	.0560	.0051
30	12000	.0509	.0049
29	11600	.0460	.0048
28	11200	.0412	.0041
27	10800	.0371	.0035
26	10400	.0336	.0036
25	10000	.0300	.0030
24	9600	.0270	.0029
23	9200	.0241	.0028
22	8800	.0213	.0024
21	8400	.0189	.0024
20	8000	.0165	.0022
19	7600	.0143	.0021
18	7200	.0122	.0019
17	6800	.0103	.0014
16	6400	.0089	.0011
15	6000	.0078	.0009
14	5600	.0069	.0010
13	5200	.0059	.0010
12	4800	.0049 / .0202	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

a/c = .24

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-2

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

ERAGE WIDTH: 1.501 ___ ___ ___

ERAGE THICKNESS: _____ 373 376 373

EA: .566

SELINE STRESS: 34 Ksi

X. LOAD: 19,244 #

1 Life

CLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD – 29.25 K#

SLIVER FLAW – a = .0006
2c = .0026
a/c = .23
ZERO – BASE OF FLAW

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0856	.0078
39	15600	.0778	.0091
38	15200	.0687	.0058
37	14800	.0629	.0056
36	14400	.0573	.0043
35	14000	.0530	.0044
34	13600	.0486	.0044
33	13200	.0442	.0034
32	12800	.0408	.0042
31	12400	.0366	.0027
30	12000	.0339	.0030
29	11600	.0309	.0027
28	11200	.0282	.0022
27	10800	.0260	.0020
26	10400	.0240	.0022
25	10000	.0218	.0018
24	9600	.0200	.0018
23	9200	.0182	.0017
22	8800	.0165	.0014
21	8400	.0151	.0014
20	8000	.0137	.0013
19	7600	.0124	.0013
18	7200	.0111	.0012
17	6800	.0099	.0014
16	6400	.0085	.0011
15	6000	.0074	.0009
14	5600	.0065	.0007
13	5200	.0058	.0008
12	4800	.0050	.0007
11	4400	.0043	.0005
10	4000	.0038	.0005
9	3600	.0033	.0004
8	3200	.0029	.0005
7	2800	.0024	.0004
6	2400	.0020	.0004
5	2000	.0016	.0004
4	1600	.0012	.0003
3	1200	.0009	.0003
2	800	.0006	
1	400		

(20)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-3

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

AVERAGE WIDTH: 1.503 _____ _____ _____

AVERAGE THICKNESS: _____ 375 379 376

AREA: .564

BASELINE STRESS: 34ksi

MAX. LOAD: 19,176 #

1 Life

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD - 29.0 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1100	.0102
39	15600	0998	0089
38	15200	0909	0072
37	14800	0837	0076
36	14400	0761	0066
35	14000	0695	0061
34	13600	0634	0054
33	13200	0580	0051
32	12800	0529	0048
31	12400	0481	0040
30	12000	0441	0040
29	11600	0401	0035
28	11200	0366	0029
27	10800	0337	0031
26	10400	0306	0026
25	10000	0280	0024
24	9600	0256	0023
23	9200	0233	0020
22	8800	0213	0022
21	8400	0191	0020
20	8000	0171	0021
19	7600	0150	0017
18	7200	0133	0020
17	6800	0113	0017
16	6400	0096	0019
15	6000	0077	0015
14	5600	0062	0013
13	5200	0049	0014
12	4800	0035	0013
11	4400	0022	0006
10	4000	0016	0006
9	3600	0010	0005
8	3200	0005	0004
7	2800	0001	
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-4

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

ERAGE WIDTH: 1.502 _____ _____ _____

ERAGE THICKNESS: _____ 369 373 369

EA: .561

SELINE STRESS: 34ksi

X. LOAD: 19,074 #

1 Life

CLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD - 27.3K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1210	.0118
39	15600	1092	0102
38	15200	0990	0085
37	14800	0905	0084
36	14400	0819	0070
35	14000	0749	0072
34	13600	0677	0060
33	13200	0617	0055
32	12800	0562	0049
31	12400	0513	0044
30	12000	0469	0039
29	11600	0430	0037
28	11200	0393	0031
27	10800	0362	0027
26	10400	0335	0027
25	10000	0308	0027
24	9600	0281	0025
23	9200	0256	0025
22	8800	0231	0026
21	8400	0205	0022
20	8000	0183	0025
19	7600	0158	0019
18	7200	0139	0021
17	6800	0118	0017
16	6400	0101	0015
15	6000	0086	0013
14	5600	0073	0014
13	5200	0059	0010
12	4800	0049	0010
11	4400	0039	0008
10	4000	0031	0005
9	3600	0026	0003
8	3200	0023	0005
7	2800	0018	0003
6	2400	0015	0004
5	2000	0011	0002
4	1600	0009	0005
3	1200	0004	
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-5

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

VERAGE WIDTH: 1.501 _____ _____ _____

VERAGE THICKNESS: _____ 371 376 371

REA: .558

ASELINE STRESS: 34ksi

AX. LOAD: 18,972 #

1 Life

YCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD - 23.3K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.20200	.02180
39	15600	18020	02089
38	15200	15931	01716
37	14800	14215	01712
36	14400	12503	01288
35	14000	11215	01195
34	13600	10020	01020
33	13200	09000	00944
32	12800	08054	00790
31	12400	07264	00672
30	12000	06592	00642
29	11600	05950	00552
28	11200	05398	00493
27	10800	04905	00409
26	10400	04496	00411
25	10000	04085	00365
24	9600	03720	00318
23	9200	03402	00247
22	8800	03155	00255
21	8400	02900	00220
20	8000	02680	00218
19	7600	02462	00200
18	7200	02262	00157
17	6800	02105	00180
16	6400	01925	00147
15	6000	01778	00150
14	5600	01628	00156
13	5200	01472	00123
12	4800	01349	00137
11	4400	01212	00124
10	4000	01088	00117
9	3600	00971	00126
8	3200	00845	00128
7	2800	00717	00109
6	2400	00608	00080
5	2000	00528	00097
4	1600	00431	00103
3	1200	00376	00055
2	800	00335	00041
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-6

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

ERAGE WIDTH: 1.499 _____ _____ _____

ERAGE THICKNESS: _____ 373 378 373

EA: .561

SELINE STRESS: 34ksi

X. LOAD: 19,074#

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 28.9 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0648	.0072
39	15600	0576	0046
38	15200	0530	0040
37	14800	0490	0040
36	14400	0450	0039
35	14000	0411	0033
34	13600	0378	0031
33	13200	0347	0029
32	12800	0318	0024
31	12400	0294	0023
30	12000	0271	0024
29	11600	0248	0024
28	11200	0224	0020
27	10800	0204	0019
26	10400	0185	0016
25	10000	0169	0018
24	9600	0151	0015
23	9200	0136	0014
22	8800	0123	0013
21	8400	0109	0011
20	8000	0098	0014
19	7600	0084	0011
18	7200	0073	0008
17	6800	0065	0006
16	6400	0059	0008
15	6000	0051	0006
14	5600	0045	0006
13	5200	0039	0006
12	4800	0033	0005
11	4400	0028	0004
10	4000	0024	0004
9	3600	0020	0003
8	3200	0017	0004
7	2800	0013	0003
6	2400	0010	0002
5	2000	0008	0003
4	1600	0005	0002
3	1200	0003	
2	800		
1	400		

(192)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-7

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

ERAGE WIDTH: 1.500 _____ _____ _____

ERAGE THICKNESS: _____ 365 370 367

EA: .551

SELINE STRESS: 34ksi

X. LOAD: 18,734# 1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD -28.1 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1051	.0121
39	15600	.0930	0100
38	15200	0830	0084
37	14800	0746	0076
36	14400	0670	0070
35	14000	0600	0058
34	13600	0542	0062
33	13200	0480	0035
32	12800	0445	0035
31	12400	0410	0038
30	12000	0372	0034
29	11600	0338	0028
28	11200	0310	0027
27	10800	0283	0027
26	10400	0256	0022
25	10000	0234	0022
24	9600	0212	0021
23	9200	0191	0020
22	8800	0171	0019
21	8400	0152	0015
20	8000	0137	0014
19	7600	0123	0014
18	7200	0109	0009
17	6800	0100	0011
16	6400	0089	0010
15	6000	0079	0010
14	5600	0069	0015
13	5200	0054	0007
12	4800	0047	0007
11	4400	0040	0007
10	4000	0033	0005
9	3600	0028	0003
8	3200	0025	0002
7	2800	0023	0003
6	2400	0020	0002
5	2000	0018	0003
4	1600	0015	0003
3	1200	0012	0003
2	800	0009	
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-8

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

ERAGE WIDTH: 1.500 _____ _____ _____

ERAGE THICKNESS: _____ 375 378 373

EA: .563

SELINE STRESS: 34ksi

X. LOAD: 19,142# 1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD-22.9 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.21373	.02481
39	15600	18892	02222
38	15200	16670	02180
37	14800	14490	01756
36	14400	12734	01479
35	14000	11255	01255
34	13600	10000	01145
33	13200	08855	00976
32	12800	07879	00814
31	12400	07065	00700
30	12000	06365	00661
29	11600	05704	00562
28	11200	05142	00483
27	10800	04659	00451
26	10400	04208	00450
25	10000	03758	00329
24	9600	03429	00384
23	9200	03045	00275
22	8800	02770	00302
21	8400	02468	00271
20	8000	02197	00244
19	7600	01953	00234
18	7200	01719	00184
17	6800	01525	00167
16	6400	01358	00185
15	6000	01173	00148
14	5600	01025	00161
13	5200	00864	00131
12	4800	00733	00135
11	4400	00598	00109
10	4000	00489	00090
9	3600	00399	00109
8	3200	00290	00052
7	2800	00238	00077
6	2400	00161	
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-9

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

VERAGE WIDTH: 1.501 _____ _____ _____

VERAGE THICKNESS: _____ 373 373 373

REA: .560

ASELINE STRESS: 34 KSI

AX. LOAD: 19,040# 1 Life

YCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 30.4 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.06258	.00569
39	15600	05689	00487
38	15200	05202	00485
37	14800	04717	00405
36	14400	04312	00344
35	14000	03968	00344
34	13600	03622	00333
33	13200	03289	00299
32	12800	02990	00281
31	12400	02710	00267
30	12000	02429	00236
29	11600	02162	00208
28	11200	01926	00202
27	10800	01718	00167
26	10400	01516	00146
25	10000	01349	00136
24	9600	01203	00124
23	9200	01067	00120
22	8800	00943	00101
21	8400	00823	00104
20	8000	00722	00105
19	7600	00618	00073
18	7200	00513	00074
17	6800	00441	
16	6400	00367	
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-10

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

ERAGE WIDTH: 1.497 _____ _____ _____

ERAGE THICKNESS: _____ 370 370 371

EA: .555

SELINE STRESS: 34 KSI

X. LOAD: 18,870# 1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 24.6 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.14478	.01553
39	15600	12925	01468
38	15200	11457	01203
37	14800	10254	01001
36	14400	09253	00905
35	14000	08348	00826
34	13600	07522	00741
33	13200	06781	00654
32	12800	06127	00559
31	12400	05568	00506
30	12000	05062	00450
29	11600	04612	00433
28	11200	04179	00391
27	10800	03788	00378
26	10400	03410	00332
25	10000	03078	00354
24	9600	02722	00365
23	9200	02357	00279
22	8800	02078	00307
21	8400	01771	00261
20	8000	01510	00215
19	7600	01295	00184
18	7200	01111	00165
17	6800	00946	00146
16	6400	00800	00129
15	6000	00671	00113
14	5600	00558	00097
13	5200	00461	00069
12	4800	00392	00071
11	4400	00321	00054
10	4000	00267	00045
9	3600	00222	00040
8	3200	00182	00029
7	2800	00153	00036
6	2400	00117	
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-11

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (3)

ERAGE WIDTH: 1.496 ___ ___ ___

/ERAGE THICKNESS: _____ 377 378 377

EA: .564

SELINE STRESS: 34ksi

X. LOAD: 19,176 #

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 31.6 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0320	.0024
39	15600	0296	0021
38	15200	0275	0021
37	14800	0254	0022
36	14400	0232	0018
35	14000	0214	0018
34	13600	0196	0017
33	13200	0179	0016
32	12800	0163	0013
31	12400	0150	0016
30	12000	0134	0013
29	11600	0121	0014
28	11200	0107	0012
27	10800	0095	0013
26	10400	0082	0009
25	10000	0073	0011
24	9600	0062	0007
23	9200	0055	0005
22	8800	0050	0008
21	8400	0042	0005
20	8000	0037	0006
19	7600	0031	0004
18	7200	0027	0003
17	6800	0024	0003
16	6400	0021	0003
15	6000	0018	0004
14	5600	0014	0003
13	5200	0011	0002
12	4800	0009	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-12

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

ERAGE WIDTH: 1.500 ___ ___ ___

/ERAGE THICKNESS: _____ 374 373 375

EA: .561

SELINE STRESS: 34ksi

X. LOAD: 19,074

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 26.9 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1621	.0151
39	15600	1470	0151
38	15200	1329	0131
37	14800	1198	0113
36	14400	1085	0096
35	14000	0989	0094
34	13600	0895	0097
33	13200	0798	0077
32	12800	0721	0071
31	12400	0650	0072
30	12000	0578	0051
29	11600	0527	0057
28	11200	0470	0048
27	10800	0422	0038
26	10400	0384	0033
25	10000	0351	0035
24	9600	0316	0034
23	9200	0282	0030
22	8800	0252	0031
21	8400	0221	0026
20	8000	0195	0026
19	7600	0169	0021
18	7200	0148	0022
17	6800	0126	0018
16	6400	0108	0017
15	6000	0091	0015
14	5600	0076	0013
13	5200	0063	0014
12	4800	0049	0013
11	4400	0036	0012
10	4000	0024	
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: WIF-13

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

ERAGE WIDTH: 1.498 ___ ___ ___

ERAGE THICKNESS: _____ 373 378 373

EA: .561

SELINE STRESS: 34 ksi

X. LOAD: 19074#

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/ 1,531,494 L8's

STATIC LOAD - 25.0 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1698	.0166
39	15600	1532	0162
38	15200	1370	0141
37	14800	1229	0120
36	14400	1109	0117
35	14000	0992	0101
34	13600	0891	0099
33	13200	0792	0081
32	12800	0711	0073
31	12400	0638	0059
30	12000	0579	0059
29	11600	0520	0047
28	11200	0473	0043
27	10800	0430	0038
26	10400	0392	0038
25	10000	0354	0033
24	9600	0321	0028
23	9200	0293	0031
22	8800	0262	0029
21	8400	0233	0024
20	8000	0209	0025
19	7600	0184	0024
18	7200	0160	0024
17	6800	0136	0018
16	6400	0118	0017
15	6000	0101	0016
14	5600	0085	0012
13	5200	0073	0010
12	4800	0063	0009
11	4400	0054	0007
10	4000	0047	0008
9	3600	0039	0005
8	3200	0034	0007
7	2800	0027	0005
6	2400	0022	0004
5	2000	0018	0003
4	1600	0015	0004
3	1200	0011	0005
2	800	0006	
1	400		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

2.1.3 WPB

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-38 (WPB-1)

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6

AVERAGE WIDTH: 1.5013 ___ ___ ___

AVERAGE THICKNESS: .3779 ___ ___ ___

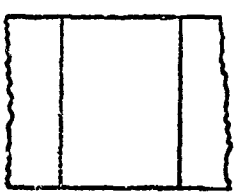
AREA: .5673

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,722 #

CYCLES AT ~~TERMINATION~~/FAILURE: * 3Lives/___

@ 939,888 L.P.'s = 3645.2 FLTS *



SPECIMEN NUMBER: WPF-1 (WPB-2)

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: [1] 2 3 4 5

AVERAGE WIDTH: 1.5012 ___ ___ ___

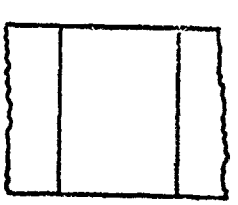
AVERAGE THICKNESS: .3762 ___ ___ ___

AREA: .5648

BASELINE STRESS: 33 KSI

MAX. LOAD: 18636.8 #

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/990117 L.P.'s



FRACTOGRAPHIC DATA

FLIGHT ~~HOURS~~		CRACK LENGTH INCH		INCREMENT INCH.	
ThreeLives	3840				
	3760				
*	~~3680~~	.1279	.0223	.0136	.0043
	3560	1143	0177	0140	0034
	3460	1003	0143	0129	0030
	3360	0874	0113	0119	0018
	3260	0755	0095	0099	0017
	3160	0656	0078	0086	0011
	3060	0570	0067	0075	0007
	2960	0495	0060	0072	0008
	2860	0423	0052	0058	0008
	2760	0365	0044	0058	0006
	2660	0317	0038	0041	
Two Lives	2560	0276		0036	
	2480	0240		0026	
	2380	0215		0022	
	2280	0193		0021	
	2180	0172		0023	
	2080	0149		0019	
	1980	0130		0019	
	1880	0111		0016	
	1780	0095		0014	
	1680	0081		0015	
	1580	0066		0009	
	1480	0057		0007	
	1380	0050		0007	
One Life	1280	0043		0005	
	1200	0038		0009	
	1100	0029		0009	
	1000	0020		0009	
	900	0016		0006	
	800	0010		0004	
	700	0006			
	600				
	500				
	400				
	300				
	200				

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.1172	0102
"	3760	.1070	0193
"	3660	.0877	0134
"	3560	.0743	0113
	3460	.0630	0089
	3360	.0541	0071
	3260	.0470	0067
	3160	.0403	0046
	3060	.0357	0048
	2960	.0309	0029
	2860	.0270	0037
	2760	.0233	0030
	2660	.0203	0023
Two Lives	2560	.0180	0022
	2480	.0158	0025
	2380	.0133	0023
	2280	.0110	0024
	2180	.0086	
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-2 (WPB-3)

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 [2] 3 4 5

AVERAGE WIDTH: 1.5007 ___ ___ ___

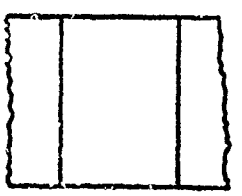
AVERAGE THICKNESS: .3803 ___ ___ ___

AREA: .5707

BASELINE STRESS: 33 Ksi

MAX. LOAD: 18833.6 #

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/9901171.P6



SPECIMEN NUMBER: WPF-3 (WPB-4)

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 [3] 4 5

AVERAGE WIDTH: 1.5017 ___ ___ ___

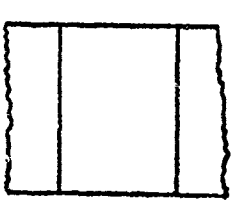
AVERAGE THICKNESS: .3712 ___ ___ ___

AREA: .5574

BASELINE STRESS: 33 Ksi

MAX. LOAD: 18395.2 #

CYCLES AT TERMINATION/FAILURE: 3Lives/9901171.P6



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.1107	.0113
	3760	.0994	0117
	3660	0877	0107
	3560	.0770	0095
	3460	.0675	0082
	3360	.0593	0076
	3260	.0517	0076
	3160	.0441	0052
	3060	.0389	0052
	2960	.0337	0041
	2860	.0296	0038
	2760	.0258	0031
	2660	.0227	0030
Two Lives	2560	.0197	0021
	2480	.0176	0028
	2380	.0148	0024
	2280	.0124	0022
	2180	.0102	
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0842	0129
	3760	.0713	0126
	3660	.0587	0107
	3560	.0480	0088
	3460	.0392	0064
	3360	.0328	0050
	3260	.0278	0042
	3160	.0236	0039
	3060	.0197	0028
	2960	.0169	0025
	2860	.0144	0024
	2760	.0120	
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

(28)

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPF-4 (WPB-5)

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: ① 2 3 4 5

AVERAGE WIDTH: 1.4960 ___ ___ ___

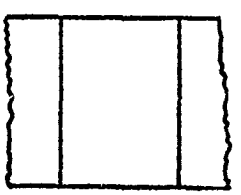
AVERAGE THICKNESS: .3708 ___ ___ ___

AREA: .5547

BASELINE STRESS: 33Ksi

MAX. LOAD: 18305.7

CYCLES AT ~~TERMINATION~~/FAILURE: * 3Lives/990117LPs
@ 943395LP's



SPECIMEN NUMBER: WPF-5 (WPB-6)

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 [2] 3 4 5

AVERAGE WIDTH: 1.5048 ___ ___ ___

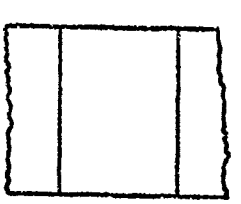
AVERAGE THICKNESS: .3720 ___ ___ ___

AREA: .5598

BASELINE STRESS: 33Ksi

MAX. LOAD: 18472.9#

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/990117LPs



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	~~3840~~		
	3760		
* →	3658.8 ~~3680~~	.4390	.1262
	3560	.3128	0516
	3460	.2612	0415
	3360	.2197	0330
	3260	.1867	0282
	3160	.1585	0235
	3060	.1350	0200
	2960	.1150	0187
	2860	.0963	0169
	2760	.0794	0132
	2660	.0662	0112
Two Lives	2560	0550	0068
	2480	.0472	0068
	2380	.0414	0064
	2280	.0350	0040
	2180	.0310	0047
	2080	.0263	0037
	1980	.0226	0034
	1880	.0192	0032
	1780	.0160	0023
	1680	.0137	0018
	1580	.0119	0021
	1480	.0098	
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0986	.0132
	3760	.0854	0126
	3660	.0728	0111
	3560	.0617	0094
	3460	.0523	0075
	3360	.0448	0063
	3260	.0385	0049
	3160	.0336	0043
	3060	.0293	0038
	2960	.0255	0033
	2860	.0222	0029
	2760	.0198	0025
	2660	.0168	0020
Two Lives	2560	.0148	0018
	2460	.0130	0020
	2387	.0110	
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-7

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5014

AVERAGE THICKNESS: .3725

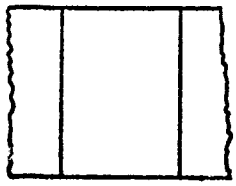
AREA: .5593

BASELINE STRESS: 33 KSi

MAX. LOAD: 18,456 #

CYCLES AT [redacted]/FAILURE: * 3Lives/___

@866,031 L.P.i = 3358.75 FLTS *



SPECIMEN NUMBER: WPB-8

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.5030

AVERAGE THICKNESS: .3729

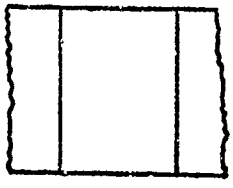
AREA: .5605

BASELINE STRESS: 33 KSi

MAX. LOAD: 18,555.0 #

CYCLES AT TERMINATION/[redacted]: 3Lives/___

STATIC LOAD = 33.1 K#



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
* →	[redacted]	.3781	.1340
	3260	2441	0575
	3160	1866	0392
	3060	1474	0274
	2960	1200	0226
	2860	0974	0202
	2760	0772	0159
	2660	0613	0139
Two Lives	2560	0474	0071
	2480	0403	0075
	2380	0328	0057
	2280	0271	0048
	2180	0223	0043
	2080	0180	0032
	1980	0148	0028
	1880	0120	0027
	1780	0093	0009
	1680	0084	0014
	1580	0070	0013
	1480	0057	0011
	1380	0046	0009
One Life	1280	0037	0010
	1200	0027	
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.1464	.0206
	3760	1258	0190
	3660	1068	0167
	3560	0901	0141
	3460	0760	0121
	3360	0636	0098
	3260	0538	0083
	3160	0455	0060
	3060	0395	0055
	2960	0340	0047
	2860	0293	0042
	2760	0251	0034
	2660	0217	0027
Two Lives	2560	0190	0029
	2480	0170	0023
	2380	0147	0022
	2280	0125	0018
	2180	0107	
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

ENERAL DYNAMICS
rt Worth Division
ABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-9

$a/2c = .40$

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6

AVERAGE WIDTH: 1.5022 ___ ___ ___

AVERAGE THICKNESS: .3743 ___ ___ ___

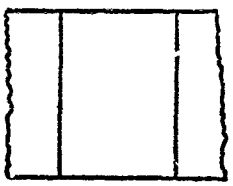
AREA: .5623

BASELINE STRESS: 33KSI

MAX. LOAD: 18,555#

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 33.1K#



SPECIMEN NUMBER: WPB-10

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6

AVERAGE WIDTH: 1.5015 ___ ___ ___

AVERAGE THICKNESS: .3763 ___ ___ ___

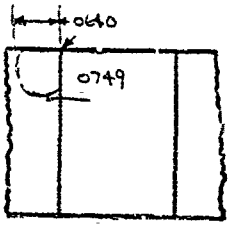
AREA: .5650

BASELINE STRESS: 33KSI

MAX. LOAD: 18,645.5#

CYCLES AT TERMINATION/[redacted]: 3Lives/___

STATIC LOAD - 31.6K#



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0111	2c = .0280
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.061	
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

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GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-11

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6

AVERAGE WIDTH: 1.5016 ___ ___ ___

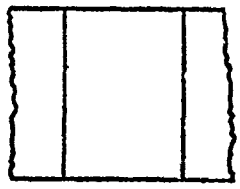
AVERAGE THICKNESS: .3806 ___ ___ ___

AREA: .5715

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,859.8 #

CYCLES AT TERMINATION/[redacted]: 3Lives/___



SPECIMEN NUMBER: WPB-12

SPECTRUM: Bomber

TEST DATE: [redacted]

TEST FRAME: 1 (2) 3 4 5 6

AVERAGE WIDTH: 1.4990 ___ ___ ___

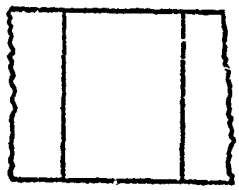
AVERAGE THICKNESS: .3843 ___ ___ ___

AREA: .5761

BASELINE STRESS: 33 KSI

MAX. LOAD: 19,010.2 #

CYCLES AT TERMINATION/[redacted]: 3Lives/___



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.1610	.0219
	3760	1391	.0213
	3660	1178	0178
	3560	1007	0155
	3460	0852	0125
	3360	0727	0107
	3260	0620	0087
	3160	0533	0073
	3060	0460	0063
	2960	0397	0054
	2860	0351	0054
	2760	0297	0041
	2660	0256	0037
Two Lives	2560	0219	0025
	2480	0194	0036
	2380	0158	0028
	2280	0130	0018
	2180	0112	0020
	2080	0092	0017
	1980	0075	0010
	1880	0065	0009
	1780	0056	0007
	1680	0049	0008
	1580	0041	0007
	1480	0034	
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT [redacted]		CRACK LENGTH INCH		INCREMENT INCH.	
ThreeLives	3840	.0196	.0143	.0020	.0015
	3760	0176	0128	0018	0017
	3660	0158	0111	0023	0019
	3560	0135	0092	0019	0017
	3460	0117	0075	0012	0015
	3360	0111	0060	0016	0010
	3260	0088	0050	0013	
	3160	0077		0011	
	3060	0066		0011	
	2960	0059		0007	
	2860	0053		0006	
	2760	0047		0006	
	2660	0043		0004	
Two Lives	2560	0041		0002	
	2480	0038		0003	
	2380	0035		0003	
	2280	0032		0003	
	2180	0029		0001	
	2080	0028		0002	
	1980	0026			
	1880				
	1780				
	1680				
	1580				
	1480				
	1380				
One Life	1280				
	1200				
	1100				
	1000				
	900				
	800				
	700				
	600				
	500				
	400				
	300				
	200				

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-13

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6

AVERAGE WIDTH: 1.5016 ___ ___ ___

AVERAGE THICKNESS: .3752 ___ ___ ___

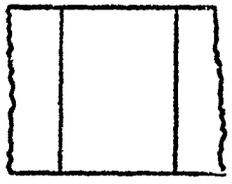
AREA: .5634

BASELINE STRESS: 33ksi

MAX. LOAD: 18,592.2#

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/___

STATIC LOAD - 22.0 K#



SPECIMEN NUMBER: ~~WPB-14~~ WPB-14

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.5014 ___ ___ ___

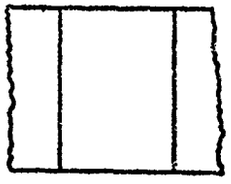
AVERAGE THICKNESS: .3821 ___ ___ ___

AREA: .5737

BASELINE STRESS: 33ksi

MAX. LOAD: 18,931.6#

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/___



FRACTOGRAPHIC DATA

FLIGHT ~~NUMBER~~		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.2914	.0393
	3760	2521	0388
	3660	2133	0304
	3560	1829	0247
	3460	1582	0219
	3360	1363	0192
	3260	1171	0170
	3160	1001	0135
	3060	0866	0146
	2960	0720	0113
	2860	0607	0090
	2760	0517	0084
	2660	0433	0064
Two Lives	2560	0369	0046
	2480	0323	0044
	2380	0279	0039
	2280	0240	0033
	2180	0207	0029
	2080	0178	0028
	1980	0150	0022
	1880	0128	0019
	1780	0109	0013
	1680	0096	0011
	1580	0085	0013
	1480	0072	0009
	1380	0063	0010
One Life	1280	0053	0004
	1200	0049	0007
	1100	0043	0005
	1000	0037	0004
	900	0033	0005
	800	0028	0004
	700	0024	0004
	600	0020	0003
	500	0017	0004
	400	0013	
	300		
	200		

FLIGHT ~~NUMBER~~		CRACK LENGTH INCH		INCREMENT INCH.	
ThreeLives	3840	.0743	.0524	.0111	.0068
	3760	0632	0456	0095	0060
	3660	0537	0396	0079	0074
	3560	0458	0346	0066	0050
	3460	0392	0305	0051	0041
	3360	0341	0270	0042	0035
	3260	0299	0237	0036	0033
	3160	0263	0208	0028	0029
	3060	0235	0182	0025	0026
	2960	0210	0155	0034	0017
	2860	0174	0135	0018	0020
	2760	0156	0118	0016	0017
	2660	0140	0105	0012	0013
Two Lives	2560	0128	0098	0011	0007
	2480	0117	0089	0015	0009
	2380	0102	0081	0013	0008
	2280	0089	0072	0012	0008
	2180	0077	0064	0014	0008
	2080	0063	0056	0007	0008
	1980	0056	0048	0005	0007
	1880	0050	0041	0008	0008
	1780	0042	0033	0006	0006
	1680	0036	0027	0006	0007
	1580	0030	0020	0003	0005
	1480	0027	0015	0004	0003
	1380	0023	0012	0006	
One Life	1280	0017		0002	
	1200	0015		0005	
	1100	0010			
	1000				
	900				
	800				
	700				
	600				
	500				
	400				
	300				

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ENERAL DYNAMICS
ort Worth Division)
ABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-15

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.5001 ___ ___ ___

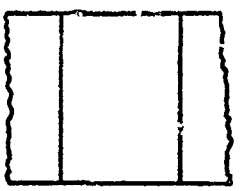
AVERAGE THICKNESS: .3717 ___ ___ ___

AREA: .5576

BASELINE STRESS: 33 ksi

MAX. LOAD: 18,400.8#

CYCLES AT TERMINATION/[redacted] 3Lives/___



SPECIMEN NUMBER: WPB-16

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5

AVERAGE WIDTH: 1.4999 ___ ___ ___

AVERAGE THICKNESS: .3786 ___ ___ ___

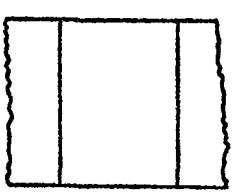
AREA: .5611

BASELINE STRESS: 33 ksi

MAX. LOAD: 18,740.7#

CYCLES AT [redacted]/FAILURE: * 3Lives/___

@ 909936 L.P.s = 3529.03 Flts.*



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH		INCREMENT INCH.	
ThreeLives	3840	.0510	.0497	.0014	.0086
	3760	0496	0411	0064	0076
	3660	0432	0335	0062	0051
	3560	0370	0284	0052	0047
	3460	0318	0237	0040	0032
	3360	0278	0205	0040	0042
	3260	0238	0162	0025	0022
	3160	0213	0140	0030	0020
	3060	0183	0120	0024	0020
	2960	0159	0100	0027	0017
	2860	0132	0083	0016	
	2760	0116		0012	
	2660	0104		0012	
Two Lives	2560	0092		0011	
	2480	0081		0011	
	2380	0070		0010	
	2280	0060		0012	
	2180	0048		0007	
	2080	0041		0007	
	1980	0034		0007	
	1880	0027		0005	
	1780	0022		0005	
	1680	0017		0006	
	1580	0011		0006	
	1480	0005			
	1380				
One Life	1280				
	1200				
	1100				
	1000				
	900				
	800				
	700				
	600				
	500				
	400				
	300				
	200				

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
* →	[redacted]	.3792	0883
	3460	2909	0599
	3360	2310	0410
	3260	1900	0327
	3160	1573	0262
	3060	1311	0211
	2960	1100	0175
	2860	0925	0158
	2760	0767	0143
	2660	0624	0106
Two Lives	2560	0518	0055
	2480	0463	0070
	2380	0393	0055
	2280	0338	0044
	2180	0294	0039
	2080	0255	0038
	1980	0217	0034
	1880	0183	0031
	1780	0152	0027
	1680	0125	0027
	1580	0098	0017
	1480	0081	0016
	1380	0065	0010
One Life	1280	0055	0006
	1200	0049	0010
	1100	0039	0008
	1000	0031	0007
	900	0024	0004
	800	0020	0003
	700	0017	0004
	600	0013	0002
	500	0011	0002
	400	0009	
	300		
	200		

ENERAL DYNAMICS
rt Worth Division
ABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-17

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.5020 ___ ___ ___

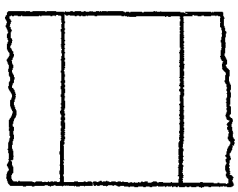
AVERAGE THICKNESS: .3736 ___ ___ ___

AREA: .5611

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,516.3#

CYCLES AT TERMINATION/[redacted] 3Lives/___



SPECIMEN NUMBER: WPB-18

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6

AVERAGE WIDTH: 1.5013 ___ ___ ___

AVERAGE THICKNESS: .3782 ___ ___ ___

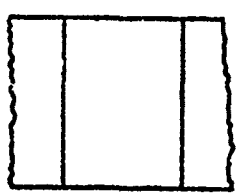
AREA: .5678

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,737

CYCLES AT TERMINATION/[redacted] 3Lives/___

STATIC LOAD - 27.2K#



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH		INCREMENT INCH.	
ThreeLives	3840	.4250	.1940	.0380	.0423
	3760	3870	1517	0707	0434
	3660	3163	1083	0502	0336
	3560	2661	0747	0396	0225
	3460	2265	0521	0220	0149
	3360	2045	0372	0104	0093
	3260	1941	0279	0263	0062
	3160	1678	0217	0225	0043
	3060	1453	0174	0188	0032
	2960	1265	0142	0160	0026
	2860	1105	0116	0149	0023
	2760	0820	0093	0136	0015
	2660	0700	0078	0120	0016
Two Lives	2560	0603	0062	0097	0007
	2480	0546	0055	0057	0005
	2380	0474	0050	0062	0007
	2280	0408	0043	0053	0006
	2180	0355	0037	0048	0005
	2080	0307	0032	0045	0006
	1980	0262	0026	0040	0003
	1880	0222	0023	0034	0003
	1780	0188	0020	0028	0002
	1680	0160	0018	0027	0003
	1580	0133	0015	0023	0002
	1480	0110	0013	0015	0002
	1380	0095	0011	0025	0001
One Life	1280	0070	0010	0010	0002
	1200	0060	0008	0010	0001
	1100	0050	0007	0007	0002
	1000	0043	0005	0010	0002
	900	0037	0003	0009	0001
	800	0027	0002	0005	
	700	0018		0005	
	600	0013		0004	
	500	0008			
	400	0004			
	300				
	200				

FLIGHT [redacted]		CRACK LENGTH INCH		INCREMENT INCH.	
ThreeLives	3840	.1028	.1020	.0145	.0150
	3760	0888	0870	0135	0120
	3660	0750	0750	0119	0111
	3560	0631	0639	0094	0096
	3460	0537	0543	0080	0081
	3360	0457	0462	0059	0064
	3260	0398	0398	0056	0057
	3160	0342	0341	0049	0046
	3060	0293	0295	0033	0044
	2960	0260	0251	0038	0036
	2860	0222	0215	0030	0028
	2760	0192	0187	0029	0037
	2660	0165	0150	0020	0021
Two Lives	2560	0143	0129	0016	0022
	2480	0127	0107	0018	0019
	2380	0109	0088	0014	0021
	2280	0095	0067	0012	0014
	2180	0083	0053	0010	0005
	2080	0073	0048	0011	0006
	1980	0062	0042	0009	0004
	1880	0053	0038	0008	0004
	1780	0045	0034	0007	0004
	1680	0038	0030	0005	0003
	1580	0033	0027	0004	0004
	1480	0029	0023	0005	0004
	1380	0024	0019	0004	0003
One Life	1280	0020	0016	0002	0002
	1200	0018	0014	0002	
	1100	0016		0003	
	1000	0013		0001	
	900	0012		0002	
	800	0010		0002	
	700	0008		0003	
	600	0005		0003	
	500	0002			
	400				
	300				

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-19 *

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5

AVERAGE WIDTH: 1.5003 ___ ___ ___

AVERAGE THICKNESS: .3755 ___ ___ ___

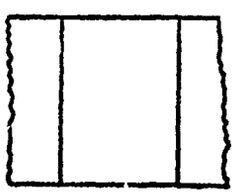
AREA: .5634

BASELINE STRESS: 33KSi

MAX. LOAD: 18,591.0#

CYCLES AT [redacted]/FAILURE: * 3Lives/___

@ 979,526 L.P.'s = 3798.92 FLTS *
@ 85.6% LOAD



SPECIMEN NUMBER: WPB-20

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: .3759 ___ ___ ___

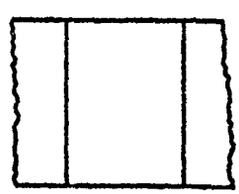
AREA: .5638

BASELINE STRESS: 33KSi

MAX. LOAD: 18,605.8#

CYCLES AT TERMINATION/[redacted]: 3Lives/___

STATIC LOAD - 33.3K#



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	[redacted]	4225	0655
	3760	3570	0780
	3660	2790	0450
	3560	2340	0374
	3460	1966	0318
	3360	1648	0272
	3260	1376	0240
	3160	1136	0191
	3060	0945	0167
	2960	0778	0129
	2860	0649	0116
	2760	0533	0089
	2660	0444	0079
Two Lives	2560	0365	0033
	2480	0332	0049
	2380	0283	0040
	2280	0243	0036
	2180	0207	0039
	2080	0173	0068
	1980	0145	0025
	1880	0120	0023
	1780	0097	0015
	1680	0082	0012
	1580	0070	0011
	1480	0059	0012
	1380	0047	0008
One Life	1280	0039	
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0141 / .0670	0014
	3760	0127	0010
	3660	0117	0015
	3560	0102	0012
	3460	0090	0011
	3360	0079	0008
	3260	0071	0012
	3160	0059	0009
	3060	0050	0007
	2960	0043	0008
	2860	0035	
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

GENERAL DY. AMICS
rt Worth Division
ABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-21

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6

AVERAGE WIDTH: 1.5002 ___ ___ ___

AVERAGE THICKNESS: .3770 ___ ___ ___

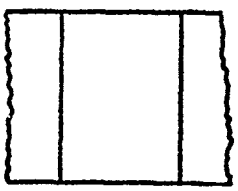
AREA: .5656

BASELINE STRESS: 33ksi

MAX. LOAD: 18,664 #

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/___

STATIC LOAD - 23.3 K#



SPECIMEN NUMBER: WPB-22

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.4995 ___ ___ ___

AVERAGE THICKNESS: .3736 ___ ___ ___

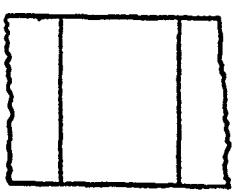
AREA: .5602

BASELINE STRESS: 33ksi

MAX. LOAD: 18487.0

CYCLES AT TERMINATION/FAILURE: 3Lives/990117LPs

STATIC LOAD - 30.0 K#



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.2597	.0337
	3760	2260	0406
	3660	1854	0296
	3560	1558	0223
	3460	1335	0190
	3360	1145	0165
	3260	0980	0180
	3160	0800	0110
	3060	0690	0117
	2960	0573	0092
	2860	0481	0073
	2760	0408	0065
	2660	0343	0059
Two Lives	2560	0284	0064
	2480	0220	0023
	2380	0197	0019
	2280	0168	0024
	2180	0144	0011
	2080	0123	0022
	1980	0101	0018
	1880	0083	0012
	1780	0071	0010
	1680	0060	0008
	1580	0052	0009
	1480	0043	0006
	1380	0037	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0673	.0091
	3760	.0582	0092
	3660	.0490	0075
	3560	.0415	0064
	3460	.0351	0053
	3360	.0298	0045
	3260	.0253	0035
	3160	.0218	0031
	3060	.0187	0026
	2960	.0161	0019
	2860	.0142	0019
	2760	.0123	0016
	2660	.0107	0015
Two Lives	2560	.0092	0008
	2480	.0084	
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-23

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 [3] 4 5 (#90)

AVERAGE WIDTH: 1.5017 ___ ___ ___

AVERAGE THICKNESS: .3710 ___ ___ ___

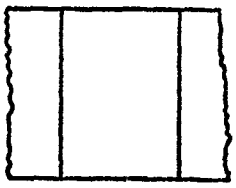
AREA: .5571

BASELINE STRESS: 33ksi

MAX. LOAD: 18385.3#

CYCLES AT ~~TERMINATION~~/FAILURE:* 3Lives/990 11748

@ 89818 L.P.



SPECIMEN NUMBER: WPB-24 %c = .42

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6

AVERAGE WIDTH: 1.5015 ___ ___ ___

AVERAGE THICKNESS: .3712 ___ ___ ___

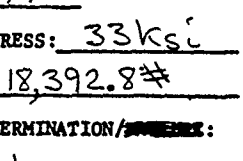
AREA: .5574

BASELINE STRESS: 33ksi

MAX. LOAD: 18,392.8#

CYCLES AT TERMINATION/[redacted]: 3Lives/___

STATIC LOAD - 32.8K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	~~3840~~		
	~~3760~~		
	~~3660~~		
	~~3560~~		
* →	~~3460~~	.3433	1141
	3360	.2292	0566
	3260	.1726	0412
	3160	.1314	0330
	3060	.0984	0216
	2960	.0768	0167
	2860	.0601	0124
	2760	.0477	0097
	2660	.0380	0078
Two Lives	2560	.0302	0044
	2480	.0257	0040
	2380	.0218	0036
	2280	.0182	0030
	2180	.0152	0026
	2080	.0126	0019
	1980	.0107	0016
	1880	.0091	0018
	1780	.0073	
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0117	2c = .0280
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1390		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

(36)

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-25

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5030 ___ ___ ___

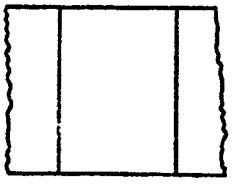
AVERAGE THICKNESS: .3729 ___ ___ ___

AREA: .5605

BASELINE STRESS: 33ksi

MAX. LOAD: 18,495.5

CYCLES AT TERMINATION/[redacted]: 3Lives/___



SPECIMEN NUMBER: WPB-26

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.5026 ___ ___ ___

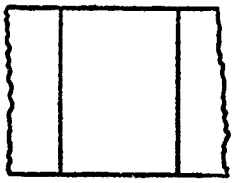
AVERAGE THICKNESS: .3743 ___ ___ ___

AREA: .5624

BASELINE STRESS: 33ksi

MAX. LOAD: 18,560#

CYCLES AT TERMINATION/[redacted] 3Lives/___



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.3347	.0626
	3760	2721	0529
	3660	2192	0412
	3560	1780	0322
	3460	1458	0277
	3360	1181	0253
	3260	0938	0221
	3160	0717	0133
	3060	0584	0114
	2960	0470	0088
	2860	0382	0067
	2760	0315	0053
	2660	0262	0037
Two Lives	2560	0225	0031
	2480	0194	0029
	2380	0165	0030
	2280	0135	0026
	2180	0109	0025
	2080	0084	0012
	1980	0072	0010
	1880	0062	0010
	1780	0052	0007
	1680	0045	0007
	1580	0038	0007
	1480	0031	0005
	1380	0026	0006
One Life	1280	0020	0003
	1200	0017	0004
	1100	0013	0003
	1000	0010	0004
	900	0006	
	800		
	700		
	600		
	500		
	400		
	300		

FLIGHT [redacted]		CRACK LENGTH INCH		INCREMENT INCH.	
ThreeLives	3840	.0772	.0350	.0104	.0055
	3760	0668	0295	0102	0047
	3660	0566	0248	0085	0042
	3560	0481	0206	0073	0033
	3460	0408	0173	0062	0028
	3360	0346	0145	0055	0023
	3260	0291	0122	0033	0021
	3160	0258	0101	0043	0015
	3060	0215	0086	0029	0014
	2960	0186	0072	0026	0010
	2860	0160	0062	0023	0011
	2760	0137	0051	0020	0007
	2660	0117	0044	0016	0008
Two Lives	2560	0101	0036	0009	0006
	2480	0092	0030	0010	
	2380	0082		0018	
	2280	0070		0012	
	2180	0058		0009	
	2080	0049		0014	
	1980	0035			
	1880				
	1780				
	1680				
	1580				
	1480				
	1380				
One Life	1280				
	1200				
	1100				
	1000				
	900				
	800				
	700				
	600				
	500				
	400				
	300				
	200				

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-27

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6

AVERAGE WIDTH: 1.5034

AVERAGE THICKNESS: .3753

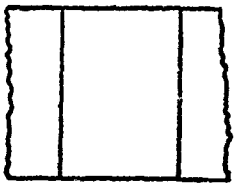
AREA: .5642

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,619.5#

CYCLES AT TERMINATION/[redacted] 3Lives/____

STATIC LOAD - 23.115#



SPECIMEN NUMBER: WPB-28 a/c = .49 →

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6

AVERAGE WIDTH: 1.5014

AVERAGE THICKNESS: .3754

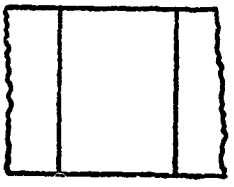
AREA: .5636

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,599.6#

CYCLES AT TERMINATION/[redacted]: 3Lives/____

STATIC LOAD - 34.0K#



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.2023	.0306
	3760	1717	0288
	3660	1429	0224
	3560	1205	0187
	3460	1018	0157
	3360	0861	0129
	3260	0732	0112
	3160	0620	0102
	3060	0518	0078
	2960	0440	0066
	2860	0374	0057
	2760	0317	0049
	2660	0268	0041
Two Lives	2560	0227	0022
	2480	0205	0028
	2380	0177	0025
	2280	0152	0029
	2180	0123	0016
	2080	0107	0015
	1980	0092	0014
	1880	0078	0009
	1780	0069	0007
	1680	0060	0009
	1580	0053	0007
	1480	0046	
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0072	2c = .0148
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-29

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.5009 ___ ___ ___

AVERAGE THICKNESS: .3797 ___ ___ ___

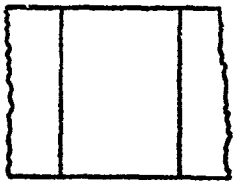
AREA: .5699

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,806.4

CYCLES AT TERMINATION/FAILURE: 3Lives/99017LPC

STATIC LOAD - 30.8K#



SPECIMEN NUMBER: WPB-30

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.5024 ___ ___ ___

AVERAGE THICKNESS: .3759 ___ ___ ___

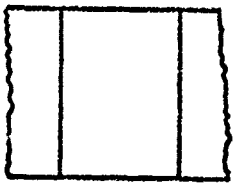
AREA: .5648

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,636.8 #

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 31.9K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0547	.0077
	3760	.0470	0065
	3660	.0405	0058
	3560	.0347	0044
	3460	.0303	0038
	3360	.0265	0031
	3260	.0234	0028
	3160	.0206	0025
	3060	.0181	0023
	2960	.0158	0023
	2860	.0135	0018
	2760	.0117	0017
	2660	.0100	0016
Two Lives	2560	.0084	0011
	2480	.0073	0011
	2380	.0062	
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1660		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0437	.0064
	3760	0373	0055
	3660	0318	0050
	3560	0268	0040
	3460	0228	0032
	3360	0196	0029
	3260	0167	0026
	3160	0147	0018
	3060	0129	0015
	2960	0114	0017
	2860	0097	0014
	2760	0083	0013
	2660	0070	0015
Two Lives	2560	0055	0009
	2480	0046	0009
	2380	0037	0010
	2280	0027	
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-31

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5022 ___ ___ ___

AVERAGE THICKNESS: .3708 ___ ___ ___

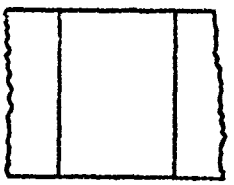
AREA: .5570

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,381.5 #

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 31.7K#



SPECIMEN NUMBER: WPB-32

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5013 ___ ___ ___

AVERAGE THICKNESS: .3737 ___ ___ ___

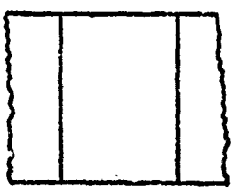
AREA: .5610

BASELINE STRESS: 33Ksi

MAX. LOAD: 18514.2

CYCLES AT TERMINATION/FAILURE: 3Lives/90117LPS

STATIC LOAD - 30.2K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0269	.0025
	3760	.0244	.0024
	3660	.0220	.0023
	3560	.0197	.0022
	3460	.0175	.0019
	3360	.0156	.0017
	3260	.0139	.0014
	3160	.0125	.0013
	3060	.0112	.0011
	2960	.0101	.0010
	2860	.0091	.0010
	2760	.0081	.0009
	2660	.0072	.0008
Two Lives	2560	.0064	.0005
	2480	.0059	.0010
	2380	.0049	.0006
	2280	.0043	.0006
	2180	.0037	.0005
	2080	.0032	.0002
	1980	.0030	.0002
	1880	.0028	.0003
	1780	.0025	.0003
	1680	.0022	.0003
	1580	.0019	.0004
	1480	.0015	.0003
	1380	.0012	.0002
One Life	1280	.0010	.0001
	1200	.0009	.0001
	1100	.0008	.0001
	1000	.0007	.0001
	900	.0006	.0001
	800	.0005	.0001
	700	.0004	.0001
	600	.0003	
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0530	.0064
	3760	.0466	.0061
	3660	.0405	.0057
	3560	.0348	.0046
	3460	.0302	.0034
	3360	.0268	.0029
	3260	.0239	.0027
	3160	.0212	.0024
	3060	.0188	.0021
	2960	.0167	.0020
	2860	.0147	.0019
	2760	.0128	.0016
	2660	.0112	.0014
Two Lives	2560	.0098	.0013
	2480	.0085	.0012
	2380	.0073	
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

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ENERAL DYNAMICS
rt Worth Division
ABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMFER: WPB-33

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6

AVERAGE WIDTH: 1.5001 ___ ___ ___

AVERAGE THICKNESS: .3732 ___ ___ ___

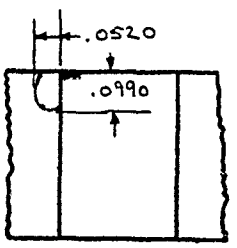
AREA: .5598

BASELINE STRESS: 33ksi

MAX. LOAD: 18,474.6#

CYCLES AT TERMINATION/[redacted]: 3Lives/___

STATIC LOAD - 32.1K#



SPECIMEN NUMBER: WPB-34

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6

AVERAGE WIDTH: 1.5012 ___ ___ ___

AVERAGE THICKNESS: .3744 ___ ___ ___

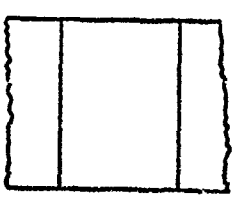
AREA: .5620

BASELINE STRESS: 33ksi

MAX. LOAD: 18,547.6#

CYCLES AT TERMINATION/[redacted]: 3Lives/___

STATIC LOAD - 29.6K#



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.001	
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0936	.0118
	3760	0818	0110
	3660	0708	0103
	3560	0605	0090
	3460	0515	0069
	3360	0446	0060
	3260	0386	0053
	3160	0333	0045
	3060	0288	0037
	2960	0251	0033
	2860	0218	0030
	2760	0188	0025
	2660	0163	0015
Two Lives	2560	0148	0015
	2480	0133	0016
	2380	0117	0013
	2280	0105	0011
	2180	0094	0007
	2080	0087	0011
	1980	0076	0008
	1880	0068	0008
	1780	0060	0007
	1680	0053	0006
	1580	0047	0007
	1480	0040	0007
	1380	0033	0006
One Life	1280	0027	0004
	1200	0023	0005
	1100	0018	0004
	1000	0014	0004
	900	0010	0003
	800	0007	0003
	700	0005	0002
	600	0003	0002
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-35 *

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: 1 2 3 4 5

AVERAGE WIDTH: 1.5020

AVERAGE THICKNESS: 3738

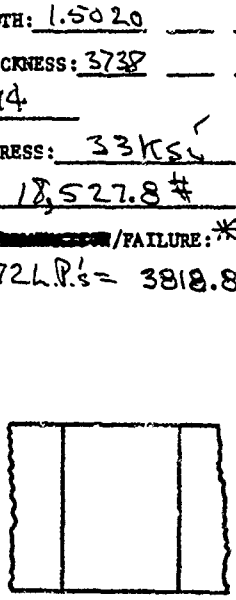
AREA: .5614

BASELINE STRESS: 33KSI

MAX. LOAD: 18,527.8 #

CYCLES AT [redacted]/FAILURE: * 3Lives/

@ 984,672 L.P.'s = 3818.88 FLTS *



SPECIMEN NUMBER: WPB-36

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.5025

AVERAGE THICKNESS: .3738

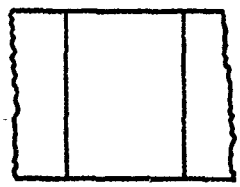
AREA: .5616

BASELINE STRESS: 33KSI

MAX. LOAD: 18,533.9

CYCLES AT TERMINATION/[redacted]: 3Lives/990117 L.P.'s

STATIC LOAD - 31.6 K#



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	[redacted]	.4346	.0888
	3760	3458	.0637
	3660	2821	0413
	3560	2408	0335
	3460	2073	0278
	3360	1795	0242
	3260	1553	0211
	3160	1342	0190
	3060	1152	0170
	2960	0982	0134
	2860	0848	0122
	2760	0726	0098
	2660	0628	0076
Two Lives	2560	0552	0059
	2480	0493	0054
	2380	0439	0048
	2280	0391	0043
	2180	0348	0034
	2080	0314	0031
	1980	0283	0033
	1880	0250	0033
	1780	0217	0026
	1680	0191	0025
	1580	0166	0022
	1480	0144	0024
	1380	0120	0021
One Life	1280	0099	0024
	1200	0075	0021
	1100	0054	0016
	1000	0038	0010
	900	0028	0010
	800	0018	0008
	700	0010	0003
	600	0007	
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0341	0037
	3760	.0304	0037
	3660	.0267	0034
	3560	.0233	0026
	3460	.0207	0028
	3360	.0179	0018
	3260	.0161	0018
	3160	.0143	0018
	3060	.0125	0013
	2960	.0112	0014
	2860	.0098	0014
	2760	0084	0011
	2660	0073	0009
Two Lives	2560	0064	0006
	2480	0058	
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WPB-37

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5018 ___ ___ ___

AVERAGE THICKNESS: .3762 ___ ___ ___

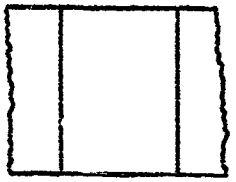
AREA: .5650

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,644.2 #

CYCLES AT TERMINATION/FAILURE: 31 lives/___

STATIC LOAD - 32.4 K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
Three Lives	3840	.0183	.0020
	3760	.0163	.0022
	3660	.0141	.0020
	3560	.0121	.0017
	3460	.0104	.0015
	3360	.0089	.0010
	3260	.0079	.0010
	3160	.0069	.0011
	3060	.0058	.0008
	2960	.0050	.0009
	2860	.0041	.0004
	2760	.0037	.0005
	2660	.0032	.0004
Two Lives	2560	.0029	.0003
	2480	.0026	.0005
	2380	.0021	.0004
	2280	.0017	.0003
	2180	.0014	.0004
	2080	.0010	.0003
	1980	.0007	.0002
	1880	.0005	
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

2.1.4 WIB

FATIGUE TEST DATA

SPECIMEN NUMBER: WIB-1

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.4998 ___ ___ ___

AVERAGE THICKNESS: .3760 .3753 .3766 .3762

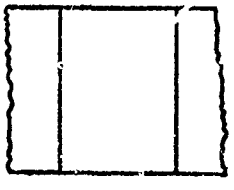
AREA: .5640

BASELINE STRESS: 33ksi

MAX. LOAD: 18611.2#

CYCLES AT ~~TERMINATION~~/FAILURE: * 3Lives/___ *

@ 672,643 L.P.'s = 2608.73 FLT-HRS



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
*	~~2660~~	.4131	.0822
Two Lives	2560	.3309	.0589
	2480	.2720	.0491
	2380	.2229	.0343
	2280	.1886	.0251
	2180	.1635	.0215
	2080	.1420	.0180
	1980	.1240	.0168
	1880	.1072	.0142
	1780	.0930	.0125
	1680	.0805	.0102
	1580	.0703	.0093
	1480	.0610	.0079
	1380	.0531	.0080
One Life	1280	.0451	.0028
	1200	.0423	.0050
	1100	.0373	.0044
	1000	.0329	.0029
	900	.0300	.0029
	800	.0271	
	700		
	600		
	500		
	400		
	300		
	200		

SPECIMEN NUMBER: WIB-2

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

AVERAGE WIDTH: 1.5068 ___ ___ ___

AVERAGE THICKNESS: .3775 .3771 .3786 .3768

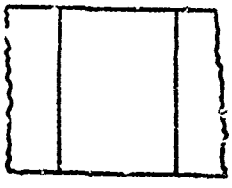
AREA: .5666

BASELINE STRESS: 33ksi

MAX. LOAD: 18,696.2#

CYCLES AT ~~TERMINATION~~/FAILURE: * 3Lives/990,117 L.P.'s *

@ 881,520 L.P.'s = 3418.83 FLT-HRS *



FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
*	~~3460~~	.3468	.0616
	3360	.2852	.0630
	3260	.2222	.0415
	3160	.1807	.0306
	3060	.1501	.0241
	2960	.1260	.0198
	2860	.1062	.0171
	2760	.0891	.0139
	2660	.0752	.0109
Two Lives	2560	.0643	.0070
	2480	.0573	.0078
	2380	.0495	.0060
	2280	.0435	.0055
	2180	.0380	.0045
	2080	.0335	.0043
	1980	.0292	.0037
	1880	.0255	.0030
	1780	.0225	.0030
	1680	.0195	.0032
	1580	.0163	.0023
	1480	.0140	.0020
	1380	.0120	.0019
One Life	1280	.0101	.0010
	1200	.0091	.0012
	1100	.0079	.0011
	1000	.0068	.0013
	900	.0055	.0008
	800	.0047	.0009
	700	.0038	.0010
	600	.0028	.0009
	500	.0019	.0008
	400	.0011	.0006
	300	.0005	
	200		

(146)

GENERAL DYNAMICS
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FATIGUE TEST DATA

SPECIMEN NUMBER: WIB-3

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.498 ___ ___ ___

AVERAGE THICKNESS: ___ 374 375 371

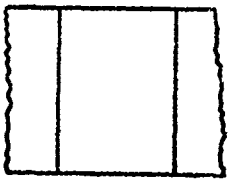
AREA: .571

BASELINE STRESS: 33ksi

MAX. LOAD: 18,843#

CYCLES AT [redacted]/FAILURE:* 3Lives/99,117 L.P.'s

@ 940,815 L.P.'s = 3648.79 FLT-HRS*



SPECIMEN NUMBER: WIB-4

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: ___ 374 377 372

AREA: .566

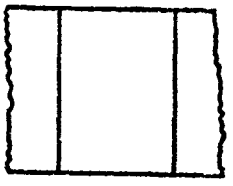
BASELINE STRESS: 33ksi

MAX. LOAD: 18,678#

CYCLES AT [redacted]/FAILURE:* 3Lives/___

= @ 711,304 L.P.'s @ 98.5% LOAD

→ 2758.67 FLT-HRS*



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660	.3694	.1206
	3560	2488	0789
	3460	1899	0409
	3360	1490	0319
	3260	1171	0231
	3160	0940	0177
	3060	0763	.0128
	2960	0635	0106
	2860	0529	0091
	2760	0438	0078
	2660	0360	0051
Two Lives	2560	0309	0044
	2480	0265	0046
	2380	0219	0048
	2280	0171	0030
	2180	0141	0026
	2080	0115	0018
	1980	0097	0018
	1880	0079	0017
	1780	0062	0012
	1680	0050	0008
	1580	0042	0009
	1480	0033	
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	[redacted]	.3108	0735
	2660	.2373	0495
Two Lives	2560	1878	0274
	2480	1604	0270
	2380	1334	0226
	2280	1108	0178
	2180	0930	0170
	2080	0760	0141
	1980	0619	0108
	1880	0511	0078
	1780	0433	0062
	1680	0371	0056
	1580	0315	0046
	1480	0269	0048
	1380	0221	0039
One Life	1280	0182	0022
	1200	0160	0023
	1100	0137	0026
	1000	0111	0022
	900	0089	0020
	800	0069	0016
	700	0053	0013
	600	0041	
	500		
	400		
	300		
	200		

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FATIGUE TEST DATA

SPECIMEN NUMBER: WIB-5

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.498 ___ ___ ___

AVERAGE THICKNESS: ___ ___ ___ ___

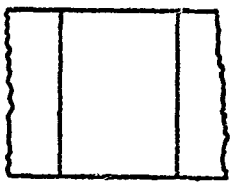
AREA: .560

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,480 #

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

STATIC LOAD - 32.1 K#



SPECIMEN NUMBER: WIB-6

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.497 ___ ___ ___

AVERAGE THICKNESS: ___ .374 .378 .374

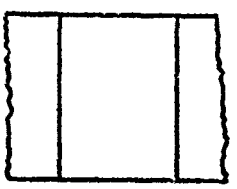
AREA: .561

BASELINE STRESS: 33KSI

MAX. LOAD: 18,513 #

CYCLES AT TERMINATION/FAILURE: Lives/___

STATIC LOAD - 27.45K #



FRACTOGRAPHIC DATA

FLIGHT		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0260	.0025
	2480	0235	0029
	2380	0206	0023
	2280	0183	0021
	2180	0162	0020
	2080	0142	0019
	1980	0123	0017
	1880	0106	0015
	1780	0092	0012
	1680	0080	0014
	1580	0066	0008
	1480	0058	0008
	1380	0050	0006
One Life	1280	0044	0004
	1200	0040	0006
	1100	0034	0006
	1000	0028	0007
	900	0021	0006
	800	0015	0003
	700	0012	0003
	600	0009	
	500		
	400		
	300		
	200		

FLIGHT		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3750		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1285	.0174
	2480	.1111	0191
	2380	0920	0150
	2280	0770	0127
	2180	0643	0112
	2080	0541	0089
	1980	0452	0067
	1880	0385	0060
	1780	0325	0050
	1680	0275	0040
	1580	0235	0034
	1480	0201	0038
	1380	0163	0026
One Life	1280	0137	0017
	1200	0120	0021
	1100	0099	0019
	1000	0080	0019
	900	0061	0015
	800	0046	0014
	700	0032	0009
	600	0023	0007
	500	0016	0005
	400	0011	0006
	300	0005	
	200		

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FATIGUE TEST DATA

SPECIMEN NUMBER: WIB-7

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.498 ___ ___ ___

AVERAGE THICKNESS: ___ ___ ___ ___

AREA: .568

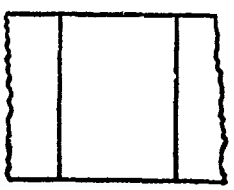
BASELINE STRESS: 33ksi

MAX. LOAD: 18,744 #

CYCLES AT ~~TERMINATION~~/FAILURE: * 3Lives/___

= 902,162 L.P.'s @ 83% Load

→ 3498.88 FLT.-HRS *



SPECIMEN NUMBER: WIB-8

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: ___ .375 .378 .377

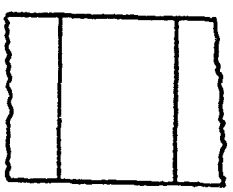
AREA: .569

BASELINE STRESS: 38ksi

MAX. LOAD: 18,777 #

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

STATIC LOAD – 30.8 k#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH.	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	~~3560~~	.9680	.0708
	3460	.2972	.0718
	3360	.2254	.0442
	3260	.1812	.0330
	3160	.1482	.0240
	3060	.1242	.0192
	2960	.1050	.0158
	2860	.0892	.0136
	2760	.0756	.0118
	2660	.0638	.0098
Two Lives	2560	.0540	.0065
	2480	.0475	.0067
	2380	.0408	.0057
	2280	.0351	.0051
	2180	.0300	.0039
	2080	.0261	.0034
	1980	.0227	.0037
	1880	.0190	.0029
	1780	.0161	.0028
	1680	.0133	.0022
	1580	.0111	.0020
	1480	.0091	.0016
	1380	.0075	.0015
One Life	1280	.0060	.0009
	1200	.0051	.0008
	1100	.0043	.0008
	1000	.0035	.0006
	900	.0029	.0005
	800	.0024	.0004
	700	.0020	.0002
	600	.0018	
	500		
	400		
	300		
	200		

FLIGHT [illegible]		CRACK LENGTH INCH.	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0497	.0066
	2480	.0431	.0074
	2380	.0357	.0056
	2280	.0301	.0043
	2180	.0258	.0032
	2080	.0226	.0032
	1980	.0194	.0028
	1880	.0166	.0024
	1780	.0142	.0019
	1680	.0123	.0021
	1580	.0102	.0019
	1480	.0083	.0018
	1380	.0065	.0010
One Life	1280	.0055	.0009
	1200	.0046	.0010
	1100	.0036	.0006
	1000	.0030	.0006
	900	.0024	.0006
	800	.0018	.0006
	700	.0012	.0002
	600	.0010	.0005
	500	.0005	.0003
	400	.0002	
	300		
	200		

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FATIGUE TEST DATA

SPECIMEN NUMBER: WIB-9

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) (3) 4 5

AVERAGE WIDTH: 1.500 ___ ___ ___

AVERAGE THICKNESS: 379 374 383 379

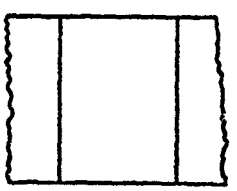
AREA: .569

BASELINE STRESS: 33KSI

MAX. LOAD: 18,777#

CYCLES AT TERMINATION/[redacted]: 2 3Lives/___

STATIC LOAD - 31.6 K#



FLTS
100 0001

SPECIMEN NUMBER: WIB-10

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 4 5

AVERAGE WIDTH: 1498 ___ ___ ___

AVERAGE THICKNESS: ___ 378 379 378

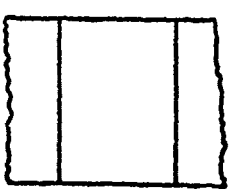
AREA: .571

BASELINE STRESS: 33KSI

MAX. LOAD: 18,843#

CYCLES AT TERMINATION/[redacted]: 3Lives/___

STATIC LOAD - 27.85K#



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH.	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0298	.0040
	2480	0258	0038
	2380	0220	0034
	2280	0186	0033
	2180	0153	0024
	2080	0129	0021
	1980	0108	0018
	1880	0090	0009
	1780	0081	0009
	1680	0072	0011
	1580	0061	0011
	1480	0050	0009
	1380	0041	0003
One Life	1280	0038	0004
	1200	0034	0003
	1100	0031	0007
	1000	0024	0003
	900	0021	0002
	800	0019	0004
	700	0015	0003
	600	0012	0001
	500	0011	0002
	400	0009	0002
	300	0007	0003
	200	0004	0003

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0995	0141
	3760	0834	0147
	3660	0687	0133
	3560	0554	0097
	3460	0457	0076
	3360	0381	0056
	3260	0325	0055
	3160	0270	0041
	3060	0229	0040
	2960	0189	0038
	2860	0151	0028
	2760	0123	0023
	2660	0100	0015
Two Lives	2560	0085	0015
	2480	0070	0014
	2380	0056	0009
	2280	0047	0014
	2180	0033	0009
	2080	0024	0004
	1980	0020	0007
	1880	0013	0004
	1780	0009	0003
	1680	0006	0004
	1580	0002	
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

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GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: WIB-11

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: ~~1~~ 2 (3) 4 5

AVERAGE WIDTH: 1.500 ___ ___ ___

AVERAGE THICKNESS: .378 378 380 375

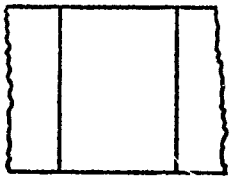
AREA: ~~.566~~ .567

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,694.5 #

CYCLES AT ~~TERMINATION~~/FAILURE: * 3Lives/___

@ 953,792 L.P.'s = 3699.12 FLT-HRS *



SPECIMEN NUMBER: WIB-12

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 ~~2~~ (3) 4 5

AVERAGE WIDTH: 1.500 ___ ___ ___

AVERAGE THICKNESS: ___ 376 378 377

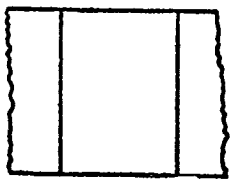
AREA: .571

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,843 #

CYCLES AT ~~TERMINATION~~/FAILURE: * 3Lives/___

@ 866,031 L.P.'s = 3358.75 FLT-HRS *



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760	.3506	.0602
	3660	.2904	.0732
	3560	.2172	.0452
	3460	.1720	.0322
	3360	.1398	.0256
	3260	.1142	.0207
	3160	.0935	.0171
	3060	.0764	.0136
	2960	.0628	.0109
	2860	.0519	.0096
	2760	.0423	.0070
	2660	.0353	.0047
Two Lives	2560	.0306	.0037
	2480	.0269	.0038
	2380	.0231	.0030
	2280	.0201	.0031
	2180	.0170	.0023
	2080	.0147	.0022
	1980	.0125	.0020
	1880	.0105	.0013
	1780	.0092	.0014
	1680	.0079	.0010
	1580	.0069	.0009
	1480	.0060	.0008
	1380	.0052	.0006
One Life	1280	.0046	.0004
	1200	.0042	.0004
	1100	.0038	.0004
	1000	.0034	.0004
	900	.0030	.0004
	800	.0026	.0004
	700	.0022	.0004
	600	.0018	.0004
	500	.0014	.0004
	400	.0010	.0004
	300	.0006	.0003
	~~200~~	.0003	

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	~~3360~~	.3108	.0924
	3260	.2184	.0562
	3160	.1622	.0390
	3060	.1232	.0280
	2960	.0952	.0204
	2860	.0748	.0155
	2760	.0593	.0116
	2660	.0477	.0083
Two Lives	2560	.0394	.0046
	2480	.0348	.0056
	2380	.0292	.0049
	2280	.0243	.0042
	2180	.0201	.0033
	2080	.0168	.0027
	1980	.0141	.0021
	1880	.0120	.0020
	1780	.0100	.0016
	1680	.0084	.0014
	1580	.0070	.0015
	1480	.0055	.0010
	1380	.0045	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

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2.1.5 QPF

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-1

SPECTRUM: Fighter

TEST DATE:

TEST FRAME: 1 2 3 4 (5)

VERAGE WIDTH: 1.497 ___ ___ ___

VERAGE THICKNESS: .3748 368 372 369

REA: .561

ASELINE STRESS: 34 Ksi

AX. LOAD: 19,074 #

1 Life

YCLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD - 30.8 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0347	.0027
39	15600	0320	0024
38	15200	0296	0018
37	14800	0278	0019
36	14400	0259	0019
35	14000	0240	0021
34	13600	0219	0019
33	13200	0200	0018
32	12800	0182	0018
31	12400	0164	0013
30	12000	0151	0017
29	11600	0134	0014
28	11200	0120	0013
27	10800	0107	0012
26	10400	0095	0010
25	10000	0085	0012
24	9600	0073	0011
23	9200	0062	0008
22	8800	0054	0004
21	8400	0050	0007
20	8000	0043	0003
19	7600	0040	0005
18	7200	0035	0004
17	6800	0031	0003
16	6400	0028	0004
15	6000	0024	0003
14	5600	0021	0001
13	5200	0020	0002
12	4800	0018	0003
11	4400	0015	0001
10	4000	0014	0003
9	3600	0011	0002
8	3200	0009	
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-2

SPECTRUM: Fighter

TEST DATE:

TEST FRAME: 1 2 (3) 4 5

/ERAGE WIDTH: 1.498 ___ ___ ___

/ERAGE THICKNESS: ____ 370 371 368

EA: .560

SELINE STRESS: 34 Ksi

X. LOAD: 19,040 #

1 Life

/CLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD @ 30.1 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0640	0059
39	15600	0581	0051
38	15200	0530	0045
37	14800	0485	0041
36	14400	0444	0036
35	14000	0408	0033
34	13600	0375	0030
33	13200	0345	0027
32	12800	0318	0026
31	12400	0292	0022
30	12000	0270	0020
29	11600	0250	0022
28	11200	0228	0021
27	10800	0207	0017
26	10400	0190	0019
25	10000	0171	0016
24	9600	0155	0015
23	9200	0140	0014
22	8800	0126	0013
21	8400	0113	0013
20	8000	0100	0014
19	7600	0086	0008
18	7200	0078	0010
17	6800	0068	0008
16	6400	0060	0008
15	6000	0052	0006
14	5600	0046	0007
13	5200	0039	0005
12	4800	0034	0004
11	4400	0030	0003
10	4000	0027	0005
9	3600	0022	0003
8	3200	0019	0004
7	2800	0015	0002
6	2400	0013	0002
5	2000	0011	0002
4	1600	0009	0003
3	1200	0006	
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-3

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

ERAGE WIDTH: 1.499 ___ ___ ___

/ERAGE THICKNESS: _____ 371 375 371

EA: .565

ASELINE STRESS: 35 KSI

X. LOAD: 19775#

1 Life

YCLES AT [redacted]/FAILURE: * @ 1,340,675 L.P.'S

2 Lives/_____

14,006.45 FLT-HRS.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400	.3564	.0007
35	14000	3557	1065
34	13600	2492	0426
33	13200	2066	0357
32	12800	1709	0259
31	12400	1455	0247
30	12000	1208	0167
29	11600	1041	0142
28	11200	0899	0130
27	10800	0769	0101
26	10400	0668	0084
25	10000	0584	0073
24	9600	0511	0061
23	9200	0450	0059
22	8800	0391	0048
21	8400	0343	0037
20	8000	0306	0035
19	7600	0271	0035
18	7200	0236	0030
17	6800	0206	0026
16	6400	0180	0025
15	6000	0155	0025
14	5600	0130	0020
13	5200	0110	0018
12	4800	0092	0017
11	4400	0075	0013
10	4000	0062	0012
9	3600	0050	0006
8	3200	0044	0004
7	2800	0040	0005
6	2400	0035	0004
5	2000	0031	0005
4	1600	0026	0005
3	1200	0021	0005
2	800	0016	
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-4

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

VERAGE WIDTH: 1.499 ___ ___ ___

VERAGE THICKNESS: _____ 367 370 367

REA: .560

ASELINE STRESS: ~~34 KSI~~ 35 KSI

AX. LOAD: ~~19,040~~ 19,600#

1 Life

YCLES AT TERMINATION/[redacted]:

STATIC LOAD-27.9 KIP 2 Lives/_____

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREM.
40	16000	.09126	.00877
39	15600	08249	00819
38	15200	07430	00758
37	14800	06672	00572
36	14400	06100	00423
35	14000	05677	00428
34	13600	05249	00437
33	13200	04812	00381
32	12800	04431	00353
31	12400	04078	00294
30	12000	03784	00294
29	11600	03490	00300
28	11200	03190	00278
27	10800	02912	00290
26	10400	02622	00254
25	10000	02368	00250
24	9600	02118	00243
23	9200	01875	00221
22	8800	01654	00210
21	8400	01444	00213
20	8000	01231	00189
19	7600	01052	00198
18	7200	00854	00168
17	6800	00686	00146
16	6400	00540	00107
15	6000	00433	00067
14	5600	00366	00077
13	5200	00289	00055
12	4800	00234	00057
11	4400	00177	00035
10	4000	00142	00033
9	3600	00109	00035
8	3200	00074	00035
7	2800	00039	
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-5

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

VERAGE WIDTH: 1499 _____ _____ _____

VERAGE THICKNESS: _____ 368 370 368

REA: .560

ASELINE STRESS: 34 ksi

AX. LOAD: 19,040#

1 Life

YCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD-279 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0982	.0096
39	15600	0886	0083
38	15200	0803	0059
37	14800	0744	0060
36	14400	0684	0054
35	14000	0630	0045
34	13600	0585	0046
33	13200	0539	0040
32	12800	0499	0039
31	12400	0460	0030
30	12000	0430	0033
29	11600	0397	0034
28	11200	0363	0026
27	10800	0337	0027
26	10400	0310	0026
25	10000	0284	0026
24	9600	0258	0025
23	9200	0233	0025
22	8800	0208	0028
21	8400	0180	0023
20	8000	0157	0022
19	7600	0135	0015
18	7200	0120	0019
17	6800	0101	0019
16	6400	0082	0012
15	6000	0070	0012
14	5600	0058	0010
13	5200	0048	0005
12	4800	0043	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-6

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

VERAGE WIDTH: 1495 _____ _____ _____

VERAGE THICKNESS: _____ 368 372 371

REA: .560

ASELINE STRESS: 34ksi

AX. LOAD: 19,040#

1 Life

YCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD- 32.3K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.03735	.00288
39	15600	03447	00247
38	15200	03200	00218
37	14800	02982	00198
36	14400	02784	00216
35	14000	02568	00183
34	13600	02385	00261
33	13200	02124	00194
32	12800	01930	00172
31	12400	01758	00136
30	12000	01622	00147
29	11600	01475	00133
28	11200	01342	00128
27	10800	01213	00092
26	10400	01121	00101
25	10000	01020	00088
24	9600	00932	00082
23	9200	00850	00074
22	8800	00786	00099
21	8400	00707	00077
20	8000	00630	00066
19	7600	00564	00067
18	7200	00497	00044
17	6800	00453	00049
16	6400	00404	00051
15	6000	00353	00038
14	5600	00315	00045
13	5200	00270	00022
12	4800	00248	00027
11	4400	00221	00033
10	4000	00188	
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		(5)
2	800		
1	400		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives → $\frac{a}{2c} = .46$

SPECIMEN NUMBER: QPF-7

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (4)

/ERAGE WIDTH: 1.499 _____ _____ _____

/ERAGE THICKNESS: _____ 368 373 369

EA: .562

SELINE STRESS: 34KSI

X. LOAD: 19,108# 1 Life

CLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD - 33.6 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN. 2c	INCREMENT IN.
40	16000	.0046/.0099	← 2c
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives *

SPECIMEN NUMBER: QPF-[redacted]31 [QPF-8]

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

VERAGE WIDTH: 1.499 _____ _____ _____

VERAGE THICKNESS: _____ 372 374 371

REA: .566 [Same for first 6,955 LB's = 33,460 psi] ZRW

ASELINE STRESS: 34KSI

AX. LOAD: 19,244 1 Life

YCLES AT ~~TERMINATION~~/FAILURE: * @ 1,493,816 L.B.'s - 79%

~~2 Lives~~/_____

15606.37 FLT. HRS *

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
~~40~~	~~15600~~	.35267	.00317
39	15600	34950	01399
38	15200	25556	04869
37	14800	20687	03432
36	14400	17255	02823
35	14000	14432	02395
34	13600	12037	01946
33	13200	10091	01595
32	12800	08496	01266
31	12400	07230	00934
30	12000	06296	00819
29	11600	05477	00805
28	11200	04672	00565
27	10800	04107	00499
26	10400	03658	00380
25	10000	03278	00435
24	9600	02843	00420
23	9200	02423	00355
22	8800	02068	00288
21	8400	01780	00275
20	8000	01525	00220
19	7600	01295	00216
18	7200	01079	00189
17	6800	00890	00149
16	6400	00741	00138
15	6000	00603	00103
14	5600	00500	00083
13	5200	00412	00068
12	4800	00344	00068
11	4400	00281	00048
10	4000	00233	00049
9	3600	00184	00040
8	3200	00144	00038
7	2800	00106	00036
6	2400	00086	
5	2000		
4	1600		
3	1200		(55)
2	800		
1	400		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives → a/2c = .46

SPECIMEN NUMBER: QPF-7

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

VERAGE WIDTH: 1.499

VERAGE THICKNESS: _____ 368 372 369

REA: .562

ASELINE STRESS: 34KSI

AX. LOAD: 19,108#

1 Life

YCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD - 33.6K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN. 2c	INCREMENT IN.
40	16000	.00476 / .099	← 2c
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives *

SPECIMEN NUMBER: QPF-~~8~~31 [QPF-8]

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

VERAGE WIDTH: 1.499

VERAGE THICKNESS: _____ 372 374 371

REA: 566 [Smaller for first 16,955 LP's = 83,946 psi] ZRW

ASELINE STRESS: 34KSI

AX. LOAD: 19,244

1 Life

YCLES AT ~~TERMINATION~~/FAILURE: * @ 1,493,816 L.P.'s - 79%

~~2 Lives~~/_____

15606.37 FLT. HRS *

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
~~40~~	~~16000~~	.35267	.00317
39	15600	34950	09394
38	15200	25556	04869
37	14800	20687	03432
36	14400	17255	02823
35	14000	14432	02395
34	13600	12037	01946
33	13200	10091	01595
32	12800	08496	01266
31	12400	07230	00934
30	12000	06296	00819
29	11600	05477	00805
28	11200	04672	00565
27	10800	04107	00449
26	10400	03658	00380
25	10000	03278	00435
24	9600	02843	00420
23	9200	02423	00355
22	8800	02068	00286
21	8400	01780	00255
20	8000	01525	00230
19	7600	01295	00216
18	7200	01079	00189
17	6800	00890	00149
16	6400	00741	00138
15	6000	00603	00103
14	5600	00500	00088
13	5200	00412	00068
12	4800	00344	00063
11	4400	00281	00048
10	4000	00233	00049
9	3600	00184	00040
8	3200	00144	00038
7	2800	00106	00036
6	2400	00080	
5	2000		
4	1600		
3	1200		(35)
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPB-35 (QPF-9)

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

VERAGE WIDTH: 1.499 ___ ___ ___

VERAGE THICKNESS: _____ 365 369 366

REA: .558 , Average load 50,374 lbs. = 33,770 psi

ASELINE STRESS: 34 KSI

AX. LOAD: 18972 #

1 Life

YCLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD - 30.7 KIP

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0427	.0042
39	15600	0385	0040
38	15200	0345	0038
37	14800	0307	0036
36	14400	0271	0029
35	14000	0242	0030
34	13600	0202	0026
33	13200	0176	0027
32	12800	0149	0020
31	12400	0129	0021
30	12000	0108	0019
29	11600	0089	0010
28	11200	0079	0008
27	10800	0071	0009
26	10400	0062	0010
25	10000	0052	0009
24	9600	0043	0005
23	9200	0038	0006
22	8800	0032	0003
21	8400	0029	0004
20	8000	0025	0004
19	7600	0021	0004
18	7200	0017	0004
17	6800	0013	0002
16	6400	0010	
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-10

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

/ERAGE WIDTH: 1.499 ___ ___ ___

/ERAGE THICKNESS: _____ 367 373 369

REA: .560

ASELINE STRESS: 34 KSI

AX. LOAD: 19,040 #

1 Life

/CLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 31.9 KIP

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0335	.0025
39	15600	0310	0024
38	15200	0286	0025
37	14800	0261	0020
36	14400	0241	0022
35	14000	0219	0025
34	13600	0194	0023
33	13200	0171	0019
32	12800	0152	0018
31	12400	0134	0017
30	12000	0117	0014
29	11600	0103	0011
28	11200	0092	0011
27	10800	0081	0010
26	10400	0071	0010
25	10000	0061	0008
24	9600	0053	0006
23	9200	0047	0006
22	8800	0041	0005
21	8400	0036	0004
20	8000	0032	0004
19	7600	0028	0004
18	7200	0024	0004
17	6800	0020	0003
16	6400	0017	0003
15	6000	0014	0004
14	5600	0010	0002
13	5200	0008	0001
12	4800	0007	0002
11	4400	0005	0002
10	4000	0003	0002
9	3600	0001	
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

$a/c = .38$

SPECIMEN NUMBER: QPF-11

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

/ERAGE WIDTH: 1.504 ___ ___ ___

/ERAGE THICKNESS: _____ 367 371 368

'EA: .564

ASELINE STRESS: 34ksi

X. LOAD: 19,176 #

1 Life

ICLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD - 32.7 KH

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0102	2a = .0266
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-12

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 ; (6)

'ERAGE WIDTH: 1.503 ___ ___ ___

'ERAGE THICKNESS: _____ 365 370 364

'EA: .558

SELINE STRESS: 34ksi

X. LOAD: 18,972 #

1 Life

ICLES AT TERMINATION/[redacted]:

2 Lives/____

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0413	.0033
39	15600	.0380	.0033
38	15200	.0347	.0031
37	14800	.0316	.0032
36	14400	.0284	.0024
35	14000	.0260	.0027
34	13600	.0233	.0028
33	13200	.0205	.0024
32	12800	.0181	.0021
31	12400	.0160	.0019
30	12000	.0141	.0019
29	11600	.0122	.0012
28	11200	.0110	.0017
27	10800	.0093	.0013
26	10400	.0080	.0010
25	10000	.0070	.0010
24	9600	.0060	.0009
23	9200	.0051	.0007
22	8800	.0042	.0009
21	8400	.0035	.0007
20	8000	.0030	.0005
19	7600	.0025	.0005
18	7200	.0021	.0004
17	6800	.0019	.0003
16	6400	.0016	.0002
15	6000	.0014	.0002
14	5600	.0012	.0002
13	5200	.0010	.0001
12	4800	.0009	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-13

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 4 (5)

'ERAGE WIDTH: 1.501 _____

'ERAGE THICKNESS: _____ 366 369 366

EA: .560

SELINE STRESS: 34 ksi

X. LOAD: 19,040 #

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 29.7K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0425	.0044
39	15600	0381	0033
38	15200	0348	0031
37	14800	0317	0028
36	14400	0289	0023
35	14000	0266	0022
34	13600	0244	0022
33	13200	0222	0022
32	12800	0200	0019
31	12400	0181	0017
30	12000	0164	0017
29	11600	0147	0016
28	11200	0131	0016
27	10800	0115	0014
26	10400	0101	0013
25	10000	0088	0013
24	9600	0075	0010
23	9200	0065	0006
22	8800	0059	0008
21	8400	0051	0006
20	8000	0045	0006
19	7600	0039	0007
18	7200	0032	0004
17	6800	0028	0004
16	6400	0024	0003
15	6000	0021	0003
14	5600	0018	0002
13	5200	0016	0003
12	4800	0013	0002
11	4400	0011	0001
10	4000	0010	0001
9	3600	0009	0002
8	3200	0007	0002
7	2800	0005	
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-14

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

'ERAGE WIDTH: 1.498 _____

'ERAGE THICKNESS: _____ 364 365 364

EA: .5535

SELINE STRESS: 34 ksi

X. LOAD: 18,819 #

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 25.3K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1509	.0162
39	15600	1347	0163
38	15200	1184	0112
37	14800	1072	0121
36	14400	0951	0095
35	14000	0856	0088
34	13600	0768	0074
33	13200	0694	0065
32	12800	0629	0057
31	12400	0572	0048
30	12000	0524	0041
29	11600	0483	0038
28	11200	0445	0040
27	10800	0405	0034
26	10400	0371	0027
25	10000	0344	0031
24	9600	0313	0029
23	9200	0284	0024
22	8800	0260	0028
21	8400	0232	0020
20	8000	0212	0022
19	7600	0190	0021
18	7200	0169	0018
17	6800	0151	0019
16	6400	0132	0019
15	6000	0113	0015
14	5600	0098	0016
13	5200	0082	0011
12	4800	0071	0009
11	4400	0062	0010
10	4000	0052	0007
9	3600	0045	0008
8	3200	0037	0007
7	2800	0030	0005
6	2400	0025	0005
5	2000	0020	0005
4	1600	0015	0003
3	1200	0012	0004
2	800	0008	0006
1	400	0002	

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-15

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

ERAGE WIDTH: 1.499 _____ _____ _____

ERAGE THICKNESS: _____ 370 372 371

EA: .564

SELINE STRESS: 34ksi

X. LOAD: 19176 #

1 Life

CLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD-29.9 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0481	.0039
39	15600	0442	0034
38	15200	0408	0035
37	14800	2373	0028
36	14400	5345	0026
35	14000	0319	0027
34	13600	0292	0023
33	13200	0269	0022
32	12800	0247	0024
31	12400	0223	0021
30	12000	0202	0021
29	11600	0181	0017
28	11200	0164	0015
27	10800	0149	0017
26	10400	0132	0014
25	10000	0118	0017
24	9600	0101	0018
23	9200	0083	0012
22	8800	0071	0010
21	8400	0061	0011
20	8000	0050	0009
19	7600	0041	0009
18	7200	0032	0007
17	6800	0025	0005
16	6400	0020	0005
15	6000	0015	0004
14	5600	0011	0001
13	5200	0010	0001
12	4800	0009	0001
11	4400	0008	0003
10	4000	0005	0002
9	3600	0003	
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

$a/c = .25$

SPECIMEN NUMBER: QPF-16

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

VERAGE WIDTH: 1.498 _____ _____ _____

VERAGE THICKNESS: _____ 371 372 372

REA: .565

ASELINE STRESS: 34ksi

AX. LOAD: 19,210 #

1 Life

YCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 31.8 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0392 2c =	.1543
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: BPF-17

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

AVERAGE WIDTH: 1.497 _____ _____ _____

AVERAGE THICKNESS: _____ .371 .371 .371

AREA: .563

BASELINE STRESS: 34ksi

MAX. LOAD: 19,142#

1 Life

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD - 25.0 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1552	.0199
39	15600	1353	0156
38	15200	1197	0144
37	14800	1053	0124
36	14400	0929	0101
35	14000	0828	0089
34	13600	0739	0074
33	13200	0665	0066
32	12800	0599	0059
31	12400	0540	0055
30	12000	0485	0045
29	11600	0440	0043
28	11200	0397	0037
27	10800	0360	0036
26	10400	0324	0031
25	10000	0293	0027
24	9600	0266	0030
23	9200	0236	0027
22	8800	0209	0026
21	8400	0183	0023
20	8000	0160	0025
19	7600	0135	0022
18	7200	0113	0018
17	6800	0095	0015
16	6400	0080	0011
15	6000	0069	0014
14	5600	0055	0009
13	5200	0046	0006
12	4800	0040	0007
11	4400	0033	0005
10	4000	0028	0007
9	3600	0021	0003
8	3200	0018	0003
7	2800	0015	0003
6	2400	0012	0002
5	2000	0010	0002
4	1600	0008	0002
3	1200	0006	
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: BPF-18

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.497 _____ _____ _____

AVERAGE THICKNESS: _____ .369 .371 .369

AREA: .561

BASELINE STRESS: 34KSI

MAX. LOAD: 19,074#

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 27.8 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.06836	.00831
39	15600	06005	00636
38	15200	05369	00484
37	14800	04885	00435
36	14400	04450	00380
35	14000	04070	00388
34	13600	03682	00267
33	13200	03415	00270
32	12800	03145	00268
31	12400	02877	00233
30	12000	02644	00251
29	11600	02393	00219
28	11200	02174	00210
27	10800	01964	00193
26	10400	01771	00176
25	10000	01595	00177
24	9600	01418	00155
23	9200	01263	00143
22	8800	01120	00090
21	8400	01030	00147
20	8000	00883	00100
19	7600	00783	00098
18	7200	00685	00076
17	6800	00609	00102
16	6400	00507	00052
15	6000	00455	00071
14	5600	00384	00056
13	5200	00328	00045
12	4800	00283	00051
11	4400	00232	00053
10	4000	00179	00038
9	3600	00141	00021
8	3200	00120	
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

$\sigma/2\sigma = .26$

SPECIMEN NUMBER: QPF-19

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

VERAGE WIDTH: 1.500 _____ _____ _____

VERAGE THICKNESS: _____ 371 372 371

REA: .557

ASELINE STRESS: 34ksi cal 994

AX. LOAD: 18938 A=7.58

1 Life

YCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 32.5 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0259 / .1005	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF20

SPECTRUM: Fighter

TEST DATE: 1.500

TEST FRAME: (1) 2 3 4 5 (88)

AVERAGE WIDTH: _____ _____ _____ _____

AVERAGE THICKNESS: _____ 369 371 371

AREA: .563

BASELINE STRESS: 34KSi cal 11.1

MAX. LOAD: 19142 A: 7.66

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 30.5 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.07827	.00600
39	15600	07227	00522
38	15200	06700	00512
37	14800	06188	00468
36	14400	05720	00420
35	14000	05300	00389
34	13600	04911	00399
33	13200	04562	00318
32	12800	04244	00314
31	12400	03930	00301
30	12000	03629	00273
29	11600	03357	00223
28	11200	03134	00238
27	10800	02896	00144
26	10400	02752	00287
25	10000	02465	00307
24	9600	02158	00204
23	9200	02054	00169
22	8800	01885	00169
21	8400	01716	00166
20	8000	01550	00175
19	7600	01375	00153
18	7200	01222	00115
17	6800	01107	00132
16	6400	00975	00138
15	6000	00837	00127
14	5600	00710	00112
13	5200	00598	00103
12	4800	00495	00094
11	4400	00401	00079
10	4000	00322	00067
9	3600	00255	00058
8	3200	00197	00042
7	2800	00155	00037
6	2400	00118	00035
5	2000	00083	00025
4	1600	00058	
3	1200		
2	800		
1	400		

(61)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-21

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (A)

AVERAGE WIDTH: 1.496 1.496 ___ ___ ___

AVERAGE THICKNESS: _____ 371 372 367

AREA: .562

BASELINE STRESS: 34ksi σ_i = 917

MAX. LOAD: 19108 A = 764

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 29.7 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.05769	.00450
39	15600	05319	00485
38	15200	04834	00409
37	14800	04425	00389
36	14400	04036	00338
35	14000	03698	00358
34	13600	03340	00327
33	13200	03013	00272
32	12800	02741	00319
31	12400	02422	00283
30	12000	02139	00257
29	11600	01882	00252
28	11200	01630	00121
27	10800	01509	00225
26	10400	01284	00159
25	10000	01125	00145
24	9600	00980	00152
23	9200	00828	00110
22	8800	00718	00106
21	8400	00612	00075
20	8000	00537	00072
19	7600	00455	00058
18	7200	00397	00058
17	6800	00339	00044
16	6400	00295	00037
15	6000	00258	00035
14	5600	00223	00028
13	5200	00195	00027
12	4800	00168	00028
11	4400	00140	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

$a/2c$ = .16

SPECIMEN NUMBER: QPF-22

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 (B)

AVERAGE WIDTH: 1.497 ___ ___ ___

AVERAGE THICKNESS: _____ 372 372 371

AREA: .564

BASELINE STRESS: 34KSI σ_i = 978

MAX. LOAD: 19176 A = 767

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 30.9 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0326 / .2059	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(62)

FATIGUE TEST DATA

2 Lives

$a/2c = .12$

SPECIMEN NUMBER: BPC-23

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.498 _____ _____ _____

AVERAGE THICKNESS: _____ 371 372 370

AREA: .563

BASELINE STRESS: 34 KSI $\sigma_1 = 973$

MAX. LOAD: 19142 $A = 766$

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 31.2 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0353 / .2894	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: BPC-24

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.499 _____ _____ _____

AVERAGE THICKNESS: _____ 370 371 371

AREA: .563

BASELINE STRESS: 34 KSI $\sigma_1 = 997$

MAX. LOAD: 19142 $A = 766$

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 33.2 K#

$a/2c = .41$

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0113	$2c = .0276$
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(23)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-25

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: _____ 371 372 371

AREA: .563

BASELINE STRESS: 34 KSi

MAX. LOAD: 19,142 #

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD – 27.1 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.15150	.01475
39	15600	13675	01345
38	15200	12330	01275
37	14800	11055	01104
36	14400	09951	00957
35	14000	08994	00903
34	13600	08091	00811
33	13200	07280	00677
32	12800	06603	00619
31	12400	05984	00529
30	12000	05455	00502
29	11600	04953	00446
28	11200	04507	00413
27	10800	04094	00317
26	10400	03777	00315
25	10000	03462	00332
24	9600	03130	00316
23	9200	02814	00262
22	8800	02552	00290
21	8400	02262	00260
20	8000	02002	00254
19	7600	01748	00257
18	7200	01491	00214
17	6800	01277	00222
16	6400	01055	00203
15	6000	00852	00185
14	5600	00667	00162
13	5200	00505	00139
12	4800	00366	00091
11	4400	00275	00068
10	4000	00207	00053
9	3600	00154	00039
8	3200	00115	00032
7	2800	00083	
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-26

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 (90)

AVERAGE WIDTH: 1.498 ___ ___ ___

AVERAGE THICKNESS: _____ 367 370 369

AREA: .560

BASELINE STRESS: 34 KSi w = 99.7

MAX. LOAD: 19040 # 762

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD – 28.4 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.10169	.01069
39	15600	09100	00975
38	15200	08125	00924
37	14800	07201	00821
36	14400	06380	00652
35	14000	05728	00594
34	13600	05134	00523
33	13200	04611	00541
32	12800	04170	00367
31	12400	03793	00338
30	12000	03455	00302
29	11600	03153	00316
28	11200	02837	00279
27	10800	02558	00277
26	10400	02281	00253
25	10000	02028	00218
24	9600	01810	00202
23	9200	01608	00168
22	8800	01440	00160
21	8400	01280	00150
20	8000	01130	00140
19	7600	00990	00104
18	7200	00886	00114
17	6800	00772	00097
16	6400	00675	00095
15	6000	00580	00105
14	5600	00475	00087
13	5200	00388	00068
12	4800	00320	00056
11	4400	00264	00058
10	4000	00206	00044
9	3600	00162	00037
8	3200	00127	00036
7	2800	00091	00014
6	2400	00077	00018
5	2000	00059	
4	1600		
3	1200		
2	800		
1	400		

(64)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-27

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1498 ___ ___ ___

AVERAGE THICKNESS: _____ 370 374 371

AREA: .565

BASELINE STRESS: 34KSI

MAX. LOAD: 19,210#

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD-33.1K#

No crack was found after 2-lives since this bolt hole was not reamed leaving the hole under size. The bolt was driven by the shop mechanic which resulted in putting a compressive load on the bolt hole and cold working the hole to some extent. Therefore, fatigue initiation was retarded.

ER Wanhill
QA Engr Mat

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-28

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: _____ 367 372 368

AREA: .560

BASELINE STRESS: 34KSI Cal = 95.0

MAX. LOAD: 19040 A = 7.62

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD-30.8 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.00000	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.04540	.00455
39	15600	04085	00277
38	15200	03808	00310
37	14800	03498	00377
36	14400	03121	00307
35	14000	02814	00256
34	13600	02558	00252
33	13200	02306	00286
32	12800	02020	00238
31	12400	01782	00221
30	12000	01561	00251
29	11600	01311	00173
28	11200	01138	00171
27	10800	00967	00136
26	10400	00831	00127
25	10000	00704	00101
24	9600	00603	00101
23	9200	00502	00092
22	8800	00410	00080
21	8400	00330	00060
20	8000	00270	00062
19	7600	00208	00060
18	7200	00148	00048
17	6800	00100	
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

a/c = .18

SPECIMEN NUMBER: 8PF-29

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5) (R16)

AVERAGE WIDTH: 1497 _____ _____ _____

AVERAGE THICKNESS: _____ 366 368 367

AREA: .557

BASELINE STRESS: 34ksi (w/= 97.8

MAX. LOAD: 18938 A= 758

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD – 32.5 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0217 / .1184	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: 8PF-30

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

AVERAGE WIDTH: 1.500 _____ _____ _____

AVERAGE THICKNESS: _____ 366 370 370

AREA: .552

BASELINE STRESS: 34ksi

MAX. LOAD: 18,768#

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD – 25.1 K#

ZERO. AT BASE OF SLIVER

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.12628	.01428
39	15600	11200	01323
38	15200	09877	01089
37	14800	08788	00948
36	14400	07840	00826
35	14000	07014	00695
34	13600	06319	00599
33	13200	05720	00491
32	12800	05229	00471
31	12400	04758	00402
30	12000	04356	00376
29	11600	03980	00329
28	11200	03659	00271
27	10800	03388	00270
26	10400	03118	00272
25	10000	02846	00266
24	9600	02580	00231
23	9200	02349	00258
22	8800	02091	00234
21	8400	01857	00197
20	8000	01660	00211
19	7600	01449	00189
18	7200	01260	00175
17	6800	01085	00165
16	6400	00920	00151
15	6000	00769	00135
14	5600	00634	00095
13	5200	00539	00095
12	4800	00444	00072
11	4400	00372	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(66)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-31

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5 F/C

AVERAGE WIDTH: 1.561 _____ _____ _____

AVERAGE THICKNESS: _____ .365 .368 .365

AREA: .557

BASELINE STRESS: 34 KSI cal: 955

MAX. LOAD: ~~19,938~~ 18938 K = 758

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD – 29.7 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.09233	.00758
39	15600	.08475	.00616
38	15200	.07859	.00624
37	14800	.07235	.00539
36	14400	.06705	.00509
35	14000	.06196	.00450
34	13600	.05746	.00411
33	13200	.05335	.00439
32	12800	.04896	.00346
31	12400	.04550	.00323
30	12000	.04227	.00303
29	11600	.03925	.00275
28	11200	.03650	.00256
27	10800	.03394	.00259
26	10400	.03135	.00247
25	10000	.02888	.00213
24	9600	.02645	.00220
23	9200	.02425	.00212
22	8800	.02213	.00198
21	8400	.02015	.00207
20	8000	.01808	.00185
19	7600	.01623	.00186
18	7200	.01437	.00172
17	6800	.01265	.00133
16	6400	.01132	.00151
15	6000	.00981	.00138
14	5600	.00843	.00133
13	5200	.00710	.00140
12	4800	.00570	.00101
11	4400	.00469	.00097
10	4000	.00372	.00074
9	3600	.00298	.00063
8	3200	.00235	.00055
7	2800	.00180	.00041
6	2400	.00139	.00036
5	2000	.00103	.00028
4	1600	.00075	
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

a/2c = .16

SPECIMEN NUMBER: QPF-32

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

ERAGE WIDTH: 1.560 _____ _____ _____

ERAGE THICKNESS: _____ .364 .365 .364

EA: .555

.SELINE STRESS: 32 KSI

X. LOAD: 18,870 #

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD – 30.6 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
		.04052	
40	16000	.0403 / .2477	.0374
39	15600	.03678	.0311
38	15200	.03367	.0256
37	14800	.03061	.0270
36	14400	.02791	.0246
35	14000	.02545	.0245
34	13600	.02300	.0221
33	13200	.02079	.0189
32	12800	.01890	.0178
31	12400	.01712	.0151
30	12000	.01561	.0143
29	11600	.01417	.0128
28	11200	.01290	.0105
27	10800	.01185	.0121
26	10400	.01064	.0096
25	10000	.00968	.0100
24	9600	.00868	.0096
23	9200	.00772	.0095
22	8800	.00677	.0073
21	8400	.00604	.0083
20	8000	.00521	.0060
19	7600	.00461	.0055
18	7200	.00406	.0049
17	6800	.00357	.0047
16	6400	.00310	.0038
15	6000	.00272	.0037
14	5600	.00235	.0031
13	5200	.00204	.0027
12	4800	.00182	.0013
11	4400	.00169	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(67)

FATIGUE TEST DATA

2 Lives

$a/2a = .23$

SPECIMEN NUMBER: 9PF-33

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.562 ___ ___ ___

AVERAGE THICKNESS: _____ 369 370 367

AREA: .561

BASELINE STRESS: 34KSI

MAX. LOAD: 19,074#

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD-32.6 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0226 / .0979	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: 9PF-34

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5) (R4)

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: _____ 366 370 367

AREA: .558

BASELINE STRESS: 34KSI al. 97.6

MAX. LOAD: 19,027 A=.359

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD-28.2 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.07359	.00719
39	15600	.06640	.00572
38	15200	.06068	.00507
37	14800	.05561	.00477
36	14400	.05084	.00429
35	14000	.04655	.00389
34	13600	.04266	.00367
33	13200	.03899	.00313
32	12800	.03586	.00277
31	12400	.03309	.00249
30	12000	.03060	.00268
29	11600	.02792	.00241
28	11200	.02551	.00244
27	10800	.02307	.00209
26	10400	.02098	.00221
25	10000	.01877	.00185
24	9600	.01692	.00183
23	9200	.01509	.00162
22	8800	.01347	.00158
21	8400	.01189	.00147
20	8000	.01042	.00152
19	7600	.00890	.00130
18	7200	.00760	.00083
17	6800	.00677	.00091
16	6400	.00586	.00085
15	6000	.00501	.00081
14	5600	.00420	.00049
13	5200	.00371	.00076
12	4800	.00295	.00057
11	4400	.00238	.00030
10	4000	.00208	.00037
9	3600	.00171	.00031
8	3200	.00140	.00045
7	2800	.00095	.00058
6	2400	.00087	
5	2000	.00062	
4	1600		
3	1200		
2	800		
1	400		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-35

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (R17)

AVERAGE WIDTH: 1498 _____ _____ _____

AVERAGE THICKNESS: _____ 368 368 364

AREA: .554

BASELINE STRESS: 34 KSI Cal: 28.1

MAX. LOAD: ~~18834~~ 18836 A: 7.53

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 22.8 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.18957	.02169
39	15600	16788	02135
38	15200	14653	01837
37	14800	12816	01489
36	14400	11327	00597
35	14000	10730	01734
34	13600	08996	01921
33	13200	07975	00815
32	12800	07160	00670
31	12400	06490	00579
30	12000	05911	00547
29	11600	05364	00470
28	11200	04894	00322
27	10800	04572	00317
26	10400	04155	00339
25	10000	03816	00341
24	9600	03475	00283
23	9200	03192	00272
22	8800	02920	00300
21	8400	02620	00265
20	8000	02355	00281
19	7600	02074	00272
18	7200	01802	00242
17	6800	01560	00245
16	6400	01315	00201
15	6000	01114	00153
14	5600	00951	00138
13	5200	00813	00114
12	4800	00699	00099
11	4400	00600	00081
10	4000	00519	00086
9	3600	00433	
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QPF-36

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 (88)

AVERAGE WIDTH: 1.561 _____ _____ _____

AVERAGE THICKNESS: _____ 372 375 371

AREA: .567

BASELINE STRESS: 34 KSI Cal = 27.3

MAX. LOAD: 19278 A: 7.71

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 29.3 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.07475	.00534
39	15600	06841	00519
38	15200	06322	00475
37	14800	05847	00410
36	14400	05437	00370
35	14000	05067	00327
34	13600	04710	00350
33	13200	04360	00318
32	12800	04042	00292
31	12400	03750	00283
30	12000	03467	00257
29	11600	03210	00249
28	11200	02961	00261
27	10800	02700	00244
26	10400	02456	00195
25	10000	02261	00196
24	9600	02065	00171
23	9200	01894	00194
22	8800	01700	00187
21	8400	01513	00167
20	8000	01346	00177
19	7600	01169	00161
18	7200	01008	00194
17	6800	00814	00119
16	6400	00695	00169
15	6000	00526	00110
14	5600	00416	00089
13	5200	00327	00062
12	4800	00265	00053
11	4400	00212	00052
10	4000	00160	00037
9	3600	00123	
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: 8PF-37

SPECTRUM: Fighter

TEST DATE:

TEST FRAME: 1 2 3 4 (5)

AVERAGE WIDTH: 1.501

AVERAGE THICKNESS: 371 371 370

AREA: .564

BASELINE STRESS: 34KSI

MAX. LOAD: 19,176#

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/

STATIC LOAD - 30.4 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.07598	.00616
39	15600	06982	00610
38	15200	06372	00532
37	14800	05840	00447
36	14400	05393	00385
35	14000	05008	00398
34	13600	04610	00406
33	13200	04204	00376
32	12800	03828	00331
31	12400	03497	00288
30	12000	03209	00289
29	11600	02920	00271
28	11200	02649	00215
27	10800	02434	00216
26	10400	02218	00168
25	10000	02050	00204
24	9600	01846	00167
23	9200	01679	00168
22	8800	01511	00161
21	8400	01350	00138
20	8000	01212	00133
19	7600	01079	00119
18	7200	00960	00096
17	6800	00864	00111
16	6400	00751	00099
15	6000	00652	00093
14	5600	00559	00080
13	5200	00479	00057
12	4800	00422	00060
11	4400	00362	00054
10	4000	00308	00045
9	3600	00263	00053
8	3200	00210	00055
7	2800	00155	00047
6	2400	00108	00034
5	2000	00074	00015
4	1600	00059	
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: 8PF-38

SPECTRUM: Fighter

TEST DATE:

TEST FRAME: 1 2 3 4 5 (6)

AVERAGE WIDTH: 1.500

AVERAGE THICKNESS: 367 368 368

AREA: .560

BASELINE STRESS: 34KSI

MAX. LOAD: 19,040#

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/

STATIC LOAD - 18.8 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.29551	.03943
39	15600	25608	03152
38	15200	22456	02386
37	14800	20070	02070
36	14400	18000	01721
35	14000	16279	01500
34	13600	14779	01317
33	13200	13462	01240
32	12800	12222	00986
31	12400	11236	00961
30	12000	10275	00899
29	11600	09376	00913
28	11200	08463	00836
27	10800	07627	00775
26	10400	06852	00609
25	10000	06243	00490
24	9600	05753	00504
23	9200	05249	00435
22	8800	04814	00389
21	8400	04425	00328
20	8000	04097	00326
19	7600	03771	00336
18	7200	03435	00305
17	6800	03130	00281
16	6400	02849	00279
15	6000	02570	00270
14	5600	02300	00278
13	5200	02022	00229
12	4800	01793	00258
11	4400	01535	00231
10	4000	01304	00232
9	3600	01072	00249
8	3200	00823	00245
7	2800	00678	00180
6	2400	00498	
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2.1.6 QIF

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-1

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

/ERAGE WIDTH: 1.497 _____ _____ _____

/ERAGE THICKNESS: _____ 377 378 376

EA: .564

SELINE STRESS: 34ksi (R: .944

X. LOAD: 19176 A:767

1 Life

/CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 29.1 KN

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.09695	.00740
39	15600	08955	00743
38	15200	08212	00662
37	14800	07550	00550
36	14400	07000	00499
35	14000	06501	00471
34	13600	06030	00440
33	13200	05590	00383
32	12800	05207	00360
31	12400	04847	00322
30	12000	04525	00315
29	11600	04210	00310
28	11200	03900	00259
27	10800	03641	00243
26	10400	03398	00213
25	10000	03185	00214
24	9600	02971	00225
23	9200	02746	00226
22	8800	02520	00215
21	8400	02305	00215
20	8000	02090	00187
19	7600	01903	00178
18	7200	01725	00169
17	6800	01556	00166
16	6400	01396	00127
15	6000	01269	00125
14	5600	01144	00150
13	5200	00994	00104
12	4800	00890	00100
11	4400	00768	00126
10	4000	00642	00119
9	3600	00523	00096
8	3200	00427	00081
7	2800	00346	00072
6	2400	00274	00060
5	2000	00214	00052
4	1600	00162	00047
3	1200	00115	
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-2

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

ERAGE WIDTH: 1.500 _____ _____ _____

/ERAGE THICKNESS: _____ 377 378 376

EA: .566

SELINE STRESS: 34ksi

X. LOAD: 19,244#

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 31.4 KN

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.02817	.00269
39	15600	02548	00195
38	15200	02353	00172
37	14800	02181	00166
36	14400	02015	00159
35	14000	01856	00159
34	13600	01697	00142
33	13200	01555	00136
32	12800	01419	00128
31	12400	01291	00123
30	12000	01168	00108
29	11600	01060	00115
28	11200	00945	00089
27	10800	00856	00086
26	10400	00770	00093
25	10000	00677	00072
24	9600	00605	00089
23	9200	00516	00062
22	8800	00454	00054
21	8400	00400	00039
20	8000	00361	00049
19	7600	00312	00034
18	7200	00278	00039
17	6800	00239	00034
16	6400	00205	00027
15	6000	00178	00020
14	5600	00158	00021
13	5200	00137	00012
12	4800	00125	00022
11	4400	00103	00008
10	4000	00095	00016
9	3600	00079	00014
8	3200	00065	
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-3

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

/ERAGE WIDTH: 1.501 _____

/ERAGE THICKNESS: _____ 377 378 379

REA: .567

ASELINE STRESS: 34ksi

AX. LOAD: 19278#

1 Life

/CLES AT TERMINATION/FAILURE:

2 Lives/1,531,494 L.P.

STATIC LOAD - 31.4 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.04738	.00380
39	15600	04358	00341
38	15200	04017	00293
37	14800	03724	00266
36	14400	03458	00261
35	14000	03197	00242
34	13600	02955	00234
33	13200	02731	00219
32	12800	02512	00212
31	12400	02309	00197
30	12000	02103	00205
29	11600	01898	00184
28	11200	01714	00173
27	10800	01541	00156
26	10400	01385	00145
25	10000	01240	00132
24	9600	01108	00119
23	9200	00989	00110
22	8800	00879	00108
21	8400	00761	00090
20	8000	00671	00089
19	7600	00582	00065
18	7200	00517	00062
17	6800	00455	00059
16	6400	00396	00033
15	6000	00363	00043
14	5600	00320	00035
13	5200	00285	00051
12	4800	00234	00025
11	4400	00209	00039
10	4000	00170	00027
9	3600	00143	00017
8	3200	00126	00019
7	2800	00107	00011
6	2400	00096	
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-4

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

/ERAGE WIDTH: 1.499 _____

/ERAGE THICKNESS: _____ 376 379 379

REA: .566

ASELINE STRESS: 34ksi

AX. LOAD: 19,244#

1 Life

/CLES AT TERMINATION/FAILURE:

2 Lives/1,531,494 L.P.

STATIC LOAD - 28.0 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.10291	.01004
39	15600	09287	00959
38	15200	08328	00832
37	14800	07496	00755
36	14400	06741	00696
35	14000	06045	00588
34	13600	05457	00540
33	13200	04917	00475
32	12800	04442	00427
31	12400	04025	00362
30	12000	03663	00354
29	11600	03309	00328
28	11200	02981	00299
27	10800	02690	00250
26	10400	02440	00230
25	10000	02210	00222
24	9600	01988	00182
23	9200	01806	00166
22	8800	01640	00148
21	8400	01492	00142
20	8000	01350	00138
19	7600	01212	00127
18	7200	01085	00128
17	6800	00957	00117
16	6400	00840	00109
15	6000	00731	00117
14	5600	00614	00109
13	5200	00505	00104
12	4800	00401	00094
11	4400	00307	00079
10	4000	00228	00072
9	3600	00156	00033
8	3200	00123	00024
7	2800	00099	00022
6	2400	00077	
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-5

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

VERAGE WIDTH: 1.499

VERAGE THICKNESS: .375 .378 .376

REA: .564

ASELINE STRESS: 34Ksi

X. LOAD: 19,176#

1 Life

YCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD-32.4 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.02220	.00282
39	15600	01938	00180
38	15200	01758	00165
37	14800	01593	00149
36	14400	01444	00156
35	14000	01288	00116
34	13600	01172	00127
33	13200	01045	00119
32	12800	00926	00112
31	12400	00814	00096
30	12000	00718	00088
29	11600	00630	00075
28	11200	00555	00067
27	10800	00488	00058
26	10400	00430	00051
25	10000	00379	00039
24	9600	00340	00037
23	9200	00303	00021
22	8800	00282	00030
21	8400	00252	00025
20	8000	00227	00026
19	7600	00201	00027
18	7200	00174	00022
17	6800	00152	00019
16	6400	00133	00021
15	6000	00112	00013
14	5600	00099	00019
13	5200	00080	
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-6

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5

VERAGE WIDTH: 1.500

VERAGE THICKNESS: .378 .381 .381

REA: .569

ASELINE STRESS: 34Ksi

X. LOAD: 19,346#

1 Life

YCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD - 31.1 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.04030	.00380
39	15600	03650	00373
38	15200	03277	00308
37	14800	02969	00303
36	14400	02666	00278
35	14000	02388	00296
34	13600	02092	00264
33	13200	01828	00251
32	12800	01577	00217
31	12400	01360	00192
30	12000	01168	00181
29	11600	00987	00167
28	11200	00820	00111
27	10800	00709	00077
26	10400	00632	00087
25	10000	00545	00087
24	9600	00458	00076
23	9200	00382	00061
22	8800	00321	00044
21	8400	00277	00058
20	8000	00219	00037
19	7600	00182	00028
18	7200	00154	00019
17	6800	00135	00012
16	6400	00123	00018
15	6000	00105	00022
14	5600	00083	00011
13	5200	00072	
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-7

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5

ERAGE WIDTH: 1.499

ERAGE THICKNESS: .375 .377 .372

EA: .561

SELINE STRESS: 34ksi

X. LOAD: 19,074#

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 29.8 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.07496	.00678
39	15600	06818	00674
38	15200	06144	00565
37	14800	05579	00482
36	14400	05097	00455
35	14000	04642	00446
34	13600	04196	00386
33	13200	03810	00358
32	12800	03452	00322
31	12400	03130	00327
30	12000	02803	00313
29	11600	02512	00303
28	11200	02187	00264
27	10800	01923	00247
26	10400	01676	00225
25	10000	01451	00214
24	9600	01237	00169
23	9200	01068	00149
22	8800	00919	00130
21	8400	00789	00104
20	8000	00665	00130
19	7600	00555	00085
18	7200	00470	00059
17	6800	00411	00059
16	6400	00352	00049
15	6000	00303	00053
14	5600	00250	00068
13	5200	00182	
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

9/16 = .12

SPECIMEN NUMBER: QIF-8

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

ERAGE WIDTH: 1.499

ERAGE THICKNESS: 373 376 375

EA: .561

SELINE STRESS: 34ksi

X. LOAD: 19074 A = 7.63 Cal: 94.9

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/1,531,494 LP

STATIC LOAD - 32.8 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0208 2c =	.2894
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-9

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

ERAGE WIDTH: 1.499 _____ _____ _____

ERAGE THICKNESS: _____ 372 375 373

EA: .560

SELINE STRESS: 34Ksi Cal: 972

X. LOAD: 19040 A-762

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/ 1531494

STATIC LOAD - 32.8K#

a/2c = .20

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0168 2c=	.08421
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-10

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

ERAGE WIDTH: 1.500 _____ _____ _____

ERAGE THICKNESS: _____ 373 375 374

EA: .561

SELINE STRESS: 34Ksi Cal: 969

X. LOAD: 19074 A: 763

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/ 1,531,494

STATIC LOAD - 33.1 K#

a/2c = .49

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0058 2c=	.0117
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(75)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-11

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

/ERAGE WIDTH: 1.501

/ERAGE THICKNESS: _____ 373 375 374

(EA: .563

ASELINE STRESS: 34 KSI Cal = 967

AX. LOAD: 19102 A: 766

1 Life

/CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 32.6 K#

FRACTOGRAPHYC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.04510	00377
39	15600	04133	00260
38	15200	03873	00250
37	14800	03623	00243
36	14400	03380	00227
35	14000	03153	00225
34	13600	02928	00220
33	13200	02708	00211
32	12800	02497	00207
31	12400	02290	00193
30	12000	02097	00182
29	11600	01915	00171
28	11200	01744	00144
27	10800	01600	00144
26	10400	01456	00118
25	10000	01338	00120
24	9600	01218	00108
23	9200	01110	00050
22	8800	01060	00150
21	8400	00910	00093
20	8000	00817	00089
19	7600	00728	00090
18	7200	00638	00068
17	6800	00570	00074
16	6400	00496	00054
15	6000	00442	00056
14	5600	00386	00038
13	5200	00348	00038
12	4800	00309	00044
11	4400	00265	00030
10	4000	00235	00034
9	3600	00201	
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-12

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

/ERAGE WIDTH: 1.500

/ERAGE THICKNESS: _____ 374 377 376

(EA: .563

ASELINE STRESS: 34 KSI Cal = 965

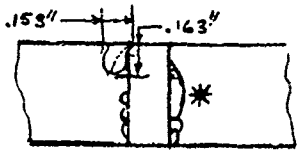
AX. LOAD: 19142 A: 766

1 Life

/CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 29.2 K#



Blk #	FLIGHT HRS.	CRACK LENGTH* IN.	INCREMENT IN.
40	16000	.05318	00445
39	15600	04873	00465
38	15200	04408	00393
37	14800	04015	00339
36	14400	03676	00288
35	14000	03378	00237
34	13600	03141	00241
33	13200	02900	00228
32	12800	02672	00214
31	12400	02458	00223
30	12000	02235	00215
29	11600	02020	00217
28	11200	01813	00182
27	10800	01631	00171
26	10400	01460	00138
25	10000	01322	00157
24	9600	01165	00119
23	9200	01046	00123
22	8800	00923	00121
21	8400	00802	00114
20	8000	00688	00123
19	7600	00565	00077
18	7200	00488	00075
17	6800	00413	
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(6)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: QIF-13

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 (40)

/ERAGE WIDTH: 1.498 ___ ___ ___

/ERAGE THICKNESS: _____ 373 378 373

EA: .561

\SELINE STRESS: 34ksi (cl: 42.5 ksi)

\X. LOAD: 19074 A:763

1 Life

/CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - 29.6K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.09024	.00835
39	15600	08189	00714
38	15200	07475	00700
37	14800	06775	00631
36	14400	06144	00483
35	14000	05461	00491
34	13600	05170	00429
33	13200	04741	00367
32	12800	04374	00309
31	12400	04065	00335
30	12000	03730	00288
29	11600	03442	00274
28	11200	03168	00278
27	10800	02890	00258
26	10400	02632	00253
25	10000	02379	00255
24	9600	02124	00237
23	9200	01887	00212
22	8800	01675	00205
21	8400	01470	00182
20	8000	01288	00164
19	7600	01124	00144
18	7200	00980	00147
17	6800	00833	00133
16	6400	00700	00105
15	6000	00595	00107
14	5600	00488	00107
13	5200	00381	00066
12	4800	00315	00055
11	4400	00260	00029
10	4000	00231	00042
9	3600	00189	00042
8	3200	00147	00024
7	2800	00123	00035
6	2400	00088	00023
5	2000	00065	
4	1600		
3	1200		
2	800		
1	400		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

2.1.7 QPB

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-1

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: ___ 3705 3750 3720

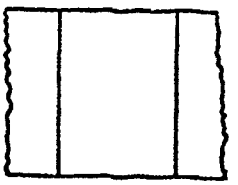
AREA: .565

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,645 #

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 32.4K #



SPECIMEN NUMBER: QPB-2

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.501 ___ ___ ___

AVERAGE THICKNESS: ___ 3735 375 372

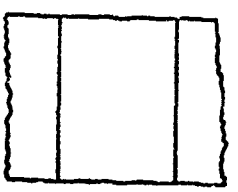
AREA: .567

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,711 #

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 32.9K #



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	0262	0018
	3760	0243	0024
	3660	0220	0020
	3560	0200	0020
	3460	0180	0017
	3360	0163	0017
	3260	0148	0016
	3160	0132	0016
	3060	0118	0010
	2960	0108	0010
	2860	0098	0007
	2760	0091	0010
	2660	0081	0006
Two Lives	2560	0075	0005
	2480	0070	0002
	2380	0068	0008
	2280	0060	0010
	2180	0050	
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.0111	0010
	3760	0101	0009
	3660	0092	0004
	3560	0088	0009
	3460	0079	0007
	3360	0072	0005
	3260	0067	0007
	3160	0060	0004
	3060	0056	0005
	2960	0051	0003
	2860	0048	0005
	2760	0043	0004
	2660	0039	
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

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GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-3

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.498 ___ ___ ___

AVERAGE THICKNESS: ___ .3730 .375 .3755

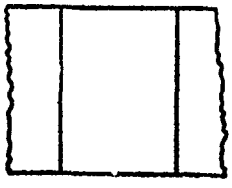
AREA: .568

BASELINE STRESS: 33 Ksi

MAX. LOAD: 18,744#

CYCLES AT TERMINATION/[redacted] 3Lives/___

STATIC LOAD – 31.2 K#



$a/2c = .60$

SPECIMEN NUMBER: QPB-4

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.498 ___ ___ ___

AVERAGE THICKNESS: ___ .3740 .3760 .3750

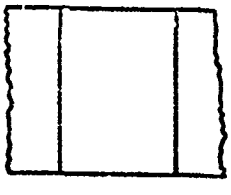
AREA: .568

BASELINE STRESS: 33 Ksi

MAX. LOAD: 18744#

CYCLES AT TERMINATION/[redacted] 3Lives/___

STATIC LOAD – 31.2 K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0402	.0040
	3760	.0362	.0041
	3660	.0321	.0040
	3560	.0281	.0029
	3460	.0252	.0027
	3360	.0225	.0024
	3260	.0201	.0022
	3160	.0179	.0019
	3060	.0160	.0018
	2960	.0142	.0014
	2860	.0128	.0013
	2760	.0115	.0010
	2660	.0105	.0014
Two Lives	2560	.0091	.0010
	2480	.0081	.0010
	2380	.0071	.0006
	2280	.0065	.0007
	2180	.0058	.0005
	2080	.0053	.0006
	1980	.0047	.0006
	1880	.0041	.0003
	1780	.0038	.0007
	1680	.0031	.0003
	1580	.0028	.0004
	1480	.0024	.0005
	1380	.0019	.0004
One Life	1280	.0015	.0004
	1200	.0011	.0001
	1100	.0010	.0002
	1000	.0008	.0002
	900	.0006 / .0010	
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0818	.0107
	3760	.0711	.0102
	3660	.0609	.0092
	3560	.0517	.0074
	3460	.0443	.0061
	3360	.0382	.0047
	3260	.0335	.0042
	3160	.0293	.0038
	3060	.0255	.0031
	2960	.0229	.0033
	2860	.0191	.0029
	2760	.0162	.0022
	2660	.0140	.0015
Two Lives	2560	.0125	.0013
	2480	.0112	.0015
	2380	.0097	.0016
	2280	.0081	.0011
	2180	.0070	.0010
	2080	.0060	.0008
	1980	.0052	.0007
	1880	.0045	.0005
	1780	.0040	.0005
	1680	.0035	.0006
	1580	.0029	.0005
	1480	.0024	.0003
	1380	.0021	.0004
One Life	1280	.0017	
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

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GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPb-5

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

AVERAGE WIDTH: 1.503 ___ ___ ___

AVERAGE THICKNESS: ___ .372 .373 .373

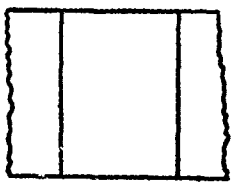
AREA: .561

BASELINE STRESS: 33Ksi

MAX. LOAD: 18744 #

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/___

STATIC LOAD – 32.3 K#



QPb-6

SPECIMEN NUMBER: QPb-6

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: ___ .3725 .3758 .3720

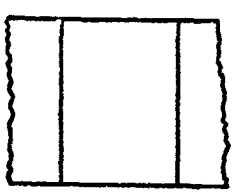
AREA: .567

BASELINE STRESS: 33ksi

MAX. LOAD: 18711#

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD – 26.4 K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	0449	0047
	3760	0402	0046
	3660	0354	0037
	3560	0319	0037
	3460	0282	0033
	3360	0249	0028
	3260	0221	0022
	3160	0199	0027
	3060	0172	0021
	2960	0151	0019
	2860	0132	0013
	2760	0119	0017
	2660	0102	0013
Two Lives	2560	0089	0007
	2480	0082	0012
	2380	0070	0009
	2280	0061	0010
	2180	0051	0009
	2080	0042	0008
	1980	0034	0005
	1880	0029	0005
	1780	0024	0003
	1680	0021	0003
	1580	0018	0004
	1480	0014	0002
	1380	0012	0001
One Life	1280	0011	0002
	1200	0009	0002
	1100	0007	0002
	1000	0005	
	900		
	800		
	700		
	600		
	500		
	400		
	300		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.2170	.0340
	3760	1830	0254
	3660	1576	0211
	3560	1365	0178
	3460	1187	0162
	3360	1025	0139
	3260	0886	0126
	3160	0760	0103
	3060	0657	0095
	2960	0562	0083
	2860	0479	0077
	2760	0402	0061
	2660	0341	0040
Two Lives	2560	0301	0032
	2480	0269	0035
	2380	0234	0031
	2280	0203	0030
	2180	0173	0025
	2080	0148	0019
	1980	0129	0020
	1880	0109	0012
	1780	0097	0014
	1680	0083	0019
	1580	0064	0017
	1480	0047	
	1380	0: -	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-7

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: ___ .3745 .3755 .3725

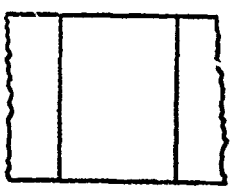
AREA: .568

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,744.0 *

CYCLES AT TERMINATION/FAILURE: * 3Lives/___

= @ 953,792 L.P.'s
3699.12 FLT-HRS *



SPECIMEN NUMBER: QPB-8

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5

AVERAGE WIDTH: 1.500 ___ ___ ___

AVERAGE THICKNESS: ___ .375 .375 .3745

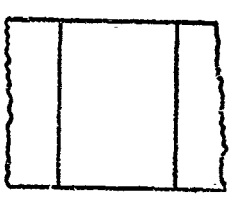
AREA: .569

BASELINE STRESS: 33 KSI

MAX. LOAD: 18,777.0 #

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 29.9 K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
Three Lives	3840		
	[illegible]	.3467	.0583
	3660	2884	.0603
	3560	2281	.0398
	3460	1883	0295
	3360	1588	0236
	3260	1352	0184
	3160	1168	0160
	3060	1008	0149
	2960	0859	0126
	2860	0733	0102
	2760	0631	0093
	2660	0538	0068
Two Lives	2560	0470	0047
	2480	0413	0051
	2380	0362	0045
	2280	0317	0044
	2180	0273	0040
	2080	0233	0031
	1980	0202	0030
	1880	0172	0027
	1780	0145	0023
	1680	0122	0022
	1580	0100	0014
	1480	0086	0014
	1380	0072	0017
One Life	1280	0055	0007
	1200	0048	0013
	1100	0035	0008
	1000	0027	
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	[illegible]		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
Three Lives	3840	.0936	0091
	3760	0845	0100
	3660	0745	0093
	3560	0652	0083
	3460	0569	0077
	3360	0492	0054
	3260	0438	0055
	3160	0383	0049
	3060	0334	0043
	2960	0291	0035
	2860	0256	0034
	2760	0222	0037
	2660	0185	0023
Two Lives	2560	0162	0023
	2480	0139	0021
	2380	0118	0019
	2280	0099	0014
	2180	0085	0010
	2080	0075	0009
	1980	0066	0007
	1880	0059	0008
	1780	0051	
	1680		
	1580		
	1480		
	1330		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: 8PB-7

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.501 ___ ___ ___

AVERAGE THICKNESS: ___ 371 3725 375

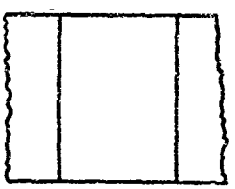
AREA: .567

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,711 #

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/___

STATIC LOAD – 32.3 K#



SPECIMEN NUMBER: 8PB-10

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.501 ___ ___ ___

AVERAGE THICKNESS: ___ 373 377 376

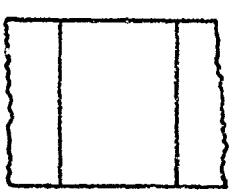
AREA: .569

BASELINE STRESS: 33ksi

MAX. LOAD: 18,777 #

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/___

STATIC LOAD – 27.7 K#



a/c = .28

FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	0297	0031
	3760	0266	0035
	3660	0231	0030
	3560	0201	0027
	3460	0174	0012
	3360	0162	0017
	3260	0145	0014
	3160	0131	0011
	3060	0120	0007
	2960	0113	0011
	2860	0102	0012
	2760	0090	0011
	2660	0079	0007
Two Lives	2560	0072	0006
	2480	0066	0008
	2380	0058	0005
	2280	0052	0004
	2180	0048	0006
	2080	0042	0002
	1980	0040	0004
	1880	0036	0003
	1780	0033	0003
	1680	0030	0001
	1580	0029	0002
	1480	0027	0002
	1380	0025	
~~One Life~~	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.1430	.0160
	3760	1270	.0165
	3660	1105	0199
	3560	0956	0125
	3460	0831	0098
	3360	0733	0100
	3260	0633	0080
	3160	0553	0063
	3060	0490	0055
	2960	0435	0048
	2860	0387	0044
	2760	0343	0037
	2660	0306	0033
Two Lives	2560	0273	0022
	2480	0251	0028
	2380	0223	0024
	2280	0199	0026
	2180	0173	0023
	2080	0150	0019
	1980	0131	0019
	1880	0112	0019
	1780	0093	0012
	1680	0081	0011
	1580	0070	0015
	1480	0055	0006
	1380	0049	0005
One Life	1280	0044	0005
	1200	0039	0003
	1100	0036	0004
	1000	0032	0004
	900	.0028 / .0101	
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-11

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.497 ___ ___ ___

AVERAGE THICKNESS: ___ 3705 373 3725

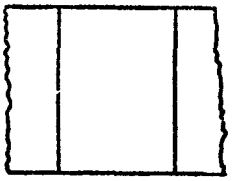
AREA: .564

BASELINE STRESS: 33ksi

MAX. LOAD: 18,612#

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 23.7 K#



SPECIMEN NUMBER: QPB-12

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

AVERAGE WIDTH: 1.498 ___ ___ ___

AVERAGE THICKNESS: ___ 3735 3755 374

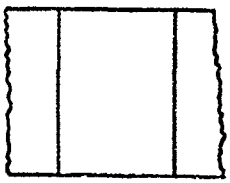
AREA: .568

BASELINE STRESS: 33ksi

MAX. LOAD: 18,744#

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 31.3 K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	2369	0281
	3760	2088	0286
	3660	1802	0255
	3560	1547	0219
	3460	1328	0190
	3360	1138	0158
	3260	0980	0141
	3160	0839	0125
	3060	0714	0099
	2960	0615	0085
	2860	0530	0080
	2760	0450	0073
	2660	0377	0084
Two Lives	2560	0293	0040
	2480	0253	0031
	2380	0222	0027
	2280	0195	0022
	2180	0173	0025
	2080	0148	0026
	1980	0122	0021
	1880	0101	0020
	1780	0081	0018
	1680	0063	0014
	1580	0049	
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.0505	.0044
	3760	0461	0048
	3660	0413	0035
	3560	0378	0037
	3460	0341	0032
	3360	0309	0033
	3260	0276	0028
	3160	0248	0021
	3060	0227	0022
	2960	0205	0021
	2860	0184	0017
	2760	0167	0023
	2660	0144	0015
Two Lives	2560	0129	0012
	2480	0117	0016
	2380	0101	0010
	2280	0091	0011
	2180	0080	0011
	2080	0069	0009
	1980	0060	0010
	1880	0050	0005
	1780	0045	0007
	1680	0038	0006
	1580	0032	0005
	1480	0027	0005
	1380	0022	0004
One Life	1280	0018	0003
	1200	0015	
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-13

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.503 ___ ___ ___

AVERAGE THICKNESS: ___ 374 376 3735

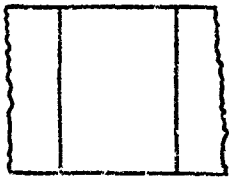
AREA: .570

BASELINE STRESS: 33KSI

MAX. LOAD: 18810 #

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/___

STATIC LOAD – 20.3 K#



SPECIMEN NUMBER: QPB-14

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.501 ___ ___ ___

AVERAGE THICKNESS: ___ 374 375 371

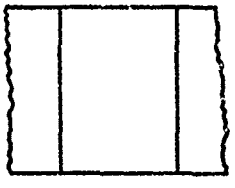
AREA: .569

BASELINE STRESS: 33KSI

MAX. LOAD: 18,777#

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/___

STATIC LOAD – 29.5 K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	2837	0461
	3760	2376	0408
	3660	1968	0304
	3560	1664	0256
	3460	1408	0207
	3360	1201	0183
	3260	1018	0158
	3160	0860	0138
	3060	0722	0101
	2960	0621	0088
	2860	0533	0076
	2760	0457	0073
	2660	0384	0054
Two Lives	2560	0330	0038
	2480	0292	0044
	2380	0248	0041
	2280	0207	0031
	2180	0176	0041
	2080	0135	0033
	1980	0102	0027
	1880	0075	0025
	1780	0050	
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0788	.0086
	3760	0702	.0101
	3660	0601	.0082
	3560	0519	0076
	3460	0443	0055
	3360	0388	0050
	3260	0338	0044
	3160	0294	0038
	3060	0256	0033
	2960	0223	0030
	2860	0193	0031
	2760	0162	0023
	2660	0139	0017
Two Lives	2560	0122	0012
	2480	0110	0009
	2380	0101	0016
	2280	0085	0012
	2180	0073	0008
	2080	0065	0008
	1980	0057	0007
	1880	0050	0007
	1780	0043	0005
	1680	0038	0003
	1580	0035	0003
	1480	0032	0004
	1380	0028	0006
One Life	1280	0022	0003
	1200	0019	
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

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GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-16

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.503 ___ ___ ___

AVERAGE THICKNESS: ___ 372 376 372

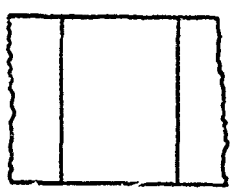
AREA: .569

BASELINE STRESS: 33KSI

MAX. LOAD: 18,777#

CYCLES AT TERMINATION/[redacted]: 3Lives/___

STATIC LOAD — 28.0K#



SPECIMEN NUMBER: QPB-16

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

AVERAGE WIDTH: 1.5062 ___ ___ ___

AVERAGE THICKNESS: 3776 3757 3798 3771

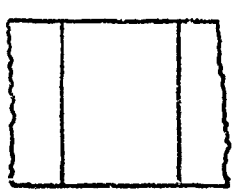
AREA: .5686

BASELINE STRESS: 33KSI

MAX. LOAD: 18,765.1#

CYCLES AT TERMINATION/[redacted]: 3Lives/___

STATIC LOAD - 31.5#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.1643	.0223
	3760	.1420	.0238
	3660	.1182	.0202
	3560	.0980	.0172
	3460	.0808	.0145
	3360	.0663	.0123
	3260	.0540	.0100
	3160	.0440	.0079
	3060	.0361	.0059
	2960	.0302	.0048
	2860	.0254	.0036
	2760	.0218	.0032
	2660	.0186	.0024
Two Lives	2560	.0162	.0019
	2480	.0143	.0021
	2380	.0122	.0014
	2280	.0108	.0014
	2180	.0094	.0009
	2080	.0085	.0010
	1980	.0075	.0008
	1880	.0067	.0007
	1780	.0059	.0011
	1680	.0049	.0008
	1580	.0041	.0006
	1480	.0035	
	1380	.0029	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.0290	.0032
	3760	.0258	.0037
	3660	.0221	.0021
	3560	.0200	.0022
	3460	.0178	.0017
	3360	.0161	.0013
	3260	.0148	.0021
	3160	.0127	.0018
	3060	.0109	.0021
	2960	.0088	.0013
	2860	.0075	.0010
	2760	.0065	.0012
	2660	.0053	.0008
Two Lives	2560	.0045	.0005
	2480	.0040	.0006
	2380	.0034	.0005
	2280	.0029	.0004
	2180	.0025	.0004
	2080	.0021	.0003
	1980	.0018	.0003
	1880	.0015	.0002
	1780	.0013	
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

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GENERAL DYNAMICS
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TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-17

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.5022 ___ ___ ___

AVERAGE THICKNESS: .3777 .3773 .3785 .3773

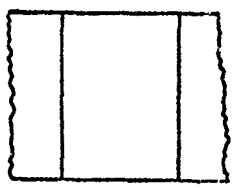
AREA: .5674

BASELINE STRESS: 33 KSI

MAX. LOAD: 18723.6 #

CYCLES AT [redacted]/FAILURE: * 3Lives/___

853,159 L.P.S = 3308.83 FLT-HRS *



SPECIMEN NUMBER: QPB-18

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5029 ___ ___ ___

AVERAGE THICKNESS: .3767 .3754 .3779 .3767

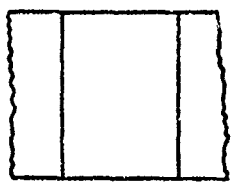
AREA: .5661

BASELINE STRESS: 33 KSI

MAX. LOAD: 18681.1 #

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 28K #



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH		INCREMENT INCH.	
ThreeLives	3840				
	3760				
	3660				
	3560				
	3460				
* →	[redacted]	.4822		.0769	
	3260	3553		0106	
	3160	2847		0473	
	3060	2374		0379	
	2960	1995		0336	
	2860	1659		0281	
	2760	1378		0254	
	2660	1124		0206	
Two Lives	2560	0918		0137	
	2480	0781		0133	
	2380	0648		0112	.0104
	2280	0536	.0544	0091	.0092
	2180	0445	0452	0069	0068
	2080	0376	0384	0058	0063
	1980	0318	0321	0047	0050
	1880	0271	0271	0043	0039
	1780	0228	0232	0038	0041
	1680	0190	0191	0037	0035
	1580	0153	0156	0029	0028
	1480	0124	0128	0026	0025
	1380	0098	0103	0018	0019
One Life	1280	0080	0084	0015	0011
	1200	0065	0073	0015	0017
	1100	0050	0056		0007
	1000		0049		0007
	900		0042		0005
	800		0037		0005
	700		0032		0007
	600		0025		0005
	500		0020		0003
	400		0017		0002
	300		0015		
	200				

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.1258	.0170
	3760	1088	0187
	3660	0901	0147
	3560	0754	0124
	3460	0630	0106
	3360	0524	0082
	3260	0442	0065
	3160	0377	0055
	3060	0322	0048
	2960	0274	0045
	2860	0229	0039
	2750	0190	0035
	2660	0155	0030
Two Lives	2560	0125	0021
	2480	0104	0016
	2380	0088	0014
	2280	0074	0012
	2180	0062	0009
	2080	0053	0008
	1980	0045	0007
	1880	0038	0008
	1780	0030	0007
	1680	0023	0005
	1580	0018	0005
	1480	0013	0002
	1380	0011	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

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GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-19

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.4997 ___ ___ ___

AVERAGE THICKNESS: .3792 .3798 .3802 .3776

AREA: .5687

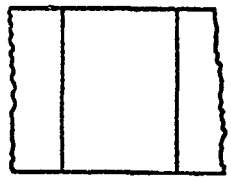
BASELINE STRESS: 33 ksi

MAX. LOAD: 18,766.7 #

CYCLES AT TERMINATION/FAILURE: * 4 Lives/___

= @ 1,033,616 L.P.'s

→ 4008.7 FLT-HRS *



TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-25

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

AVERAGE WIDTH: 1.5007 ___ ___ ___

AVERAGE THICKNESS: .3793 .3802 .3813 .3764

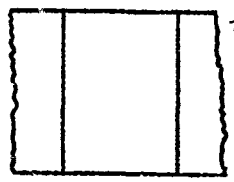
AREA: .5692

BASELINE STRESS: 33 ksi

MAX. LOAD: 18,784.1 #

CYCLES AT TERMINATION/FAILURE: 4 Lives/___

~~833,592~~ 832,517 L.P.'s = 3228.78 Flt. Hrs.



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
	4008.7	.4130	.1052
	3940	3078	0668
ThreeLives	3840	2410	0307
	3760	2103	0224
	3660	1779	0245
	3560	1534	0207
	3460	1327	0182
	3360	1145	0163
	3260	0982	0144
	3160	0838	0136
	3060	0702	0118
	2960	0584	0099
	2860	0485	0083
	2760	0402	0064
	2660	0338	0044
Two Lives	2560	0294	0039
	2480	0255	0035
	2380	0220	0029
	2280	0191	0025
	2180	0166	0025
	2080	0141	0020
	1980	0121	0022
	1880	0099	0021
	1780	0078	0014
	1680	0064	0013
	1580	0051	0015
	1480	0036	0011
	1380	0025	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	[redacted]	.4171	.0930
	3160	3241	0603
	3060	2638	0427
	2960	2211	0351
	2860	1860	0290
	2760	1570	0255
	2660	1315	0213
Two Lives	2560	1102	0132
	2480	0970	0141
	2380	0829	0131
	2280	0698	0110
	2180	0588	0085
	2080	0503	0073
	1980	0430	0059
	1880	0371	0051
	1780	0320	0049
	1680	0271	0038
	1580	0233	0035
	1480	0198	0037
	1380	0161	0020
One Life	1280	0141	0029
	1200	0112	0027
	1100	0085	0025
	1000	0068	0022
	900	0038	0013
	800	0025	0007
	700	0018	0004
	600	0014	0004
	500	0010	0002
	400	0008	0003
	300	0006	
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: OPE-21

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.5048 ___ ___ ___

AVERAGE THICKNESS: .3796 .3800 .3806 .3783

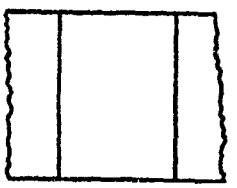
AREA: .5713

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,852.0 #

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/___

STATIC LOAD – 33.3 K#



SPECIMEN NUMBER: OPB-22

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5003 ___ ___ ___

AVERAGE THICKNESS: .3792 .3775 .3807 .3794

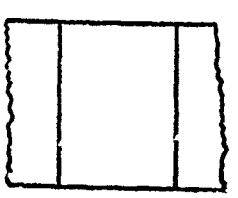
AREA: .5689

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,774.2 #

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/___

STATIC LOAD – 31.9 K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0177	0027
	3760	0150	0020
	3660	0130	0017
	3560	0113	0012
	3460	0101	0010
	3360	0091	0009
	3260	0082	0008
	3160	0074	0009
	3060	0065	0009
	2960	0056	0008
	2860	0048	0008
	2760	0040	0007
	2660	0033	0004
Two Lives	2560	0029	0004
	2480	0025	0004
	2380	0021	0003
	2280	0018	0005
	2180	0013	0002
	2080	0011	0002
	1980	0009	
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.0282	.0032
	3760	0250	.0030
	3660	0220	0026
	3560	0194	0024
	3460	0170	0019
	3360	0151	0017
	3260	0134	0019
	3160	0115	0014
	3060	0101	0011
	2960	0090	0011
	2860	0079	0008
	2760	0071	0009
	2660	0062	0009
Two Lives	2560	0053	0006
	2480	0047	0007
	2380	0040	0007
	2280	0033	0004
	2180	0029	0004
	2080	0025	0004
	1980	0021	0002
	1880	0019	0002
	1780	0017	0004
	1680	0013	0003
	1580	0010	0002
	1480	0008	0001
	1380	0007	0001
One Life	1280	0006	0001
	1200	0005	0001
	1100	0004	0001
	1000	0003	
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-23

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.5018 ___ ___ ___

AVERAGE THICKNESS: .3786 .3784 .3788 .3785

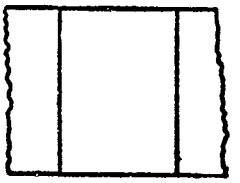
AREA: .5686

BASELINE STRESS: 33 ksi

MAX. LOAD: 18763.8 #

CYCLES AT TERMINATION/[illegible]: 3Lives/___

27 STATIC LOAD - 28.1K*



SPECIMEN NUMBER: QPB-24

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

AVERAGE WIDTH: 1.497 ___ ___ ___

AVERAGE THICKNESS: ___ .371 .374 .373

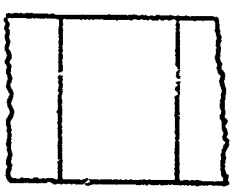
AREA: .565

BASELINE STRESS: 33 ksi

MAX. LOAD: 18645. #

CYCLES AT TERMINATION/[illegible]: 3Lives/___

STATIC LOAD - 22.1K*



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.0850	.0115
	3760	0735	0110
	3660	0625	0093
	3560	0532	0078
	3460	0454	0063
	3360	0391	0051
	3260	0340	0038
	3160	0302	0032
	3060	0265	0030
	2960	0235	0026
	2860	0209	0023
	2760	0186	0025
	2660	0161	0018
Two Lives	2560	0143	0013
	2480	0130	0013
	2380	0117	0016
	2280	0101	0010
	2180	0091	0012
	2080	0079	0009
	1980	0070	0009
	1880	0061	0008
	1780	0053	0005
	1680	0047	0007
	1580	0040	0006
	1480	0034	0005
	1380	0029	0007
One Life	1280	0022	0003
	1200	0019	0003
	1100	0016	0004
	1000	0012	0002
	900	0010	0002
	800	0008	0002
	700	0006	0003
	600	0003	0001
	500	0002	0001
	400	~ 0001	
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.2531	.0386
	3760	2145	.0351
	3660	1794	0281
	3560	1513	0235
	3460	1278	0203
	3360	1075	0166
	3260	0909	0138
	3160	0771	0102
	3060	0669	0098
	2960	0571	0075
	2860	0496	0067
	2760	0429	0057
	2660	0372	0043
Two Lives	2560	0329	0036
	2480	0293	0034
	2380	0259	0038
	2280	0221	0025
	2180	0196	0026
	2080	0170	0028
	1980	0142	0026
	1880	0116	0018
	1780	0098	0017
	1680	0081	0013
	1580	0068	0013
	1480	0056	0009
	1380	0047	0008
One Life	1280	0039	0005
	1200	0034	0006
	1100	0028	
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
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FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-25

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.502 ___ ___ ___

AVERAGE THICKNESS: ___ 374 375 374

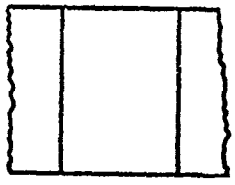
AREA: .569

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,777 #

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 29.2K#



SPECIMEN NUMBER: QPB-26

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.498 ___ ___ ___

AVERAGE THICKNESS: ___ .372 .374 .371

AREA: .566

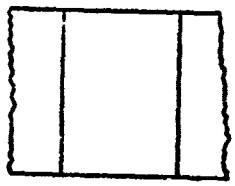
BASELINE STRESS: 33Ksi

MAX. LOAD: 18678 #

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 30.9 K#

origin chip



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.1204	.0166
	3760	1038	.0177
	3660	0861	.0154
	3560	0707	0109
	3460	0598	0096
	3360	0502	0079
	3260	0423	0062
	3160	0361	0052
	3060	0309	0040
	2960	0269	0044
	2860	0225	0035
	2760	0198	0033
	2660	0157	0019
Two Lives	2560	0138	0017
	2480	0121	0013
	2380	0108	0019
	2280	0089	0018
	2180	0071	0016
	2080	0055	0010
	1980	0045	0007
	1880	0038	0008
	1780	0030	0006
	1680	0024	0004
	1580	0020	0002
	1480	0018	
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	0623	0073
	3760	0550	0080
	3660	0470	0071
	3560	0399	0059
	3460	0340	0054
	3360	0286	0045
	3260	0241	0038
	3160	0203	0031
	3060	0172	0027
	2960	0145	0021
	2860	0124	0015
	2760	0109	0010
	2660	0099	0009
Two Lives	2560	0090	0007
	2480	0083	0008
	2380	0075	0006
	2280	0069	0007
	2180	0062	0007
	2080	0055	0004
	1980	0051	0004
	1880	0047	0005
	1780	0042	0002
	1680	0040	0002
	1580	0038	0004
	1480	0034	0002
	1380	0032	0002
One Life	1280	0030	0002
	1200	0028	0002
	1100	0026	
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-27

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.497 ___ ___ ___

AVERAGE THICKNESS: ___ .372 .375 .371

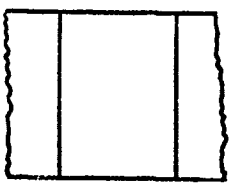
AREA: .566

BASELINE STRESS: 33ksi

MAX. LOAD: 18,678 #

CYCLES AT TERMINATION/[redacted]: 3Lives/___

STATIC LOAD-27.8K#



SPECIMEN NUMBER: QPB-28

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

AVERAGE WIDTH: 1.496 ___ ___ ___

AVERAGE THICKNESS: ___ 366 369 367

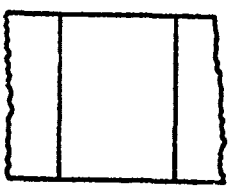
AREA: .557

BASELINE STRESS: 33ksi

MAX. LOAD: 18381 #

CYCLES AT TERMINATION/[redacted]: 3Lives/___

STATIC LOAD-24.3 K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.1470	.0193
	3760	1277	.0215
	3660	1062	.0175
	3560	0887	.0141
	3460	0746	0119
	3360	0627	0096
	3260	0531	0071
	3160	0460	0070
	3060	0390	0051
	2960	0339	0046
	2860	0293	0039
	2760	0254	0035
	2660	0219	0030
Two Lives	2560	0189	0023
	2480	0166	0025
	2380	0141	0024
	2280	0117	0018
	2180	0099	0017
	2080	0082	0013
	1980	0069	0010
	1880	0059	0009
	1780	0050	0007
	1680	0043	0007
	1580	0036	0007
	1480	0030	
	1380		
One Life	1230		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.1918	.0291
	3760	1627	0288
	3660	1339	0247
	3560	1092	0191
	3460	0901	0156
	3360	0745	0123
	3260	0622	0100
	3160	0522	0080
	3060	0442	0064
	2960	0378	0055
	2860	0323	0044
	2760	0279	0048
	2660	0231	0031
Two Lives	2560	0200	0029
	2480	0171	0026
	2380	0145	0024
	2280	0121	0022
	2180	0099	0019
	2080	0080	0019
	1980	0061	0018
	1880	0043	0018
	1780	0035	0005
	1680	0030	0005
	1580	0025	0004
	1480	0021	0003
	1380	0018	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-29

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.498 ___ ___ ___

AVERAGE THICKNESS: ___ 366 369 366

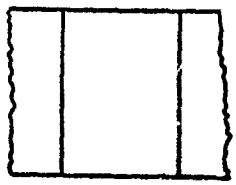
AREA: .557

BASELINE STRESS: 33KSI

MAX. LOAD: 18,381#

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD-26.8K#



SPECIMEN NUMBER: QPB-30

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.5065 ___ ___ ___

AVERAGE THICKNESS: .3735 .3736 .3734 .3742

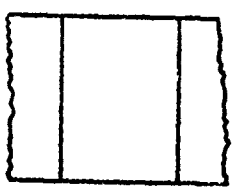
AREA: .5627

BASELINE STRESS: 33KSI

MAX. LOAD: 18,570#

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD-29.2K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.1361	0199
	3760	1162	0194
	3660	0968	0160
	3560	0808	0132
	3460	0676	0108
	3360	0568	0089
	3260	0479	0077
	3160	0402	0054
	3060	0348	0046
	2960	0302	0042
	2860	0259	0037
	2760	0221	0031
	2660	0190	0024
Two Lives	2560	0166	0023
	2480	0143	0023
	2380	0120	0019
	2280	0101	0019
	2180	0082	0015
	2080	0067	0010
	1980	0057	0008
	1880	0049	0010
	1780	0039	0010
	1680	0029	0008
	1580	0021	0003
	1480	0018	
	1380		
One Life	1290		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.1112	.0103
	3760	1009	0106
	3660	0903	0104
	3560	0799	0094
	3460	0705	0078
	3360	0627	0070
	3260	0557	0057
	3160	0500	0054
	3060	0445	0046
	2960	0399	0039
	2860	0360	0040
	2760	0320	0034
	2660	0286	0025
Two Lives	2560	0261	0021
	2480	0240	0029
	2380	0211	0023
	2280	0188	0025
	2180	0163	0021
	2080	0142	0024
	1980	0118	0018
	1880	0100	0019
	1780	0081	0016
	1680	0065	0014
	1580	0051	0011
	1480	0040	0011
	1380	0029	0008
One Life	1280	0021	0002
	1200	0019	0004
	1100	0015	0002
	1000	0013	0003
	900	0010	0001
	800	0009	0002
	700	0007	
	600		
	500		
	400		
	300		
	200		

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GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-32

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.495 ___ ___ ___

AVERAGE THICKNESS: ___ 372 374 373

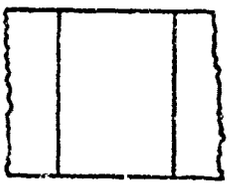
AREA: .565

BASELINE STRESS: 33KSI

MAX. LOAD: 18,645#

CYCLES AT [redacted]/FAILURE: * 3Lives/___

@ 752,580 L.P.'s = 2918.75 FLTS.



Flts Crack Length
100 .0006

SPECIMEN NUMBER: QPB-33

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: ___ 365 371 376

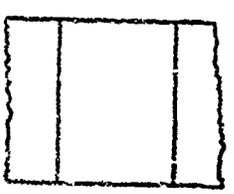
AREA: .562

BASELINE STRESS: 33KSI

MAX. LOAD: 18,546#

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD - 32.1K#



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3750		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	[redacted]	.3966	.0667
	2860	.3299	.0694
	2760	.2605	.0494
	2660	.2111	.0409
Two Lives	2560	.1702	.0241
	2480	.1461	.0271
	2380	.1190	.0223
	2280	.0967	.0178
	2180	.0789	.0134
	2080	.0655	.0115
	1980	.0540	.0090
	1880	.0450	.0072
	1780	.0378	.0056
	1580	.0322	.0043
	1580	.0279	.0040
	1480	.0239	.0038
	1380	.0201	.0028
One Life	1280	.0173	.0022
	1200	.0151	.0027
	1100	.0124	.0023
	1000	.0101	.0023
	900	.0078	.0011
	800	.0067	.0014
	700	.0053	.0013
	600	.0040	.0009
	500	.0031	.0010
	400	.0021	.0006
	300	.0014	.0005
	200	.0009	.0004

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.0381	.0038
	3750	.0343	.0041
	3660	.0302	.0034
	3560	.0268	.0029
	3460	.0239	.0030
	3360	.0209	.0028
	3260	.0181	.0021
	3160	.0160	.0022
	3060	.0138	.0018
	2960	.0120	.0018
	2860	.0102	.0015
	2760	.0087	.0012
	2660	.0075	.0011
Two Lives	2560	.0064	.0005
	2480	.0059	.0010
	2380	.0049	.0008
	2280	.0041	.0007
	2180	.0034	.0008
	2080	.0026	.0006
	1980	.0020	.0005
	1880	.0015	.0003
	1780	.0012	.0003
	1580	.0009	.0003
	1560	.0006	
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-34

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.550

AVERAGE THICKNESS: .372 ~~.375~~ ~~.370~~ ~~.375~~ .370 ~~.375~~ ~~.370~~ ~~.375~~ ~~.370~~ ~~.375~~ ~~.370~~

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPB-37

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: ___ 370 373 371

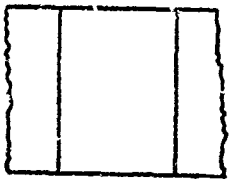
AREA: .565

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,645 #

CYCLES AT ~~TERMINATION~~/FAILURE:* 3Lives/___

@ 837663.P's = 3248.73 FLT-Hrs*



SPECIMEN NUMBER: ~~QPF-8~~ (QPB-3 3/8)

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: ___ 367 371 368

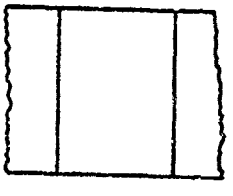
AREA: .560

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,480 #

CYCLES AT TERMINATION/FAILURE: 3Lives/___

Static Load - 23.4 K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
* →	3260	.3754	.1002
	3160	2752	0942
	3060	2210	0373
	2960	1837	0289
	2860	1548	0225
	2760	1323	0186
	2660	1137	0166
Two Lives	2560	0971	0106
	2480	0865	0116
	2380	0749	0100
	2280	0649	0082
	2180	0567	0073
	2080	0494	0065
	1980	0429	0052
	1880	0377	0049
	1780	0328	0039
	1680	0289	0036
	1580	0253	0026
	1480	0227	
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.1990	.0312
	3760	1678	.0302
	3660	1376	0241
	3560	1135	0194
	3460	0941	0151
	3360	0790	0139
	3260	0651	0103
	3160	0548	0088
	3060	0460	0068
	2960	0392	0057
	2860	0335	0045
	2760	0290	0039
	2660	0251	0041
Two Lives	2560	0210	0020
	2480	0190	0027
	2380	0163	0024
	2280	0139	0023
	2180	0116	0018
	2080	0098	0016
	1980	0082	0012
	1880	0070	0011
	1780	0059	0009
	1680	0050	0006
	1580	0044	0010
	1480	0034	0004
	1380	0030	0005
One Life	1280	0025	0003
	1200	0022	0003
	1100	0019	0004
	1000	0015	0003
	900	0012	0002
	800	0010	0001
	700	0009	0001
	600	0008	0002
	500	0006	
	400		
	300		
	200		

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GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QPF-9 QPF-39

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5)

AVERAGE WIDTH: 1.499 ___ ___ ___

AVERAGE THICKNESS: ___ 371 375 376

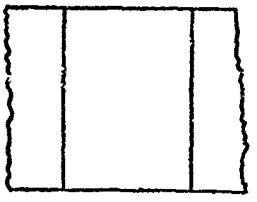
AREA: .564

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,612#

CYCLES AT TERMINATION/[redacted]: 3Lives/___.

STATIC LOAD - 27.0K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.1659	.0188
	3760	1471	0199
	3660	1272	0160
	3560	1112	0142
	3460	0970	0126
	3360	0844	0102
	3260	0742	0101
	3160	0641	0089
	3060	0552	0085
	2960	0467	0074
	2860	0393	0068
	2760	0325	0057
	2660	0268	0039
Two Lives	2560	0229	0019
	2480	0210	0046
	2380	0164	0035
	2280	0129	0031
	2180	0105	0019
	2080	0089	0018
	1980	0071	0016
	1880	0055	0012
	1780	0043	0011
	1680	0032	0011
	1580	0021	
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

2.1.8 QIB

FATIGUE TEST DATA

SPECIMEN NUMBER: QIB-1

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.503 ___ ___ ___

AVERAGE THICKNESS: ___ 372 374 375

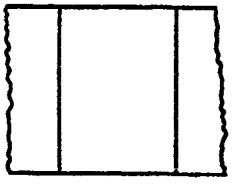
AREA: .562

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,546#

CYCLES AT TERMINATION/FAILURE: 2 [redacted]Lives/___

STATIC LOAD - 32.2 K#



SPECIMEN NUMBER: QIB-2

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) (3) 4 5 (3rd Life → 2nd Life)

AVERAGE WIDTH: 1.498 ___ ___ ___

AVERAGE THICKNESS: ___ 375 376 374

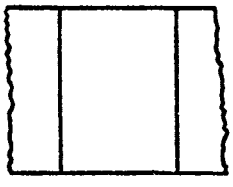
AREA: .562

BASELINE STRESS: 33ksi

MAX. LOAD: 18546#

CYCLES AT TERMINATION/[redacted]: 3 [redacted]Lives/___

STATIC LOAD - 33.0 K#



FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0300	.0042
	2480	.0258	.0046
	2380	.0212	.0037
	2280	.0175	.0033
	2180	.0142	.0028
	2080	.0114	.0021
	1980	.0093	.0018
	1880	.0075	.0012
	1780	.0063	.0009
	1680	.0052	.0007
	1580	.0045	.0007
	1480	.0038	.0007
	1380	.0031	.0007
One Life	1280	.0024	.0006
	1200	.0018	.0004
	1100	.0014	.0005
	1000	.0009	.0004
	900	.0005	
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.0125	.0012
	3760	.0113	.0013
	3660	.0101	.0011
	3560	.0090	.0008
	3460	.0082	.0009
	3360	.0073	.0007
	3260	.0066	.0006
	3160	.0060	.0008
	3060	.0052	.0005
	2960	.0047	.0006
	2860	.0041	.0005
	2760	.0036	.0005
	2660	.0031	.0003
Two Lives	2560	.0028	.0003
	2480	.0025	.0004
	2380	.0021	.0003
	2280	.0018	.0003
	2180	.0015	.0003
	2080	.0012	
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

file 50
file 50-55
NOT PLOTTED

FATIGUE TEST DATA

SPECIMEN NUMBER: QTB-3

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5

AVERAGE WIDTH: 1.503 ___ ___ ___

AVERAGE THICKNESS: ___ 378 379 377

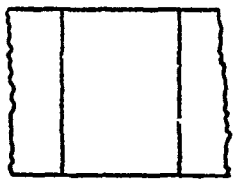
AREA: .568

BASELINE STRESS: 33Ksi

MAX. LOAD: 18744#

CYCLES AT TERMINATION/FAILURE: 2Lives/660078.8's

STATIC LOAD - 29.8 K#



SPECIMEN NUMBER: QTB-4

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

AVERAGE WIDTH: 1.501 ___ ___ ___

AVERAGE THICKNESS: ___ 375 377 375

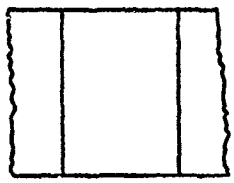
AREA: .564

BASELINE STRESS: 33Ksi

MAX. LOAD: 18,612#

CYCLES AT TERMINATION/FAILURE: 2Lives/660078.8's

STATIC LOAD - 27.2 K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0749	.0119
	2480	0630	0119
	2380	0511	0091
	2280	0420	0074
	2180	0341	0062
	2080	0284	0048
	1980	0236	0044
	1880	0192	0039
	1780	0153	0028
	1680	0125	0014
	1580	0101	0023
	1480	0078	0018
	1380	0060	0013
One Life	1280	0047	0009
	1200	0038	0008
	1100	0030	0008
	1000	0022	
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1801	.0238
	2480	1563	.0254
	2380	1309	0227
	2280	1082	0177
	2180	0905	0158
	2080	0747	0131
	1980	0616	0110
	1880	0506	0089
	1780	0417	0074
	1680	0343	0061
	1580	0282	0054
	1480	0228	0057
	1380	0171	0040
One Life	1280	0131	0023
	1200	0108	0028
	1100	0079	0021
	1000	0058	0018
	900	0040	0012
	800	0028	0008
	700	0020	0006
	600	0014	0005
	500	0009	0004
	400	0005	
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QIB-5

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 (6) (3) 3rd Life

AVERAGE WIDTH: 1.498 (1st 2 Lives) ___ ___ ___

AVERAGE THICKNESS: ___ 377 378 376

AREA: .565

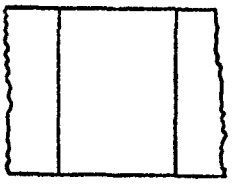
BASELINE STRESS: 33Ksi

MAX. LOAD: 18,645 #

CYCLES AT TERMINATION/FAILURE: 2 Lives/66078

3rd Life run without Bolt 3 Data not valid after 2nd Life!

STATIC LOAD – 27.7 K#



SPECIMEN NUMBER: QIB-6

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

AVERAGE WIDTH: 1.501 ___ ___ ___

AVERAGE THICKNESS: ___ 376 377 375

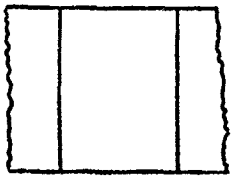
AREA: .564

BASELINE STRESS: 33ksi

MAX. LOAD: 18,612 #

CYCLES AT TERMINATION/[redacted]: 2 Lives/___

STATIC LOAD – 33.2 K#



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.1519	.0245
	3760	1274	.0273
	3660	1001	0207
	3560	0794	0155
	3460	0639	0122
	3360	0517	0095
	3260	0422	0066
	3160	0356	0056
	3060	0300	0051
	2960	0249	0044
	2860	0205	0035
	2760	0170	0036
	2660	0134	0021
Two Lives	2560	0113	0010
	2480	0103	0012
	2380	0091	0007
	2280	0084	0009
	2180	0075	0010
	2080	0065	0007
	1980	0058	0008
	1880	0050	0008
	1780	0042	0006
	1680	0036	0007
	1580	0029	0005
	1480	0024	0003
	1380	0021	0007
One Life	1280	0019	0002
	1200	0017	0003
	1100	0014	0002
	1000	0012	0002
	900	0010	0002
	800	0008	
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0154	.0016
	2480	0138	0020
	2380	0118	0018
	2280	0100	0016
	2180	0084	0012
	2080	0072	0009
	1980	0063	0010
	1880	0053	0005
	1780	0048	0007
	1680	0041	0005
	1580	0036	0005
	1480	0031	0004
	1380	0027	0003
One Life	1280	0024	0002
	1200	0022	0003
	1100	0019	0003
	1000	0016	0003
	900	0013	0002
	800	0011	0001
	700	0010	0001
	600	0009	0001
	500	0008	
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QIB-7

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) (3) 4 5 (1st & 2nd Life → 2; 3rd Life → 3)

AVERAGE WIDTH: 1.497 ___ ___ ___

AVERAGE THICKNESS: ___ .373 .374 .374

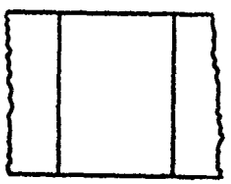
AREA: .561

BASELINE STRESS: 33ksi

MAX. LOAD: 18,513# A:741 (5100 · .033 / 154.5)

CYCLES AT TERMINATION/[redacted]: 3 [redacted]Lives/___

STATIC LOAD-30.6 K# WTK



SPECIMEN NUMBER: QIB-8

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 (3rd) (1st) (1st & 2nd Life → 2; 3rd Life → 3)

AVERAGE WIDTH: 1.502 ___ ___ ___

AVERAGE THICKNESS: ___ .378 .380 .377

AREA: .568

BASELINE STRESS: 33ksi (W: 4246)

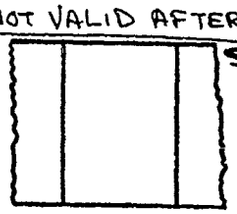
MAX. LOAD: 18744 A·750

CYCLES AT TERMINATION/FAILURE: 2 Lives/66078
3

3rd life run without Bolt

STATIC LOAD-27.8 K#

DATA NOT VALID AFTER 2ND LIFE!



STRESS WAS HIGHER

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.0615	.0089
	3760	0526	0078
	3660	0448	0074
	3560	0374	0058
	3460	0316	0046
	3360	0270	0043
	3260	0227	0036
	3160	0188	0039
	3060	0156	0032
	2960	0131	0025
	2860	0108	0023
	2760	0090	0018
	2660	0074	0016
Two Lives	2560	0058	0008
	2480	0050	0009
	2380	0041	0008
	2280	0033	0006
	2180	0027	0007
	2080	0020	0007
	1980	0013	0003
	1880	0010	0002
	1780	0008	
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.11816	.02072
	3760	09744	02057
	3660	07687	01572
	3560	06115	01154
	3460	04961	00885
	3360	04076	00778
	3260	03298	00689
	3160	02609	00509
	3060	02100	00454
	2960	01646	00391
	2860	01255	00263
	2760	00992	00229
	2660	00763	00182
Two Lives	2560	00581	00084
?	2480	00497	00039
	2380	00458	00062
	2280	00396	00057
	2180	00344	00060
	2080	00284	00039
	1980	00245	00026
	1880	00219	00038
	1780	00181	00041
	1680	00140	00045
	1580	00095	00036
	1480	00059	
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QIB-9

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (1) 2 ~~(3)~~ 4 5 (64)
1st life
2nd life

AVERAGE WIDTH: 1.498 ___ ___ ___

AVERAGE THICKNESS: ___ 378 380 378

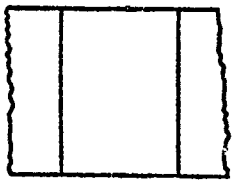
AREA: .567

BASELINE STRESS: 33Ksi w: 4.7 (64)

MAX. LOAD: 18,711# A-748

CYCLES AT TERMINATION/FAILURE: ~~2 Slives/66078~~ 3 Lives

STATIC LOAD-27.2 K#



SPECIMEN NUMBER: QIB-10

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 (40)

AVERAGE WIDTH: 1.500 ___ ___ ___

AVERAGE THICKNESS: ___ 377 379 378

AREA: .567

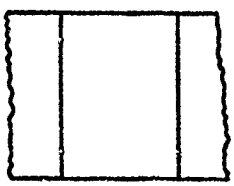
BASELINE STRESS: 33Ksi w: 4.3

MAX. LOAD: 18711 A: 748

CYCLES AT TERMINATION/FAILURE: 2 Slives/66078

STATIC LOAD-33.1 K#

FINAL 9/2c=.45



FRACTOGRAPHIC DATA

.001½ Dia Steps

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840	.13003	.02204
	3760	.10799	.02071
	3660	.08728	.01585
	3560	.07143	.01179
	3460	.05964	.00942
	3360	.05022	.00757
	3260	.04265	.00630
	3160	.03635	.00566
	3060	.03069	.00503
	2960	.02566	.00429
	2860	.02137	.00437
	2760	.01700	.00332
	2660	.01378	.00369
Two Lives	2560	.01009	.00177
	2480	.00832	.00113
	2380	.00719	.00101
	2280	.00608	.00076
	2180	.00532	.00078
	2080	.00454	.00052
	1980	.00402	.00074
	1880	.00328	
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.00657	2c=.01449
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

(40)

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: QIB-11

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 *

AVERAGE WIDTH: 1.507 ___ ___ ___

AVERAGE THICKNESS: ___ 378 380 375

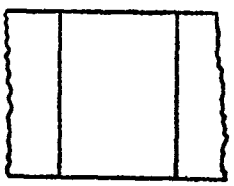
AREA: .566

BASELINE STRESS: 33KSI

MAX. LOAD: 18,678#

CYCLES AT ~~TERMINATION~~/FAILURE: * 3Lives/___

@ 829,710 LPS = 3217.89 FLT-HRS *



SPECIMEN NUMBER: QIB-12

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6 (89)

AVERAGE WIDTH: 1.497 ___ ___ ___

AVERAGE THICKNESS: ___ 376 378 373

AREA: .563

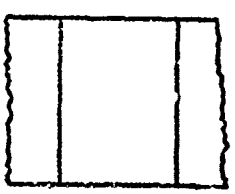
BASELINE STRESS: 33KSI Calc: 43.0 (FREQ)

MAX. LOAD: 18,579 A=743

CYCLES AT TERMINATION/FAILURE: 2 Blives/660078

STATIC LOAD - 32.5K#

FINAL a/2c = .41



FRACTOGRAPHIC DATA

FLIGHT HOURS		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260	.4982	.0103
	3160	.4879	.1718
	3060	.3161	.0500
	2960	.2661	.0421
	2860	.2240	.0362
	2760	.1878	.0323
	2660	.1555	.0287
Two Lives	2560	.1268	.0192
	2480	.1076	.0206
	2380	.0870	.0171
	2280	.0699	.0134
	2180	.0565	.0105
	2080	.0460	.0078
	1980	.0382	.0063
	1880	.0319	.0054
	1780	.0265	.0046
	1680	.0219	.0046
	1580	.0173	.0032
	1480	.0141	.0031
	1380	.0110	.0032
One Life	1280	.0088	.0019
	1200	.0071	.0066
	1100	.0055	.0015
	1000	.0040	.0009
	900	.0031	.0007
	800	.0024	.0006
	700	.0018	.0006
	600	.0012	
	500		
	400		
	300		
	200		

FLIGHT [illegible]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.00782	2c = .01896
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		(102)
	500		
	400		
	300		
	200		

2.1.9 ZWPF

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-1

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6

RAGE WIDTH: 1.501 1.501 1.501 1.501

RAGE THICKNESS: .377 .378 .379 .376

A: .566 Rgl-18752 cs - 97.5% Apt - 270

ELINE STRESS: 34 KSi

LOAD: 19,239.82

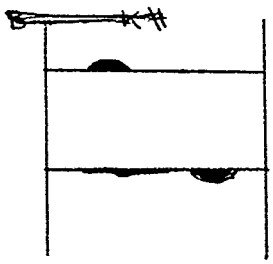
1 Life

LES AT TERMINATION/[redacted]:

2 Lives/_____

@ 1,187,685 L.P.'s

TATIC LOAD A-31.4 K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a / CRACK LENGTH IN.	INCREMENT IN.
40	16000	[redacted]	
39	15600	.03287/.03528	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-2

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6

RAGE WIDTH: 1.501 1.501 1.501 1.501

RAGE THICKNESS: .376 .375 .377 .376

A: .564 Rgl-18627 cs - 97.1% Apt - 7.68

ELINE STRESS: 34 KSi

LOAD: 19188.78

1 Life

LES AT TERMINATION/[redacted]:

2 Lives/_____

@ 1,189,657 L.P.'s

TATIC LOAD A-31.45 K#

Blk #	FLIGHT HRS.	a CRACK LENGTH IN.	INCREMENT IN.
40	16000	.03130	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

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FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: 2W1F-3

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6

RAGE WIDTH: 1.501 1.501 1.501 1.501

RAGE THICKNESS: .375 .376 .374 .376

A: .563 Rad-18982 CS - 99.1% Apt - 7.66

ELINE STRESS: 34 KSi

. LOAD: 19154.76

1 Life

LES AT TERMINATION [redacted]

2 Lives/_____

) @ 1,191,089 L.P.'s =

TATIC LOAD A-32.5 K#

[redacted] K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a CRACK LENGTH IN.	INCREMENT IN.
40	16000	.01810	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: 2W1F-4

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5 6

RAGE WIDTH: 1.502 1.502 1.502 1.502

RAGE THICKNESS: .374 .372 .374 .376

A: .562 Rad-17478 CS - 96.8% Apt - 7.54

ELINE STRESS: 34 KSi

. LOAD: 19,099.43 #

1 Life

LES AT TERMINATION [redacted]

2 Lives/_____

@ 1,191,941 L.P.'s =

TATIC LOAD A-33.0 K#

[redacted]

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.01172	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

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FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: 2WPF-5

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5) 6

RAGE WIDTH: 1.502 — 1.500 1.500 1.500

RAGE THICKNESS: .377 — 377 377 378

Rcal - 18652
CS - 94.9%
Apt - 7.70

A: .566

ELINE STRESS: 34 KSI

LOAD: 19,244.00 #

1 Life

LES AT TERMINATION: [redacted]

2 Lives/____

@ 1,192,559 L.P.'s

TATIC LOAD A-30,65K #

[redacted]

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.03673/.02795	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: 2WPF-6

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

RAGE WIDTH: 1.4995 — 1.4995 1.4995 1.4995

RAGE THICKNESS: .378 — 378 377 378

Rcal - 18094
CS - 94.0%
Apt - 7.70

A: .566

ELINE STRESS: 34 KSI

LOAD: 19254.58 #

1 Life

LES AT TERMINATION: [redacted]

2 Lives/____

@ 1,193,160 L.P.'s =

TATIC LOAD A-31.00 K #

[redacted]

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.04760/.02887	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7500		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

105

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-7

SPECTRUM: Fighter

TEST DATE: _____ (88)

TEST FRAME:	(1)	2	3	4	5	6
RAGE WIDTH:	1.5030		1.5031	1.5029	1.5030	
RAGE THICKNESS:	.3701		.3707	.3710		

A: [redacted] .5562 RC 18752

ELINE STRESS: _____ CS 99.1

LOAD: 18912.9 AP 757

1 Life

LES AT TERMINATION/[redacted]

Lives/_____

@ 1,170,367 L.P.'s

TATIC LOAD A-32.45K#

~~B- K#~~

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0504/.0098/.1067	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-8

SPECTRUM: Fighter

TEST DATE: _____ (89)

TEST FRAME:	1	(2)	3	4	5	6
RAGE WIDTH:	1.5027		1.5026	1.5029	1.5026	
RAGE THICKNESS:	.3739		.3750	.3727		

A: .5618 RC 18627

ELINE STRESS: _____ CS 99.5%

LOAD: 19100.7 AP. 764

1 Life

LES AT TERMINATION/[redacted]

Lives/_____

@ 1,163,316 L.P.'s

TATIC LOAD A-32.80 K#

B- K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.02.072	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		186
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-9

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6 (90)

RAGE WIDTH: 1.4998 | 1.4998 | 1.4997 | 1.4999

RAGE THICKNESS: .3756 | .3772 | .3733

A: .5632 R Cal. 18882

ELINE STRESS: 34 KSI C S 99.1%

LOAD: 19150.5 Ap 766

1 Life

LES AT TERMINATION/[redacted]

[redacted] Lives/____

@ 1,162,531 L.P.'S =

TATIC LOAD A-32.90 K#

[redacted]

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.00445	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-10

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5 6 (15)

RAGE WIDTH: 1.5016 | 1.5017 | 1.5016 | 1.5016

RAGE THICKNESS: .3738 | .3744 | .3732

A: .5613 I. Cal. 18478

ELINE STRESS: _____ C S 97 %

LOAD: 19084.1 Ap 767

1 Life

LES AT TERMINATION/[redacted]

[redacted] Lives/____

1 @ 1,161,504 L.P.'S =

TATIC LOAD A-29.60 K#

[redacted] K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.08597/.03775	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		107
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMEER: ZwPF-11

SPECTRUM: Fighter

TEST DATE: 7-5-77

TEST FRAME: (1) 2 3 4 5 6

RAGE WIDTH: 1.499 1.499 1.499 1.499

DAGE THICKNESS: .375 .374 .376 .375

A: .562 Rcal - 12752
C.S. - 98.1
Apt - 765

ELINE STRESS: 34ksi

LOAD: 19112.25

1 Life

LES AT TERMINATION/FAILURE:

1.5 Lives/____

1,148621 LPs

TATIC LOAD A-33.60 K#

[redacted]

FRACTOGRAPHIC DATA

a / c

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	~~.002~~ .102	
39	15600	~~Not Sharp~~	
38	15200	~~To Measure~~	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZwPF-12

SPECTRUM: Fighter

TEST DATE: ____

TEST FRAME: 1 (2) 3 4 5 6

RAGE WIDTH: 1.501 1.501 1.501 1.501

RAGE THICKNESS: .374 .376 .376 .376

A: .864 Rcal - 18627
C.S - 97.1
Apt - 7.68

ELINE STRESS: 34ksi

LOAD: 19188.78

1 Life

LES AT TERMINATION/FAILURE:

2 Lives/____

1148621

TATIC LOAD A-33.05 K#

[redacted]

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.002	
39	15600	~~Too Sharp~~	
38	15200	~~To Measure~~	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		1.108"
3	1200		
2	800		
1	400		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-13

SPECTRUM: Fighter

TEST DATE: 7-5-77

TEST FRAME: 1 2 (3) 4 5 6

RAGE WIDTH: 1.562 1.562 1.562 1.562 1.562

RAGE THICKNESS: .372 .372 .372 .371

A: .559

Rok - 18982
C.S - 99.9
Apt - 7.60

ELINE STRESS: 34

LOAD: 18997.3

1 Life

LES AT TERMINATION/[redacted]

1.5 Lives/____

@ 1,148,621 L.P.S =

TATIC LOAD A-33.00 K#

[redacted]

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0013	
39	15600	[redacted]	
38	15200	[redacted]	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-18

SPECTRUM: Fighter

TEST DATE: 7-5-77

TEST FRAME: 1 2 3 (4) 5 6

RACE WIDTH: 1.562 1.562 1.561 1.562 1.562

RAGE THICKNESS: .374 .374 .375 .374

A: .561

Rok - 18478
CS - 96.8
Apt - 763

ELINE STRESS: 34

LOAD. 19086.7

1 Life

LES AT TERMINATION/[redacted]

1.5 Lives/____

@ 1,148,621 L.P.

TATIC LOAD A-32.5 K#

[redacted]

Blk #	FLIGHT HRS.	CRACK LENGTH IN. (a / c)	INCREMENT IN.
40	16000	.0207 / .0650	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		109
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-15

SPECTRUM: Fighter

TEST DATE: 7-5-77

TEST FRAME: 1 2 3 4 (5) 6

RAGE WIDTH: 1.562 1.562 1.562 1.562 1.562

RAGE THICKNESS: .377 .377 .377 .376

A: .566 Rcal - 18652 C.S - 96.9 Apt - 7.70

ELINE STRESS: 192-82-6

. LOAD:

1 Life

LES AT TERMINATION [redacted]:

1.5 Lives/

@ 1,148,621 L.P.S =

TATIC LOAD A-33.70 K#

[redacted]

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	[redacted]	.0072
39	15600	[redacted]	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-16

SPECTRUM: Fighter

TEST DATE: 7-5-77

TEST FRAME: 1 2 3 4 5 (6)

RAGE WIDTH: 1.500 1.500 1.500 1.500 1.500

RAGE THICKNESS: .377 .377 .377 .376

A: .525 Rcal - 18094 C.S - 94.2 Apt - 7.68

ELINE STRESS: [redacted] 346

LOAD: 4920 1.5

1 Life

LES AT TERMINATION [redacted]

1.5 Lives/

@ 1,148,621 L.P.S =

TATIC LOAD A-33.55 K#

[redacted]

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	[redacted]	.0016
39	15600	measure	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		110
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-17

SPECTRUM: Fighter

TEST DATE: _____ (88)

TEST FRAME: 1 2 3 4 5 6

RAGE WIDTH: 1.5025 / 1.5025 / 1.5025

RAGE THICKNESS: .3730 / .3715 / .3744

A: .5604 RCal 18752

ELINE STRESS: 34ksi CS 38.4

. LOAD: 19052.2 AP 762

1 Life

LES AT TERMINATION/[redacted]:

2 Lives/_____

@ 1,165,770 L.P.'s ~

TATIC LOAD A-33.1 K#

[redacted] K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	[redacted]	.0017
39	15600	[redacted]	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-18

SPECTRUM: Fighter

TEST DATE: _____ (89)

TEST FRAME: 1 2 3 4 5 6

RAGE WIDTH: 1.5023 / 1.5023 / 1.5023

RAGE THICKNESS: .3764 / .3769 / .3758

A: .5654 RCal 18627

ELINE STRESS: 34ksi CS 869

. LOAD: 19223.3 AP 770

1 Life

LES AT TERMINATION/[redacted]:

2 Lives/_____

@ 1,148,621 L.P.'s ~

TATIC LOAD A-33.3 K#

[redacted]

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a / c	INCREMENT IN.
40	16000	.0184 / .0287	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-19

SPECTRUM: Fighter

TEST DATE: _____ (90)

TEST FRAME: 1 2 3 4 5 6

RAGE WIDTH: 1.5002 / 1.5002 / 1.5001

RAGE THICKNESS: .3724 / .3734 / .3713

A: .5586 Rcal 6352

ELINE STRESS: 34 ksi cs 99.9

. LOAD: 189924 AP 7.6

1 Life

LES AT TERMINATION/FAILURE:

2 Lives/____

@ 1,161,914 L.P.'s =

TATIC LOAD A-33.4 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	~~too small to~~	.0010
39	15600	~~measure~~	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-20

SPECTRUM: Fighter

TEST DATE: _____ (15)

TEST FRAME: 1 2 3 4 5 6

RAGE WIDTH: 1.5014 / 1.5014 / 1.5014

RAGE THICKNESS: .3769 / .3763 / .3774

A: .5658 Rcal 18478

ELINE STRESS: 34 ksi cs 96'

. LOAD: 192373 A.P 770

1 Life

LES AT TERMINATION/FAILURE:

2 Lives/____

@ 1,160,687 L.P.'s =

TATIC LOAD A-32.7 K#

Blk #	FLIGHT HRS.	a / c CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0157 / .0457	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		112
3	1200		
2	800		
1	400		

a / c

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-21

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

RAGE WIDTH: 1.4992 / 1.4992 / 1.4991

RAGE THICKNESS: .3764 / .3755 / .3772

A: .5642

ELINE STRESS: 34ksi

. LOAD: 19188.6

RCAI 18652
CS 972
AP 767

1 Life

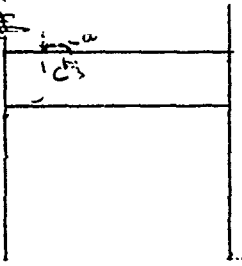
LES AT TERMINATION/[redacted]:

Lives/____

@ 1,159,423 L.P.S. =

TATIC LOAD A-33.05K#

[redacted]



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a / c	INCREMENT IN.
40	16000	.005 / .0234	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-22

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

RAGE WIDTH: 1.5034 / 1.5035 / 1.5033

RAGE THICKNESS: .3776 / .3767 / .3784

A: .5676

ELINE STRESS: 34ksi

. LOAD: 19298.7

RCAI 18034
CS 938
AP 772

1 Life

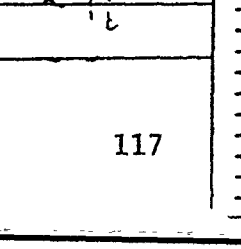
LES AT TERMINATION/[redacted]:

Lives/____

@ 1,158,044 L.P.S. =

TATIC LOAD A-32.8 K#

[redacted]



Blk #	FLIGHT HRS.	CRACK LENGTH IN. a / c	INCREMENT IN.
40	16000	.0084 / .0211	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		113
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-25

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6 (90)

RAGE WIDTH: 1.4977 ___ ___ ___

RAGE THICKNESS: .3743 .3765/.3720

A: .5605 RCAI 13982 CS 996 AP 762

ELINE STRESS: 34 ksi

LOAD: 19057.5

1 Life

LES AT TERMINATION/[redacted]:

Lives/____

@ 1,270,003 L.P.'s =

TAIIC LOAD A-33.0 K#

[redacted]

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0093/.0240	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-26

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5 6 (15)

RAGE WIDTH: 1.5015 ___ ___ ___

RAGE THICKNESS: .3740 .3766/.3714

A: .5616 Ecal 13973 CS 998 AP 764

ELINE STRESS: 34 ksi

LOAD: 19093.1

1 Life

LES AT TERMINATION [redacted]

2 Lives/____

@ 1,272,447 L.P.'s =

TAIIC LOAD A-33.35 K#

[redacted]

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	~~TOO SMALL TO~~ .0012	
39	15600	~~[redacted]~~	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		445
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: 2WPF-27

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (5) (16)

AVERAGE WIDTH: 1.5027

AVERAGE THICKNESS: .3794 | .3772/.3815

AREA: .5700 R CAL 18652

BASELINE STRESS: 34 ksi CAL SWING 962

MAX. LOAD: 19381.7 # A POT 7.75 1 Life

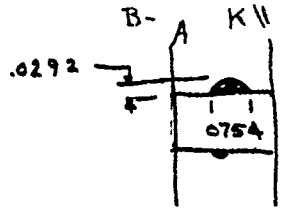
CYCLES AT TERMINATION/[redacted]:

2 Lives/____

@ 1,269,892 L.P.S = 13266.96 FLT-HRS

STATIC LOAD A-33.3 KN

B- A KN



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
[redacted]	[redacted]	.0235	.0022
33	13200	.0213	.0019
32	12800	.0194	.0017
31	12400	.0177	.0017
30	12000	.0160	.0015
29	11600	.0148	.0013
28	11200	.0132	.0014
27	10800	.0118	.0013
26	10400	.0105	.0014
25	10000	.0091	.0009
24	9600	.0082	.0010
23	9200	.0072	.0008
22	8800	.0064	.0007
21	8400	.0057	.0008
20	8000	.0049	
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: 2WPF-28

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6) (17)

RAGE WIDTH: 1.5020

RAGE THICKNESS: .3747 .3728/.3766

A: .5628 R CAL 18004

ELINE STRESS: 34 ksi CAL SWING 95 %

. LOAD: 19135.2 AR 7.65

LES AT TERMINATION/[redacted]: 1 Life

2 Lives/____

@ 1,268,893 L.P.S = 13256.26 FLT-HRS

TATIC LOAD A-32.9 KN

[redacted]

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0109 / .0185	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
[redacted]	[redacted]	.0178	.0006
33	13200	.0172	.0014
32	12800	.0158	.0020
31	12400	.0138	.0019
30	12000	.0119	.0016
29	11600	.0103	.0015
28	11200	.0088	.0014
27	10800	.0074	.0011
26	10400	.0063	.0010
25	10000	.0053	.0009
24	9600	.0048	.0008
23	9200	.0040	.0007
22	8800	.0033	.0005
21	8400	.0028	.0005
20	8000	.0025	.0002
19	7600	.0023	
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		116
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-29

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6

RAGE WIDTH: 1.5012

RAGE THICKNESS: .3778 .3779/.3777

A: .5672 Rcal. 18752 CS 97% A.R 7.71

ELINE STRESS: 34ksi

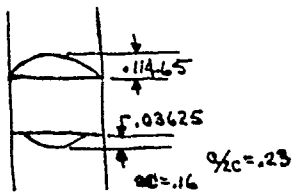
. LOAD: 19283.2

1 Life

LES AT TERMINATION/[redacted]:

2 Lives/✓

TATIC LOAD A-28.6 K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1124	0124
39	15600	1008	0107
38	15200	0901	0096
37	14800	0805	0077
36	14400	0728	0073
35	14000	0655	0063
34	13600	0592	0055
33	13200	0537	0049
32	12800	0488	0047
31	12400	0441	0041
30	12000	0400	0042
29	11600	0359	0037
28	11200	0321	0035
27	10800	0284	0037
26	10400	0253	0028
25	10000	0225	0029
24	9600	0196	0026
23	9200	0170	0022
22	8800	0148	0021
21	8400	0127	0017
20	8000	0110	0017
19	7600	0093	0016
18	7200	0077	0013
17	6800	0064	0009
16	6400	0055	0007
15	6000	0048	0009
14	5600	0039	0008
13	5200	0031	0007
12	4800	0024	0007
11	4400	0017	0005
10	4000	0012	0004
9	3600	0008	0003
8	3200	0005	0003
7	2800	0002	
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ZWPF-30

SPECTRUM: Fighter

TEST DATE: _____ (89)

TEST FRAME: 1 (2) 3 4 5 6

RAGE WIDTH: 1.5006

RAGE THICKNESS: .3764 .3750/.3778

A: .5648 Rcal. 18627 CS 97% A.R. 7.68

ELINE STRESS: 34 KSi

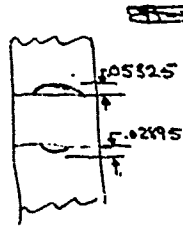
LOAD: 19204.1

1 Life

LES AT TERMINATION/[redacted]:

2 Lives/✓

TATIC LOAD A-30.60K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0504	0054
39	15600	0450	0043
38	15200	0407	0041
37	14800	0366	0033
36	14400	0333	0033
35	14000	0300	0035
34	13600	0265	0032
33	13200	0232	0025
32	12800	0208	0024
31	12400	0184	0014
30	12000	0165	0017
29	11600	0148	0017
28	11200	0131	0014
27	10800	0117	0016
26	10400	0102	0011
25	10000	0091	0013
24	9600	0078	0010
23	9200	0068	0010
22	8800	0058	0008
21	8400	0050	0006
20	8000	0044	
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		117
3	1200		
2	800		
1	400		

2.2 TASK II
2.2.1 XWPF

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XWPF-1A

SPECTRUM: Fighter

TEST DATE: _____ '88

TEST FRAME:	(1)	2	3	4	5	6
RAGE WIDTH:	1.5004		1.5013	1.5006	1.4992	1.5003
RAGE THICKNESS:	.3815		.3816	.3815	.3813	.3817	.3812

A: .5723 Rcal 18752
CS 96.4
ELINE STRESS: _____ AP 7.80

LOAD: 19459.6

1 Life

LES AT TERMINATION/[redacted]

2 Lives/_____

TATIC LOAD A-15.64 K#
B-16.40 K#

ORIGIN LIES ON RADIUS OF BROKEN CORNER. FATIGUE ORIGINATES AT THE BASE OF A SLIVER.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0910	.0077
39	15600	0833	0051
38	15200	0782	0052
37	14800	0730	0043
36	14400	0691	0043
35	14000	0648	0037
34	13600	0611	0037
33	13200	0574	0036
32	12800	0538	0033
31	12400	0505	0035
30	12000	0470	0032
29	11600	0438	0025
28	11200	0413	0027
27	10800	0386	0028
26	10400	0358	0021
25	10000	0337	0019
24	9600	0318	0025
23	9200	0293	0023
22	8800	0270	0020
21	8400	0250	0017
20	8000	0233	0017
19	7600	0216	0021
18	7200	0195	0023
17	6800	0172	0021
16	6400	0151	0020
15	6000	0131	0019
14	5600	0112	0017
13	5200	0095	0014
12	4800	0081	0013
11	4400	0068	0012
10	4000	0056	0011
9	3600	0045	0013
8	3200	0032	0016
7	2800	0026	
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XWPF-2A

SPECTRUM: Fighter

TEST DATE: _____ '89

TEST FRAME:	1	(2)	3	4	5	6
RAGE WIDTH:	1.5024		1.5035	1.5028	1.5025	1.5018
RAGE THICKNESS:	.3822		.3806	.3809	.3816	.3838	.3838

A: .5742 R cal 18627
CS 95.8
ELINE STRESS: 34KSI AP 7.81

LOAD: 19521.3

1 Life

LES AT TERMINATION/FAILURE:

2 Lives/_____

TATIC LOAD A-13.90 K#
B-13.72 K#

ORIGIN LIES ON CHAMFERED CORNER SURFACE NEAR BOLT HOLE/CHAMFER TRANSITION. ORIGIN STARTS FROM THE BASE OF A SLIVER.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1739	.0179
39	15600	1560	0170
38	15200	1390	0158
37	14800	1232	0127
36	14400	1105	0120
35	14000	0985	0085
34	13600	0900	0096
33	13200	0804	0093
32	12800	0711	0078
31	12400	0633	0069
30	12000	0564	0057
29	11600	0507	0056
28	11200	0451	0049
27	10800	0402	0051
26	10400	0351	0045
25	10000	0306	0054
24	9600	0252	0032
23	9200	0220	0028
22	8800	0192	0026
21	8400	0166	0018
20	8000	0148	0026
19	7600	0122	0011
18	7200	0111	
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		(118)
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XW PF-3

SPECTRUM: Fighter

TEST DATE: _____

(90)

TEST FRAME:	1	2	(3)	4	5	6
RAGE WIDTH:	1.5081		1.5024	1.5020	1.5016	1.5027
RAGE THICKNESS:	.3752		.3745	.3738	.3736	.3767	.3773

EA: .5658

ELINE STRESS: _____

.. LOAD: 19237.5

LES AT [redacted] FAILURE: *

2 Lives/_____

R Cal. 18982
CS 98.6
A.P. 7.70

1 Life

@ 1,493,815 H.P.'s = 15606.36 FLT-HRS *

TATIC LOAD ~~A-~~ ~~K#~~
~~B-~~ ~~K#~~

ORIGIN LIES ON BOLT HOLE SURFACE.

[redacted]

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	[redacted]	.6300	
39	15600	.6300	.2377
38	15200	.3923	0515
37	14800	3408	0405
36	14400	3003	0348
35	14000	2655	0257
34	13600	2398	0256
33	13200	2142	0236
32	12800	1906	0216
31	12400	1690	0209
30	12000	1481	0204
29	11600	1277	0191
28	11200	1086	0176
27	10800	0910	0174
26	10400	0736	0122
25	10000	0614	0102
24	9600	0512	0085
23	9200	0427	0077
22	8800	0350	0053
21	8400	0297	0044
20	8000	0253	0038
19	7600	0215	0029
18	7200	0186	0026
17	6800	0150	0026
16	6400	0124	0021
15	6000	0103	0020
14	5600	0083	0017
13	5200	0066	0012
12	4800	0054	0009
11	4400	0045	0008
10	4000	0037	0009
9	3600	0028	0005
8	3200	0023	0008
7	2800	0018	0004
6	2400	0014	
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XWPF-4B

SPECTRUM: Fighter

TEST DATE: _____

(13)

TEST FRAME:	1	2	3	(4)	5	6
RAGE WIDTH:	1.5013		1.5007	1.5004	1.5007	1.5022
RAGE THICKNESS:	.3863		.3851	.3840	.3853	.3883	.3890

A: .5800

ELINE STRESS: 34Ksi

LOAD: 19720.4

LES AT TERMINATION/FAILURE:

2 Lives/_____

R Cal 18478
CS 93.6
A.P 7.89

1 Life

TATIC LOAD A-16.56 K#
B-13.77 K#

ORIGIN LIES FROM BOLT HOLE SURFACE.
MATING PLATE SURFACES WERE MILLED.

ORIGIN LIES 0.0006 IN. BELOW BOLT HOLE SURFACE

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1034 -.0005	.0132
39	15600	0902	0126
38	15200	0776	0100
37	14800	0676	0098
36	14400	0578	0087
35	14000	0491	0074
34	13600	0417	0056
33	13200	0361	0047
32	12800	0314	0040
31	12400	0274	0046
30	12000	0228	0041
29	11600	0187	0026
28	11200	0161	0025
27	10800	0136	0020
26	10400	0116	0014
25	10000	0102	0014
24	9600	0088	0015
23	9200	0073	0008
22	8800	0065	0008
21	8400	0057	0007
20	8000	0050	0006
19	7600	0044	0003
18	7200	0041	0004
17	6800	0037	0004
16	6400	0033	0003
15	6000	0030	0003
14	5600	0027	0002
13	5200	0025	0002
12	4800	0023	0002
11	4400	0021	0002
10	4000	0019	0002
9	3600	0017	0002
8	3200	0015	
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(19)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XWPF-5B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	1	2	3	4	(5)	6	(16)
AGE WIDTH:	1.5011	1.5010	1.5008	1.5012		1.5013	
AGE THICKNESS:	.3833	.3827	.3822	.3833	.3840	.3844	

A: .5754

ELINE STRESS: 34KSI

. LOAD: 19563.7

RCAL 10652
CS 953
AP 783

1 Life

LES AT TERMINATION/FAILURE:

2 Lives/_____

TATIC LOAD A-15.54 K#
B-13.24 K#

ORIGIN LIES ON BOLT HOLE SURFACE
INITIATION SITE WAS AT THE BASE OF A SLIVER.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0992	.0104
39	15600	0888	0078
38	15200	0810	0083
37	14800	0727	0074
36	14400	0653	0055
35	14000	0598	0063
34	13600	0535	0046
33	13200	0489	0046
32	12800	0443	0042
31	12400	0401	0037
30	12000	0364	0036
29	11600	0328	0041
28	11200	0287	0023
27	10800	0264	0027
26	10400	0237	0020
25	10000	0217	0014
24	9600	0203	0022
23	9200	0181	0023
22	8800	0158	0022
21	8400	0136	0018
20	8000	0118	0017
19	7600	0101	0014
18	7200	0087	0022
17	6800	0065	0009
16	6400	0056	0008
15	6000	0048	0005
14	5600	0043	0007
13	5200	0036	0004
12	4800	0032	0005
11	4400	0027	0004
10	4000	0023	0003
9	3600	0020	0003
8	3200	0017	0002
7	2800	0015	0002
6	2400	0013	0002
5	2000	0011	0001
4	1600	0010	
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF6A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 90

AVERAGE WIDTH:	1.5007	1.5010	1.5009	1.5005	1.5002	
AVERAGE THICKNESS:	.3740	.3752	.3734	.3753	.3732	.3729

AREA: .5613

BASELINE STRESS: 34KSI

MAX. LOAD: 19083

RCAL. 10982
CALS 99%
A.POT. 76.3

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-15.85 K#
B-16.92 K#

ORIGIN LIES AT CORNER
THE CORNER HAD A TOOLED RADIUS

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCR
40	16000	.0670	.0054
39	15600	0616	0041
38	15200	0575	0038
37	14800	0537	0043
36	14400	0494	0040
35	14000	0454	0038
34	13600	0416	0036
33	13200	0380	0031
32	12800	0349	0029
31	12400	0320	0028
30	12000	0292	0026
29	11600	0266	0033
28	11200	0233	0025
27	10800	0208	0021
26	10400	0187	0018
25	10000	0169	0019
24	9600	0150	0020
23	9200	0130	0018
22	8800	0112	0019
21	8400	0093	0012
20	8000	0081	0013
19	7600	0068	0009
18	7200	0061	0006
17	6800	0055	0008
16	6400	0047	0006
15	6000	0041	0006
14	5600	0035	0005
13	5200	0030	0004
12	4800	0026	0005
11	4400	0021	0003
10	4000	0018	
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-07A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 15

AVERAGE WIDTH:	1.4986	1.4993	1.4993	1.4979	1.4978	
AVERAGE THICKNESS:	.3744	.3763	.3737	.3768	.3726	.3727

AREA: .5611 RCAL. 18478

BASELINE STRESS: 34K CAL.S 97%

MAX. LOAD: 19076 A-POT. 7.63

CYCLES AT [redacted]/FAILURE:

2 Lives/____

1 @ 1,366,705 L.P.'s = 14,278.4 FLT-HRS*

STATIC LOAD A- K#

B- K#

ORIGN LIES AT THE BASE OF A SLIVER FROM THE BOLT HOLE SURFACE. MATING SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCR
40	16000		
39	15600		
38	15200		
37	14800		
36	[redacted]	.4200	0971
35	14000	3229	0517
34	13600	2712	0385
33	13200	2327	0314
32	12800	2013	0149
31	12400	1864	0395
30	12000	1559	0182
29	11600	1377	0155
28	11200	1222	0124
27	10800	1098	0136
26	10400	0962	0113
25	10000	0849	0106
24	9600	0743	0112
23	9200	0631	0094
22	8800	0537	0107
21	8400	0430	0085
20	8000	0345	0065
19	7600	0280	0069
18	7200	0211	0050
17	6800	0161	0026
16	6400	0135	0022
15	6000	0113	0025
14	5600	0088	0019
13	5200	0069	0015
12	4800	0054	0009
11	4400	0045	0007
10	4000	0038	0008
9	3600	0030	0005
8	3200	0025	0005
7	2800	0020	0005
6	2400	0015	0005
5	2000	0010	
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XWPF-08

SPECTRUM: Fighter

TEST DATE: _____ (15)

TEST FRAME: 1 2 3 4 5 6

RAGE WIDTH:	1.5021	1.5028	1.5022	1.5011	1.5024	
RAGE THICKNESS:	.3769	.3773	.3765	.3774	.3767	.3768

A: .5661 RCAL 18478

ELINE STRESS: 34ksi CS 960

. LOAD: 19247.8 A-P 770

1 Life

LES AT TERMINATION/[redacted]

2 Lives/____

@ 1,072,452 L.P.'s = 11,204.24 FLT-HRS

TATIC LOAD A- 16.27 K#

B- 1630 K#

ORIGIN LIES AT BOLT HOLE/MATING SURFACE CORNER. MATING SURFACES WERE MILLED.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	[redacted]	.0558	.0009
28	11200	0549	0062
27	10800	0487	0042
26	10400	0445	0050
25	10000	0395	0046
24	9600	0349	0040
23	9200	0309	0030
22	8800	0279	0032
21	8400	0247	0027
20	8000	0220	0030
19	7600	0190	0022
18	7200	0168	0018
17	6800	0150	0019
16	6400	0131	0015
15	6000	0116	0014
14	5600	0102	0015
13	5200	0087	0012
12	4800	0075	0012
11	4400	0063	0013
10	4000	0050	0011
9	3600	0039	0007
8	3200	0032	
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		(12)
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XMPF-9A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	1	2	3	4	5	6	17.
RAGE WIDTH:	1.5018		1.5025	1.5018	1.5009	1.5018	
RAGE THICKNESS:	.3841	.3847	.3831	.3842	.3850	.3837	

A: .5769

ELINE STRESS: 34Ksi

. LOAD: 19614.6

R.cal 18094
CS 923
A.P. 7.85

1 Life

LES AT TERMINATION/FAILURE:

2 Lives/_____

TATIC LOAD A-10.26 K#
B-14.79 K#

ORIGIN LIES ON BOLT HOLE SURFACE DUE TO Mfg. DEFECT.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.3149	.0322
39	15600	2827	.0272
38	15200	2555	0226
37	14800	2329	0205
36	14400	2124	0181
35	14000	1943	0160
34	13600	1783	0136
33	13200	1647	0149
32	12800	1498	0126
31	12400	1372	0119
30	12000	1253	0108
29	11600	1145	0106
28	11200	1039	0099
27	10800	0940	0099
26	10400	0841	0093
25	10000	0748	0082
24	9600	0666	0082
23	9200	0584	0088
22	8800	0496	0070
21	8400	0426	0056
20	8000	0370	0060
19	7600	0310	0062
18	7200	0248	0047
17	6800	0201	0049
16	6400	0152	0036
15	6000	0116	0026
14	5600	0090	0021
13	5200	0069	0016
12	4800	0053	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWMPF-10A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	90					
AVERAGE WIDTH:	1.5014	1.5014	1.5014	1.5016	1.5012	
AVERAGE THICKNESS:	.3801	.3801	.3788	.3794	.3814	.3806

AREA: .5706

BASELINE STRESS: 34K

MAX. LOAD: 19401.2

RCAL. 18982
CALS 98%
A.POT. 7.76

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-14.44K#
B-14.74K#

ORIGIN LIES AT BASE OF A SLIVER FROM BOLT HOLE.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCR
40	16000	.1034	.0160
39	15600	0844	0131
38	15200	0713	0126
37	14800	0587	0096
36	14400	0491	0086
35	14000	0405	0061
34	13600	0344	0064
33	13200	0280	0050
32	12800	0230	0041
31	12400	0189	0034
30	12000	0155	0024
29	11600	0131	0018
28	11200	0113	0013
27	10800	0100	0015
26	10400	0085	0011
25	10000	0074	0012
24	9600	0062	0010
23	9200	0052	0006
22	8800	0046	0005
21	8400	0041	0004
20	8000	0037	0004
19	7600	0033	0003
18	7200	0030	0002
17	6800	0028	0003
16	6400	0025	0002
15	6000	0023	0003
14	5600	0020	0001
13	5200	0019	0001
12	4800	0018	0002
11	4400	0016	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-11B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: E

AVERAGE WIDTH:	1.5037	1.5036	1.5043	1.5035	1.5034	
AVERAGE THICKNESS:	.3826	.3832	.3818	.3830	.3829	.3822

AREA: .5753 RCAL 19052

BASELINE STRESS: 34 KSI CAL's 95%

MAX. LOAD: 19561 A.P.T. 2982

CYCLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD A-15.42 K#
B-13.31 K#

ORIGIN LIES ON HOLE SURFACE NEAR CHAMFER CORNER.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	.1333	.0116
39	15600	1217	0127
38	15200	1090	0091
37	14800	0999	0085
36	14400	0919	0074
35	14000	0845	0072
34	13600	0773	0069
33	13200	0704	0066
32	12800	0638	0056
31	12400	0582	0053
30	12000	0529	0050
29	11600	0479	0062
28	11200	0417	0054
27	10800	0363	0044
26	10400	0319	0049
25	10000	0270	0042
24	9600	0228	0037
23	9200	0191	0033
22	8800	0158	0027
21	8400	0131	0029
20	8000	0102	0018
19	7600	0084	0017
18	7200	0067	0013
17	6800	0054	0007
16	6400	0047	0005
15	6000	0042	0006
14	5600	0036	0004
13	5200	0032	0003
12	4800	0029	0004
11	4400	0025	0004
10	4000	0021	0004
9	3600	0017	0003
8	3200	0014	0002
7	2800	0012	0002
6	2400	0010	0002
5	2000	0008	0002
4	1600	0006	0002
3	1200	0004	0001
2	800	0003	
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XWPF-12B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6 (90)

RAGE WIDTH:	1.4997	1.4993	1.4992	1.5001	1.5001	
RAGE THICKNESS:	.3773	.3786	.3761	.3796	.3760	.3762

A: .5658 RCAL 18982

ELINE STRESS: 34 KSI <S 98.7

. LOAD: 19238.5 AP 7.70

1 Life

LES AT TERMINATION/[redacted]:

2 Lives/____

) @ 1,073,986 L.P.S = 11,220.27 FLT-HRS.

TATIC LOAD A-16.72 K#
B-16.64 K#

ORIGIN LIES ON CHAMFER/BOLT HOLE CORNER.
MATING SURFACES WERE MILLED.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	[redacted]	.0428	.0056
28	11200	0372	0039
27	10800	0333	0038
26	10400	0295	0032
25	10000	0263	0036
24	9600	0227	0042
23	9200	0185	0025
22	8800	0160	0024
21	8400	0136	0024
20	8000	0112	0014
19	7600	0098	0017
18	7200	0081	0012
17	6800	0069	0012
16	6400	0057	
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		123
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XWPF-13A

SPECTRUM: Fighter

TEST DATE: _____ (16)

TEST FRAME:	1	2	3	4	(5)	6
RAGE WIDTH:	1.5068	1.4996	1.4994	1.5021	1.5023	
RAGE THICKNESS:	.3760	.3757	.3777	.3755	.3795	.3793

A: .5657 RCal 18652

ELINE STRESS: 34 KSI CS 970

Af 770

. LOAD: 19235.5

1 Life

LES AT TERMINATION/[redacted]

2 Lives/____

1 @ 1,071,321 L.P.'s = 11,19243 FLT-HRS

TATIC LOAD A-[redacted] 16.41 K#

B-17.32 K#

ORIGIN LIES ON BOLT HOLE SURFACE. MATING SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	[redacted]	.0190	.0016
27	10800	0174	0025
26	10400	0149	0024
25	10000	0125	0017
24	9600	0108	0014
23	9200	0094	0013
22	8800	0082	0014
21	8400	0068	0009
20	8000	0059	0009
19	7600	0050	0005
18	7200	0045	0006
17	6800	0039	0004
16	6400	0035	0003
15	6000	0032	0007
14	5600	0025	0003
13	5200	0022	0005
12	4800	0017	0002
11	4400	0015	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	0		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-14B

SPECTRUM: Fighter

TEST DATE: _____ *

TEST FRAME: 6

AVERAGE WIDTH:	1.5028	1.5016	1.5034	1.5028	1.5003
AVERAGE THICKNESS:	.3785	.3797	.3778	.3779	.3788	.3765

AREA: .15689 RCAL: 17925

BASELINE STRESS: 34 KSI CALS 970

MAX. LOAD: 19342 A.POT. 774

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,225,811 L.P.'s = 12,806.43 FLT-HRS *

STATIC LOAD A- K#

B- K#

ORIGIN LIES ON BOLT HOLE SURFACE.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	[redacted]	.1764	.0024
32	12800	1740	0636
31	12400	1104	0390
30	12000	0714	0302
29	11600	0412	0247
28	11200	0165	0055
27	10800	0110	0024
26	10400	0086	0014
25	10000	0072	0013
24	9600	0059	0010
23	9200	0049	0011
22	8800	0038	0010
21	8400	0028	0002
20	8000	0026	0002
19	7600	0024	0002
18	7200	0022	0001
17	6800	0021	0001
16	6400	0020	0001
15	6000	0019	0001
14	5600	0018	0001
13	5200	0017	0001
12	4800	0016	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(128)

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-15B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 15

AVERAGE WIDTH:	1.5009	1.5008	1.5010	1.5012	1.5007
AVERAGE THICKNESS:	.3794	.3821	.3762	.3821	.3785 .3780

AREA: .5694 RCAL. 18478

BASELINE STRESS: 34ksi CALS 95%

MAX. LOAD: 19350.9 A.POT. 7.74

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-12.40 K#
B-11.50K#

ORIGIN LIES AT BASE OF SLIVER FROM BOLT HOLE SURFACE.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCR.
40	16000	.2665	.0272
39	15600	2393	0245
38	15200	2148	0224
37	14800	1924	0201
36	14400	1723	0178
35	14000	1545	0176
34	13600	1369	0149
33	13200	1220	0147
32	12800	1073	0133
31	12400	0940	0115
30	12000	0825	0095
29	11600	0730	0077
28	11200	0653	0071
27	10800	0582	0074
26	10400	0508	0068
25	10000	0440	0053
24	9600	0387	0062
23	9200	0325	0043
22	8800	0282	0041
21	8400	0241	0051
20	8000	0190	0029
19	7600	0161	0021
18	7200	0140	0021
17	6800	0119	0019
16	6400	0100	0014
15	6000	0086	0012
14	5600	0074	0011
13	5200	0063	0011
12	4800	0052	0008
11	4400	0044	0007
10	4000	0037	0005
9	3600	0032	0006
8	3200	0026	0005
7	2800	0021	0004
6	2400	0017	0003
5	2000	0014	0003
4	1600	0011	0002
3	1200	0009	
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XWPF-16A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6) (17)

RAGE WIDTH:	1.4990	1.4997	1.4995	1.4984	1.4985	
RAGE THICKNESS:	.3802	.3785	.3795	.3790	.3816	.3823

A: .5699 RCAL 18094

ELINE STRESS: 34ksi CS 93.3

LOAD: 19377.3 AP 7.75

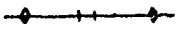
1 Life

LES AT TERMINATION/[redacted]

2 Lives/_____

) @ 1,069,172 L.P.S = 11,169.98 FLT-HRS

TATIC LOAD A-16.45 K#
B-17.27 K#



ORIGIN LIES ON BOLT HOLE SURFACE
MATING SURFACES WERE MILLED.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	[redacted]	.0335	.0047
27	10800	0288	0038
26	10400	0250	0034
25	10000	0216	0028
24	9600	0188	0024
23	9200	0164	0014
22	8800	0150	0017
21	8400	0133	0017
20	8000	0116	0016
19	7600	0100	0012
18	7200	0088	0011
17	6800	0077	0010
16	6400	0067	0007
15	6000	0060	0010
14	5600	0050	0007
13	5200	0043	0008
12	4800	0035	0004
11	4400	0031	0003
10	4000	0028	0005
9	3600	0023	0003
8	3200	0020	0004
7	2800	0016	0003
6	2400	0013	0003
5	2000	0011	
4	1600		
3	1200		
2	800		
1	400		(1.25)

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-17B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 90

AVERAGE WIDTH:	1.5018	1.5015	1.5024	1.5016	1.5018	
AVERAGE THICKNESS:	.3837	.3836	.3837	.3840	.3834	.3838

AREA: .5762 BCAL: 18982

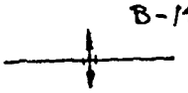
BASELINE STRESS: 34 KSI CALS 97%

MAX. LOAD: 19592 A.POT. 784

CYCLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD A- 14.93 K#
B- 15.1 K#



ORIGIN(2) LIE ON BOLT HOLE SURFACE FROM CIRCUMFERENTIAL TOOL MARKS.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	.1316	.0139
39	15600	1177	0145
38	15200	1032	0101
37	14800	0931	0099
36	14400	0832	0118
35	14000	0714	0106
34	13600	0608	0098
33	13200	0510	0075
32	12800	0435	0055
31	12400	0380	0048
30	12000	0332	0042
29	11600	0290	0039
28	11200	0251	0028
27	10800	0223	0021
26	10400	0202	0024
25	10000	0178	0020
24	9600	0158	0018
23	9200	0148	0019
22	8800	0121	0019
21	8400	0102	0012
20	8000	0090	0012
19	7600	0078	0015
18	7200	0063	0012
17	6800	0051	0010
16	6400	0041	0008
15	6000	0033	0009
14	5600	0024	0004
13	5200	0020	0003
12	4800	0017	0004
11	4400	0013	0001
10	4000	0012	0002
9	3600	0010	0002
8	3200	0008	0002
7	2800	0006	0002
6	2400	0004	0001
5	2000	0003	0001
4	1600	0002	0001
3	1200	0001	
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-18A *

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 15

AVERAGE WIDTH:	1.4996	1.4987	1.4982	1.5002	1.5013	
AVERAGE THICKNESS:	.3772	.3776	.3766	.3769	.3775	.3773

AREA: .5656 BCAL: 18478

BASELINE STRESS: 34 KSI CALS 96%

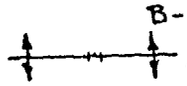
MAX. LOAD: 19231 A.POT. 770

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 4,417,246 L.P.'s = 14,806.42 FLT-HRS *

STATIC LOAD A- K#
B- K#



BROKE ORIGIN LIES ON BOLT HOLE SURFACE STARTING FROM IMPROPERLY DRILLED HOLE (TOOL-DRAG) MATING SURFACES WERE MILLED.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000		
39	15600		
38	[redacted]	.3690	.0025
37	14800	3665	0686
36	14400	2979	0394
35	14000	2585	0320
34	13600	2265	0283
33	13200	1982	0229
32	12800	1753	0206
31	12400	1547	0165
30	12000	1382	0152
29	11600	1230	0161
28	11200	1069	0126
27	10800	0943	0113
26	10400	0830	0099
25	10000	0731	0085
24	9600	0646	0083
23	9200	0563	0073
22	8800	0490	0060
21	8400	0430	0050
20	8000	0380	0056
19	7600	0324	0060
18	7200	0264	0046
17	6800	0218	0045
16	6400	0173	0033
15	6000	0140	0026
14	5600	0114	0022
13	5200	0092	0018
12	4800	0074	0018
11	4400	0056	0016
10	4000	0040	0011
9	3600	0029	0010
8	3200	0019	0006
7	2800	0013	0006
6	2400	0007	0005
5	2000	0002	0001
4	1600	0001	
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XA PF-19A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: F

AVERAGE WIDTH:	1.5015	1.5023	1.5014	1.5010	1.5012	
AVERAGE THICKNESS:	.3805	.3806	.3803	.3800	.3811	.3807

AREA: .5714 RCAL. 17925

BASELINE STRESS: 34 Ksi CALC 92%

MAX. LOAD: 19427 A.POT. 777

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-14.20 K# WAS NOT MILLED ON 2 SIDES
B-14.80 K# WAS MILLED - 2 SIDES

ORIGIN LIES ON BOLT HOLE SURFACE

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	.1125	.0121
39	15600	1004	0104
38	15200	0900	0080
37	14800	0820	0071
36	14400	0749	0063
35	14000	0686	0061
34	13600	0625	0061
33	13200	0564	0058
32	12800	0506	0046
31	12400	0466	0048
30	12000	0418	0046
29	11600	0372	0052
28	11200	0320	0049
27	10800	0271	0039
26	10400	0232	0037
25	10000	0195	0033
24	9600	0162	0023
23	9200	0139	0026
22	8800	0113	0020
21	8400	0093	0014
20	8000	0079	0018
19	7600	0061	0012
18	7200	0049	0008
17	6800	0041	0005
16	6400	0035	0006
15	6000	0029	0004
14	5600	0025	0005
13	5200	0020	0002
12	4800	0018	0002
11	4400	0016	0003
10	4000	0013	
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-20A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 90

AVERAGE WIDTH:	1.5015	1.5016	1.5004	1.5022	1.5025	
AVERAGE THICKNESS:	.3770	.3775	.3766	.3769	.3766	.3775

AREA: .5661 RCAL. 18982

BASELINE STRESS: _____ CALC 99%

MAX. LOAD: 19247. A.POT. 7.10

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-16.35 K#
B-16.99 K#

ORIGIN LIES [redacted] ON BOLT HOLE SURFACE.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	.0299	.0047
39	15600	0252	0034
38	15200	0218	0041
37	14800	0177	0024
36	14400	0153	0020
35	14000	0133	0019
34	13600	0114	0014
33	13200	0100	0016
32	12800	0084	0012
31	12400	0072	0012
30	12000	0060	0010
29	11600	0050	0008
28	11200	0042	0008
27	10800	0034	0007
26	10400	0027	0005
25	10000	0022	0003
24	9600	0019	0003
23	9200	0016	0002
22	8800	0014	0002
21	8400	0012	0002
20	8000	0010	0002
19	7600	0008	0001
18	7200	0007	0001
17	6800	0006	0001
16	6400	0005	0001
15	6000	0004	
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-21A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 90

AVERAGE WIDTH:	1.4987	1.4985	1.4984	1.4991	1.4989	
AVERAGE THICKNESS:	.3772	.3778	.3728	.3756	.3729	.3778

AREA: .5653 RCAL: 18982

BASELINE STRESS: 34ksi CALS 99%

MAX. LOAD: 19220 A.POT. 76%

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-15.81 K#
B-16.72 K#

ORIGIN LIES AT BASE OF SLIVER FROM BOLT HOLE SURFACE

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	.0760	.0066
39	15600	.0694	.0060
38	15200	.0634	.0056
37	14800	.0578	.0057
36	14400	.0521	.0049
35	14000	.0472	.0048
34	13600	.0424	.0042
33	13200	.0382	.0039
32	12800	.0343	.0035
31	12400	.0308	.0033
30	12000	.0275	.0034
29	11600	.0241	.0025
28	11200	.0216	.0025
27	10800	.0191	.0026
26	10400	.0165	.0018
25	10000	.0147	.0021
24	9600	.0126	.0016
23	9200	.0110	.0011
22	8800	.0099	.0012
21	8400	.0087	.0008
20	8000	.0079	.0010
19	7600	.0069	.0009
18	7200	.0060	.0008
17	6800	.0052	.0006
16	6400	.0046	.0007
15	6000	.0039	.0006
14	5600	.0033	.0005
13	5200	.0028	.0005
12	4800	.0023	.0003
11	4400	.0020	.0003
10	4000	.0017	.0003
9	3600	.0014	.0003
8	3200	.0011	.0002
7	2800	.0009	
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-22A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 6d

AVERAGE WIDTH:	1.5014	1.5020	1.5008	1.5015	1.5011	
AVERAGE THICKNESS:	.3808	.3788	.3787	.3789	.3773	.3793

AREA: .5717 RCAL. 18478

BASELINE STRESS: 34ksi CALS 95%

MAX. LOAD: 19438 A.POT. 77%

CYCLES AT [redacted]/FAILURE: *

2 Lives/_____

1 @ 1,419,995 L.P.C. = 14835.13 FI-HRS*

STATIC LOAD A- K#
B- K#

ORIGIN LIES ON BOLT HOLE SURFACE FROM CIRCUMFERENTIAL TOOL MARK (SLIVER)

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000		
39	15600		
38	[redacted]	.2948	.0670
37	14800	.2278	.0335
36	14400	.1943	.0278
35	14000	.1665	.0214
34	13600	.1451	.0178
33	13200	.1273	.0155
32	12800	.1118	.0136
31	12400	.0982	.0112
30	12000	.0870	.0119
29	11600	.0751	.0100
28	11200	.0651	.0076
27	10800	.0575	.0075
26	10400	.0500	.0059
25	10000	.0441	.0066
24	9600	.0375	.0058
23	9200	.0317	.0054
22	8800	.0263	.0044
21	8400	.0219	.0043
20	8000	.0176	.0026
19	7600	.0150	.0019
18	7200	.0131	.0015
17	6800	.0116	.0015
16	6400	.0101	.0014
15	6000	.0084	.0015
14	5600	.0069	.0012
13	5200	.0057	.0010
12	4800	.0047	.0008
11	4400	.0039	.0007
10	4000	.0032	.0004
9	3600	.0028	.0005
8	3200	.0023	.0004
7	2800	.0019	.0002
6	2400	.0017	.0003
5	2000	.0014	.0002
4	1600	.0012	.0003
3	1200	.0009	.0003
2	800	.0006	
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-23A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 15

AVERAGE WIDTH:	1.4999	1.5010	1.5011	1.4991	1.4987	
AVERAGE THICKNESS:	.3772	.3785	.3765	.3787	.3756	.3765

AREA: .5658 RCAL: 18478

BASELINE STRESS: 34 KSI CALS 96%

MAX. LOAD: 19235 A.POT. 770

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,493,815 L.P.'s = 15,606.36 FLT-HRS *

STATIC LOAD A- K#

B- K#

ORIGIN LIES ON BOLT HOLE SURFACE.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	[redacted]	.3495	.1110
39	15600	2385	0453
38	15200	1932	0367
37	14800	1565	0293
36	14400	1272	0241
35	14000	1031	0201
34	13600	0830	0161
33	13200	0669	0124
32	12800	0545	0084
31	12400	0461	0058
30	12000	0403	0081
29	11600	0323	0070
28	11200	0252	0051
27	10800	0201	0050
26	10400	0151	0026
25	10000	0125	0025
24	9600	0109	0017
23	9200	0083	0011
22	8800	0072	0009
21	8400	0063	0008
20	8000	0055	0006
19	7600	0049	0007
18	7200	0042	
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-24A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 16

AVERAGE WIDTH:	1.5003	1.5001	1.4998	1.5008	1.5010	
AVERAGE THICKNESS:	.3741	.3728	.3726	.3736	.3758	.3757

AREA: .5613 RCAL. 18652

BASELINE STRESS: 34 KSI CALS 98%

MAX. LOAD: 19083 A.POT. 763

CYCLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD A-15.27 K#

B-15.90 K#

ORIGIN LIES AT CORNER WHICH HAD A RADIUS.

ORIGIN WAS AT THE BASE OF A SLIVER.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.1016	.0089
39	15600	0927	0085
38	15200	0842	0092
37	14800	0750	0063
36	14400	0687	0053
35	14000	0630	0046
34	13600	0584	0049
33	13200	0535	0053
32	12800	0482	0040
31	12400	0442	0043
30	12000	0399	0048
29	11600	0351	0037
28	11200	0314	0033
27	10800	0281	0026
26	10400	0255	0025
25	10000	0230	0022
24	9600	0208	0018
23	9200	0190	0016
22	8800	0174	0015
21	8400	0159	0015
20	8000	0144	0012
19	7600	0132	0012
18	7200	0120	0012
17	6800	0108	0011
16	6400	0097	0013
15	6000	0084	0009
14	5600	0075	0010
13	5200	0065	0009
12	4800	0056	0008
11	4400	0048	0007
10	4000	0041	0006
9	3600	0035	0005
8	3200	0030	0004
7	2800	0026	0004
6	2400	0022	0005
5	2000	0017	0004
4	1600	0013	0003
3	1200	0010	0001
2	800	0009	
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-25A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 15

AVERAGE WIDTH:	1.5008	1.5005	1.5008	1.5018	1.5002	
AVERAGE THICKNESS:	.3785	.3786	.3775	.3783	.3794	.3786

AREA: .5680 RCAL: 18478

BASELINE STRESS: 34ksi CALS 96%

MAX. LOAD: 19313 A.POT. 7.73

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-15.42 K#
B-16.96 K#

ORIGIN LIES AT THE BASE OF A SLIVER FROM BOLT HOLE SURFACE.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.0690	.0055
39	15600	0635	0047
38	15200	0588	0048
37	14800	0540	0049
36	14400	0491	0043
35	14000	0448	0041
34	13600	0407	0036
33	13200	0371	0033
32	12800	0338	0037
31	12400	0301	0032
30	12000	0269	0026
29	11600	0243	0027
28	11200	0216	0023
27	10800	0193	0016
26	10400	0177	0017
25	10000	0160	0013
24	9600	0147	0015
23	9200	0132	0013
22	8800	0119	0011
21	8400	0108	0015
20	8000	0093	0013
19	7600	0080	0010
18	7200	0070	0009
17	6800	0061	0008
16	6400	0053	0007
15	6000	0046	0004
14	5600	0042	0005
13	5200	0037	0005
12	4800	0032	0003
11	4400	0030	0003
10	4000	0028	0005
9	3600	0023	0001
8	3200	0022	0003
7	2800	0019	0003
6	2400	0016	0003
5	2000	0013	
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-26A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 90 (3)

AVERAGE WIDTH:	1.5003	1.5001	1.4999	1.5007	1.5008	
AVERAGE THICKNESS:	.3738	.3730	.3729	.3728	.3754	.3748

AREA: .5608 RCAL. 18982

BASELINE STRESS: 34ksi CALS 99%

MAX. LOAD: 19069 A.POT. 7.63

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-14.00 K#
B-15.84 K#

ORIGIN LIES AT BASE OF A SLIVER FROM BOLT HOLE SURFACE.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.1318	.0191
39	15600	1127	.0157
38	15200	0970	[redacted]0125
37	14800	0845	0127
36	14400	0718	0103
35	14000	0615	0099
34	13600	0516	0088
33	13200	0428	0077
32	12800	0351	0068
31	12400	0283	0060
30	12000	0223	0035
29	11600	0188	0027
28	11200	0161	0021
27	10800	0140	0020
26	10400	0120	0019
25	10000	0101	0013
24	9600	0088	0013
23	9200	0075	0009
22	8800	0066	0007
21	8400	0059	0006
20	8000	0053	0006
19	7600	0047	0007
18	7200	0040	0007
17	6800	0033	0004
16	6400	0029	0006
15	6000	0023	0003
14	5600	0020	0005
13	5200	0015	0004
12	4800	0011	0002
11	4400	0009	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-27B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 15 ⊕

AVERAGE WIDTH:	1.5037	1.5049	1.5045	1.5018	1.5036	
AVERAGE THICKNESS:	.3776	.3760	.3755	.3761	.3806	.3793

AREA: .5678 RCAL. 18478

BASELINE STRESS: 34KSI CAL.S 96%

MAX. LOAD: 19306 A.POT. 772

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-17.69 K#
B-15.60 K#

MATING SURFACES WERE MILLED. ORIGIN LIES ON BOLT HOLE SURFACE[redacted]

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.0838	.0069
39	15600	0769	0052
38	15200	0717	0042
37	14800	0675	0047
36	14400	0628	0044
35	14000	0584	0054
34	13600	0530	0050
33	13200	0480	0052
32	12800	0428	0047
31	12400	0381	0045
30	12000	0336	0048
29	11600	0288	0040
28	11200	0248	0038
27	10800	0210	0026
26	10400	0184	0020
25	10000	0164	0022
24	9600	0142	0019
23	9200	0123	0015
22	8800	0108	0015
21	8400	0093	0013
20	8000	0080	0012
19	7600	0068	0010
18	7200	0058	0010
17	6800	0048	0008
16	6400	0040	0007
15	6000	0033	0005
14	5600	0028	0006
13	5200	0022	0003
12	4800	0019	0004
11	4400	0015	0004
10	4000	0011	0003
9	3600	0008	0004
8	3200	0004	0002
7	2800	0002	
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-28A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: F

AVERAGE WIDTH:	1.5014	1.5024	1.5014	1.5005	1.5011	
AVERAGE THICKNESS:	.3812	.3815	.3806	.3814	.3811	.3815

AREA: .5723 RCAL. 17926

BASELINE STRESS: 34KSI CAL.S 92%

MAX. LOAD: 19459 A.POT. 778

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-10.86 K#
B-10.86 K#

ORIGIN LIES ON BOLT HOLE SURFACE FROM CIRCUMFERENTIAL TOOL MARK CREATING A SLIVER.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.2433	.0344
39	15600	2089	0281
38	15200	1808	0258
37	14800	1550	0247
36	14400	1303	0199
35	14000	1104	0166
34	13600	0938	0181
33	13200	0757	0144
32	12800	0613	0135
31	12400	0478	0094
30	12000	0384	0078
29	11600	0306	0057
28	11200	0249	0036
27	10800	0213	0030
26	10400	0183	0031
25	10000	0152	0027
24	9600	0125	0024
23	9200	0101	0014
22	8800	0087	0013
21	8400	0074	0011
20	8000	0063	0009
19	7600	0054	0007
18	7200	0047	0007
17	6800	0040	0005
16	6400	0035	0004
15	6000	0031	0005
14	5600	0026	0004
13	5200	0022	0004
12	4800	0018	0003
11	4400	0015	0002
10	4000	0013	0003
9	3600	0010	0001
8	3200	0009	0003
7	2800	0007	0002
6	2400	0005	0002
5	2000	0003	
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-29B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH:	1.5048	1.5058	1.5053	1.5039	1.5043	
AVERAGE THICKNESS:	.3792	.3781	.3767	.3779	.3819	.3814

AREA: .5706 RCAL. 18652

BASELINE STRESS: 84 KSI CALS 96%

MAX. LOAD: 19401 A.POT. 776

CYCLES AT TERMINATION/[redacted]:

2 Lives/1,531,494

STATIC LOAD A-13.88 K#
B-14.25 K#

PLATE

ORIGIN LIES ON [redacted] SURFACE NEAR CORNER.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.1383	.0145
39	15600	1238	0105
38	15200	1133	0107
37	14800	1026	0083
36	14400	0943	0083
35	14000	0863	0070
34	13600	0793	0064
33	13200	0729	0059
32	12800	0670	0058
31	12400	0612	0054
30	12000	0558	0034
29	11600	0502	0042
28	11200	0460	0031
27	10800	0429	0029
26	10400	0399	0030
25	10000	0370	0035
24	9600	0335	0031
23	9200	0314	0019
22	8800	0295	0019
21	8400	0277	0025
20	8000	0252	0023
19	7600	0229	0023
18	7200	0206	0028
17	6800	0178	0030
16	6400	0148	0019
15	6000	0129	
14	5600		
13	5200		
12	4800		
11	4400.		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-30A *

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 16 (5)

AVERAGE WIDTH:	1.5023	1.5028	1.5023	1.5018	1.5026	
AVERAGE THICKNESS:	.3789	.3771	.3764	.3773	.3809	.3819

AREA: .5690 RCAL. 18652

BASELINE STRESS: 34 KSI CALS 96%

MAX. LOAD: 19345 A.POT. 774

CYCLES AT [redacted]/FAILURE: *

2 Lives/_____

1 @ 1,373,537 LP's = 14,349.77 FLT-HRS*

STATIC LOAD A- K#
B- K#

ORIGIN LIES ON BOLT HOLE SURFACE

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000		
39	15600		
38	15200		
37	14800		
36	[redacted]	.2559	.0541
35	14000	2018	0374
34	13600	1644	0316
33	13200	1328	0284
32	12800	1044	0252
31	12400	0792	0216
30	12000	0576	0145
29	11600	0431	0101
28	11200	0330	0073
27	10800	0257	0046
26	10400	0211	0040
25	10000	0171	0026
24	9600	0145	0028
23	9200	0117	0013
22	8800	0104	0018
21	8400	0086	0016
20	8000	0070	0010
19	7600	0060	0008
18	7200	0052	0006
17	6800	0046	0009
16	6400	0037	0005
15	6000	0032	0006
14	5600	0026	0005
13	5200	0021	0003
12	4800	0018	0003
11	4400.	0015	0003
10	4000	0012	0003
9	3600	0009	
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(132)

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-31B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 17 (6)

AVERAGE WIDTH:	1.5025	1.5024	1.5028	1.5025	1.5022
AVERAGE THICKNESS:	.37804	.3802	.3765	.3799	.3770 .3766

AREA: .5680 RCAL. 17925

BASELINE STRESS: 34KSI CALS 9396

MAX. LOAD: 19312 A.POT. 772

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-16.00 K#
B-13.86 K#

ORIGIN LIES ON BOLT HOLE SURFACE.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.1347	.0103
39	15600	1244	0084
38	15200	1160	0075
37	14800	1085	0077
36	14400	1008	0076
35	14000	0932	0063
34	13600	0869	0064
33	13200	0805	0057
32	12800	0748	0049
31	12400	0699	0046
30	12000	0653	0049
29	11600	0604	0046
28	11200	0558	0033
27	10800	0525	0040
26	10400	0485	0046
25	10000	0439	0039
24	9600	0400	0048
23	9200	0352	0036
22	8800	0316	0034
21	8400	0282	0024
20	8000	0258	0033
19	7600	0225	0030
18	7200	0195	0024
17	6800	0171	0027
16	6400	0144	0029
15	6000	0115	0018
14	5600	0097	0014
13	5200	0083	0013
12	4800	0070	0010
11	4400	0060	0009
10	4000	0051	0010
9	3600	0041	0008
8	3200	0033	0007
7	2800	0026	0006
6	2400	0020	0005
5	2000	0015	
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-33B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 90

AVERAGE WIDTH:	1.4985	1.4977	1.4966	1.4998	1.5000
AVERAGE THICKNESS:	.3770	.3765	.3766	.3762	.3772 .3786

AREA: .5650 RCAL: 10158 9982

BASELINE STRESS: 34KSI CALS 9696 9996

MAX. LOAD: 19209 A.POT. 770

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A-16.27 K#
B-14.46 K# Room Tolerance!

ORIGIN LIES AT CORNER WHICH HAD A RADIUS. ORIGIN ON OPPOSITE OF HOLE LIES ON MATING SURFACE FROM A TOOL MARK due to RELAXED TOLERANCE-MILLING. MATING SURFACES WERE MILLED.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.0980	.0130
39	15600	0850	0081
38	15200	0769	0079
37	14800	0690	0065
36	14400	0625	0059
35	14000	0566	0065
34	13600	0501	0056
33	13200	0445	0053
32	12800	0392	0050
31	12400	0342	0047
30	12000	0295	0034
29	11600	0261	0028
28	11200	0233	0030
27	10800	0203	0023
26	10400	0180	0027
25	10000	0153	0017
24	9600	0136	0015
23	9200	0121	0013
22	8800	0108	0011
21	8400	0097	0010
20	8000	0087	0007
19	7600	0080	0009
18	7200	0071	0008
17	6800	0063	0008
16	6400	0055	0006
15	6000	0049	0006
14	5600	0043	0006
13	5200	0037	0004
12	4800	0033	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-34B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 15

AVERAGE WIDTH:	1.5010	1.5009	1.5006	1.5014	1.5009
AVERAGE THICKNESS:	.3781	.3770	.3769	.3767	.3794	.3803

AREA: .5675

RCAL. ~~18882~~ 18478

BASELINE STRESS: 34 ksi

CALS 98% 96%

MAX. LOAD: 19294

A.POT. ~~772~~ 772

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A-13.42 K#
B-12.14 K#

ORIGIN LIES AT THE BASE OF A SLIVER FROM THE BOLT HOLE

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	.3030	.0231
39	15600	2794	0241
38	15200	2553	0198
37	14800	2355	0189
36	14400	2166	0176
35	14000	1990	0157
34	13600	1833	0154
33	13200	1679	0147
32	12800	1532	0137
31	12400	1395	0142
30	12000	1253	0135
29	11600	1118	0238
28	11200	0880	0127
27	10800	0753	0098
26	10400	0655	0102
25	10000	0553	0080
24	9600	0473	0068
23	9200	0405	0067
22	8800	0338	0056
21	8400	0282	0057
20	8000	0225	0043
19	7600	0182	0029
18	7200	0153	0023
17	6800	0130	0019
16	6400	0111	0016
15	6000	0095	0020
14	5600	0075	0013
13	5200	0062	0010
12	4800	0052	0008
11	4400	0044	0006
10	4000	0038	0007
9	3600	0031	0005
8	3200	0026	0004
7	2800	0022	0005
6	2400	0017	
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-35B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH:	1.5007	1.5015	1.5008	1.5001	1.5002
AVERAGE THICKNESS:	.3812	.3810	.3803	.3813	.3811	.3822

AREA: .5720

RCAL 18982

BASELINE STRESS: _____

CALS 98%

MAX. LOAD: 19448

A.POT. 778

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-16.24 K#
B-16.45 K#

ORIGIN LIES ON CHAMFERED CORNER.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	.0817	.0103
39	15600	0714	0080
38	15200	0634	0056
37	14800	0578	0058
36	14400	0520	0060
35	14000	0460	0057
34	13600	0403	0051
33	13200	0352	0037
32	12800	0315	0034
31	12400	0281	0031
30	12000	0250	0032
29	11600	0218	0030
28	11200	0188	0019
27	10800	0169	0018
26	10400	0151	0019
25	10000	0132	0019
24	9600	0113	0019
23	9200	0094	0016
22	8800	0078	0009
21	8400	0069	0009
20	8000	0060	0007
19	7600	0053	0008
18	7200	0045	0005
17	6800	0040	0007
16	6400	0033	0004
15	6000	0029	0006
14	5600	0023	0003
13	5200	0020	0003
12	4800	0017	0003
11	4400	0014	0001
10	4000	0013	0001
9	3600	0012	0002
8	3200	0010	
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-36A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: d

AVERAGE WIDTH:	1.5008	1.4997	1.5011	1.5007	1.5015	
AVERAGE THICKNESS:	.3779	.3764	.3755	.3768	.3805	.3802

AREA: .5671 RCAL. 18478

BASELINE STRESS: 34 ksi CALS 96%

MAX. LOAD: 19282 A.POT. 771

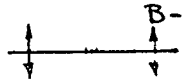
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,493,815 L.P.'s = 15,606.36 FLT-HRS *

STATIC LOAD A- ____ K#

B- ____ K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	[redacted]	.3411	.0028
39	15600	.3383	.0693
38	15200	.2690	.0357
37	14800	.2333	.0245
36	14400	.2088	.0208
35	14000	.1880	.0196
34	13600	.1684	.0197
33	13200	.1487	.0153
32	12800	.1334	.0116
31	12400	.1218	.0117
30	12000	.1101	.0115
29	11600	.0986	.0095
28	11200	.0891	.0077
27	10800	.0814	.0063
26	10400	.0751	.0051
25	10000	.0700	.0058
24	9600	.0642	.0052
23	9200	.0590	.0049
22	8800	.0541	.0040
21	8400	.0501	.0037
20	8000	.0464	.0036
19	7600	.0428	.0036
18	7200	.0392	.0039
17	6800	.0353	.0035
16	6400	.0318	.0025
15	6000	[redacted] .0293	.0030
14	5600	.0263	.0033
13	5200	.0230	.0035
12	4800	.0195	.0032
11	4400	.0163	.0022
10	4000	.0141	
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-37B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH:	1.5021	1.5021	1.5021	1.5019	1.5021	
AVERAGE THICKNESS:	.3791	.3794	.3787	.3797	.3788	.3790

AREA: .5695 RCAL. 18982

BASELINE STRESS: 34 ksi CALS 98%

MAX. LOAD: 19362 A.POT. 774

CYCLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD A-4.00 K#

B-12.60 K#

ORIGIN LIES ON BOLT HOLE SURFACE AT TRANSITION OF BOLT HOLE AND RADIUS OF CORNER.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	.1138	.0167
39	15600	.0971	.0117
38	15200	.0854	.0106
37	14800	.0748	.0098
36	14400	.0650	.0077
35	14000	.0573	.0096
34	13600	.0497	.0065
33	13200	.0432	.0053
32	12800	.0379	.0043
31	12400	.0336	.0027
30	12000	.0309	.0039
29	11600	.0270	.0030
28	11200	.0240	.0025
27	10800	.0215	.0021
26	10400	.0194	.0021
25	10000	.0173	.0021
24	9600	.0152	.0021
23	9200	.0131	.0019
22	8800	.0112	.0020
21	8400	.0092	.0017
20	8000	.0075	.0015
19	7600	.0060	.0012
18	7200	.0048	.0010
17	6800	.0038	.0008
16	6400	.0030	.0005
15	6000	.0025	.0004
14	5600	.0021	.0003
13	5200	.0018	.0004
12	4800	.0014	.0003
11	4400	.0011	.0002
10	4000	.0009	.0003
9	3600	.0006	.0003
8	3200	.0004	.0002
7	2800	.0002	
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPF-38B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: D

AVERAGE WIDTH:	1.4999	1.5000	1.4999	1.5006	1.4993	
AVERAGE THICKNESS:	.3844	.3853	.3835	.3866	.3832	.3814

AREA: 5766

BASELINE STRESS: 34 ksi

MAX. LOAD: 19603

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

RCAL: 19478

CALS 94%

A.POT. 784

STATIC LOAD A-10.68 K#
B-10.68 K#

ORIGIN LIE ON BOLT HOLE SURFACE NEAR CORNER STARTING FROM CIRCUMFERENTIAL TOOL MARK (SLIVER)

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.2953	0266
39	15600	[redacted] 2687	0268
38	15200	2419	0213
37	14800	2206	0206
36	14400	2006	0159
35	14000	1847	0170
34	13600	1677	0188
33	13200	1489	0106
32	12800	1383	0109
31	12400	1274	0103
30	12000	1171	0098
29	11600	1073	0074
28	11200	0999	0077
27	10800	0922	0067
26	10400	0855	0055
25	10000	0800	0064
24	9600	0736	0062
23	9200	0674	0052
22	8800	0622	0054
21	8400	0568	0055
20	8000	0513	0055
19	7600	0458	0040
18	7200	0418	0048
17	6800	0370	0044
16	6400	0326	0040
15	6000	0286	0044
14	5600	0243	0030
13	5200	0213	0036
12	4800	0176	0028
11	4400	0148	0023
10	4000	0125	0030
9	3600	0095	0028
8	3200	0067	0020
7	2800	0047	0015
6	2400	0032	0011
5	2000	0021	0009
4	1600	0012	0005
3	1200	0007	0004
2	800	0003	
1	400		

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2.2.2 XWPB

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-1B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B (C) D E F
1 2 3 4 5 6

AVERAGE WIDTH:	1.4971	1.4967	1.4972	1.4974	1.4973
AVERAGE THICKNESS:	.3782	.3801	.3767	.3804	.3768	.3769

AREA: .5662

R-Cal 8100
Cal S 43.4
Apt 7.47

BASELINE STRESS: 33ksi

MAX. LOAD: 18684.6

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

@
Static Load A-13.88 KN
B 12.10 KN

Origin lies at corner. Both Plate surfaces (A&B) were milled

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560	.1769	.0205
2480	.1563	.0369
2380	.1194	.0285
2280	.0900	.0211
2180	.0698	.0160
2080	.0538	.0111
1980	.0427	.0065
1880	.0343	.0074
1780	.0268	.0046
1680	.0222	.0041
1580	.0181	.0037
1480	.0144	.0026
1380	.0118	.0025
One Life 1280	.0093	.0013
1200	.0080	.0015
1100	.0065	
1000		
900		
800		
700	Origin Damaged by	
600	Rubbing on tool	
500		
400		
300		
200		

SPECIMEN NUMBER: XWPB-2B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B (C) D E F
1 2 3 4 5 6

AVERAGE WIDTH:	1.5029	1.5021	1.5023	1.5004	1.4998
AVERAGE THICKNESS: 3830	.3827	.3813	.3825	.3843	.3842

AREA: .5748

R-Cal 18982 (8100)
Cal S 43%
Apt 7.59

BASELINE STRESS: 33ksi

MAX. LOAD: 18960

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

@
STATIC LOAD A-15.25 K#
B-13.30K#

Origin lies on Bolt Hole Surface.

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560	.1733	.0370
2480	.1353	.0335
2380	.1018	.0234
2280	.0724	.0171
2180	.0605	.0145
2080	.0460	.0096
1980	.0364	.0074
1880	.0290	.0069
1780	.0221	.0050
1680	.0171	.0031
1580	.0140	.0031
1480	.0103	.0024
1380	.0085	.0015
One Life 1280	.0067	.0018
1200	.0049	.0018
1100	.0031	.0006
1000	.0041	.0010
900	.0031	.0006
800	.0025	.0006
700	.0019	
600		
500		
400		
300		
200		

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FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-3A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C (D) E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5029	1.5024	1.5023	1.5033	1.5034
AVERAGE THICKNESS: (.3807)	.3802	.3774	.3794	.3833	.3831

AREA: .5721

R-Cal 18478 (2884)
Cal.S 42% *

BASELINE STRESS: 33ksi Apt 7.56

MAX. LOAD: 10879

CYCLES AT [redacted]/FAILURE: * 3Lives/___

@ 649,487 L.P.'s = 2518.92 FLTS *

STATIC LOAD A- **
B- K**

Origin lies on Bolt Hole Surface

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
[redacted] →	.5940	.3348
2480	.2552	.0838
2380	1714	0515
2280	1199	0329
2180	0810	0379
2080	0531	0184
1980	0347	0098
1880	0249	0073
1780	0176	0044
1680	0132	0030
1580	0102	0021
1480	0081	0018
1380	0063	0009
One Life 1280	0054	0011
1200	0043	0008
1100	0035	0006
1000	0029	0006
900	0023	0005
800	0018	0004
700	0014	0004
600	0010	0003
500	0007	
400		
300		
200		

SPECIMEN NUMBER: XWPB-4A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.4999	1.4992	1.4992	1.5009	1.5006
AVERAGE THICKNESS: (.3807)	.3825	.3812	.3816	.3810	.3809

AREA: .5723

R-Cal 18652 (7957)
Cal.S 42%

BASELINE STRESS: 33ksi Apt 7.55

MAX. LOAD: 18880

CYCLES AT [redacted]/FAILURE: * [redacted]/___

@ 394607 L.P.'s = 1518.78 FLTS *

STATIC LOAD A- K**
B- K**

Origin lies on transition point of Bolt Hole and corner (rounded). Both Plate Surfaces (A & B) were milled.

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2180		
2080		
1980		
1880		
1780		
1680		
* → [redacted]	.4480	.1379
1680	3101	1119
1580	1982	0645
One Life 1280	1537	0336
1200	1201	0301
1100	0799	0202
1000	0598	0166
900	0432	0111
800	0321	0073
700	0148	0057
600	0091	0042
500	0049	0013
400	0036	0013
300	0023	
200		

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FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-5B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C (D) E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.502	1.5014	1.5026	1.5031	1.5015
AVERAGE THICKNESS:	.3850	.3850	.3823	.3841	.3845	.3794

AREA: .5783

R-Cal 7894
Cal S 41.4

BASELINE STRESS: 33 ksi

Apt 7.63

MAX. LOAD: 19083.9

CYCLES AT [redacted]/FAILURE: * 2 Slives/

@ 639145 L.P.s = 2478.81 FLTS *

STATIC LOAD A- K#
B- K#

Origin lies at corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
* → [redacted]	.3227	1045
2380	3182	0589
2280	1593	0432
2180	1161	0292
2080	0869	0211
1980	0658	0157
1880	0501	0107
1780	0394	0071
1680	0323	0058
1580	0265	0043
1480	0212	0046
1380	0167	0034
One Life 1280	0133	
1200		
1100		
1000		
900	Fracture damaged	
800	by Rubbing on itself	
700		
600		
500		
400		
300		
200		

SPECIMEN NUMBER: XWPB-6A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E (F) / 1 2 3 4 5 6

AVERAGE WIDTH:	1.4923	1.4995	1.5003	1.5000	1.4985
AVERAGE THICKNESS:	.3843	.3847	.3844	.3847	.3837	.3842

AREA: .5764

R-Cal 17925 (7668)
Cal S 40%

BASELINE STRESS: 33 ksi

Apt 7.61

MAX. LOAD: 19020

CYCLES AT [redacted]/FAILURE: * [redacted]

@ 535,993 L.P.'s = 2078.76 FLTS *

STATIC LOAD A- K#
B- K#

Origin lies at Xaion between Bolt Hole surface and corner.

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2186		
* → [redacted]	.4350	.1001
1980	2349	0595
1880	1854	0489
1780	1315	0340
1680	0975	0244
1580	0731	0210
1480	0521	0133
1380	0388	0086
One Life 1280	0302	0071
1200	0231	0074
1100	0157	0049
1000	0108	0036
900	0072	0028
800	0044	0018
700	0026	
600		
500		
400		
300		
200		

(438)

GENERAL DYNAMICS
Fort Worth Division
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FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-7A

SPECTRUM: Bomber

TEST DATE: D/A-24

TEST FRAME: A B C D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5016	1.5013	1.5013	1.5020	1.5020
AVERAGE THICKNESS:	.3832	.3852	.3825	.3846	.3820	.3817

AREA: .5754 R-Cal 7957
Cal S 41.9

BASELINE STRESS: 33 ksi Apt 7.60 *

MAX. LOAD: 18988.2

CYCLES AT TERMINATION/FAILURE:* 2 3Lives/___
@ 597,964 L.P. = 2319.1 FLTS*
Service Loads A kW
B kW

origin lies at corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
→	[redacted]	.5032	.1073
	2280	.3959	.0924
	2180	.3035	.0605
	2080	.2430	.0493
	1980	.1937	.0408
	1880	.1529	.0318
	1780	.1211	.0279
	1680	.0932	.0216
	1580	.0716	.0164
	1480	.0552	.0132
	1380	.0420	.0093
One Life	1280	.0327	.0056
	1200	.0271	.0058
	1100	.0213	.0049
	1000	.0164	.0041
	900	.0123	.0036
	800	.0087	.0032
	700	.0065	
	600		
	500		
	400		
	300		
	200		

SPECIMEN NUMBER: XWPB-8B

SPECTRUM: Bomber

TEST DATE: D/A-25

TEST FRAME: A B C D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5017	1.5016	1.5017	1.5016	1.5020
AVERAGE THICKNESS:	.3837	.3858	.3822	.3848	.3827	.3827

AREA: .5762 R-Cal 7668
Cal S 40.3

BASELINE STRESS: 33 ksi Apt 7.61

MAX. LOAD: 19014.6

CYCLES AT [redacted]/FAILURE:* 2 3Lives/___
@ 378,738 L.P.s 1468.87 FLTS*
Service Loads A kW
B kW

Origin lies at Corner.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
→	[redacted]	.3851	.1413
	1380	.2438	.0853
One Life	1280	.1585	.0414
	1200	.1171	.0234
	1100	.0799	.0187
	1000	.0569	.0112
	900	.0384	.0082
	800	.0273	.0057
	700	.0190	.0046
	600	.0133	.0032
	500	.0087	.0039
	400	.0035	
	300	.0025	
	200		

GENERAL DYNAMICS
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FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-9A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME:	A 1	B 2	C 3	D 4	E 5	F 6
AVERAGE WIDTH:	1.5010	1.5013	1.5016	1.5010	1.5004	
AVERAGE THICKNESS:	.3871	.3874	.3865	.3870	.3873	.3874

AREA: .5810

R-Cal 8100
Cal S 42.2 *

BASELINE STRESS: 33 KSI Apt 767

MAX. LOAD: 19173.0

CYCLES AT [redacted] FAILURE: * 2 Lives/___

(1) [redacted]

Service Loads A Between 2520 & 2530 FLTS
B
1 & 11

Completed 2 lives but failed plate "A" Before the end of 2 lives.

origin lies on Bolt Hole surface near corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives [redacted]	.4840	.1397
2480	.3443	.0935
2380	.2502	.0541
2280	.1967	.0416
2180	.1551	.0320
2080	.1231	.0276
1980	.0955	.0236
1880 *	.0719	.0179
1780	.0540	.0142
1680	.0398	.0096
1580	.0304	.0064
1480	.0235	.0054
1380	.0181	.0059
One Life 1280	.0123	.0023
1200	.0099	.0035
1100	.0074	.0032
1000	.0052	.0015
900	.0037	.0008
800	.0029	.0007
700	.0022	.0005
600	.0017	.0005
500	.0012	
400		
300		
200		

SPECIMEN NUMBER: XWPB-10A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME:	A 1	B 2	C 3	D 4	E 5	F 6
AVERAGE WIDTH:	1.4995	1.4978	1.4988	1.5012	1.5004	
AVERAGE THICKNESS:	.3814	.3828	.3783	.3840	.3810	.3810

AREA: .5719

R-Cal 7894
Cal S 41.8

BASELINE STRESS: 33 KSI Apt 755

MAX. LOAD: 18872.7

CYCLES AT [redacted] FAILURE: * 2 Lives/___

(1) 458,628 L.P.'s = 1778.71 FLTS *

Service Loads A KH
B 1 & 11

origin lies at corner.

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2180		
2080		
1980		
1880		
* [redacted]	.5006	.1768
1680	.3238	.0887
1580	.2351	.0572
1480	.1779	.0424
1380	.1355	.0357
One Life 1280	.0998	.0223
1200	.0775	.0194
1100	.0581	.0142
1000	.0439	.0098
900	.0342	.0080
800	.0262	.0061
700	.0201	.0050
600	.0151	.0043
500	.0108	.0037
400	.0071	.0023
300	.0045	.0024
200		

GENERAL DYNAMICS
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FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-11A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME:	A 1	B 2	C 3	D 4	E 5	F 6
AVERAGE WIDTH:	1.5039	1.5034	1.5041	1.5050	1.5033	
AVERAGE THICKNESS:	3785	3818	3799	3713	3794	3804

AREA: .5692 R-Cal 7668
Cal S 40.8

BASELINE STRESS: 33 Ksi Apt 7.51

MAX. LOAD: 18783.6

CYCLES AT [redacted]/FAILURE: * 2 Lives/

@ 458,628 L.P.S = 1778.7 FLTS

Service Loads A- KH
B- HH

Origin Lies on Bolt Hole surface.

FLTS.	Δ.L.	Δa
100	0007	0007

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2180		
2080		
1980		
1880		
[redacted] * →	.4535	.2057
1680	2478	0805
1580	1673	0539
1480	1139	0371
1380	0768	0245
One Life 1280	0525	0139
1200	0386	0105
1100	0281	0078
1000	0203	0059
900	0144	0041
800	0103	0026
700	0077	0019
600	0058	0013
500	0045	0013
400	0032	0011
300	0021	0010
200	0011	0004

SPECIMEN NUMBER: XWPB-12A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME:	A 1	B 2	C 3	D 4	E 5	F 6
AVERAGE WIDTH:	1.5010	1.4994	1.5016	1.5017	1.5013	
AVERAGE THICKNESS:	3835	3869	3823	3738	3835	3814

AREA: .5756 R-Cal 7957
Cal S 41.9

BASELINE STRESS: 33 Ksi Apt 7.60

MAX. LOAD: 18994.8

CYCLES AT [redacted]/FAILURE: * 2 Lives/

@ 517,974 L.P.S - 2008.87 FLTS *

Service Loads A- KH
B- HH

Origin lies at corner.

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2180		
[redacted] * →	.4475	.1049
1980	3426	1117
1880	2309	0605
1780	1704	0478
1680	1226	0328
1580	0898	0230
1480	0665	0183
1380	0485	0124
One Life 1280	0361	0063
1200	0298	0062
1100	0236	0060
1000	0176	0039
900	0137	0043
800	0094	0027
700	0067	0019
600	0047	0013
500	0035	0013
400	0022	
300		
200		

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GENERAL DYNAMICS
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FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-13B

SPECTRUM: Pomber

TEST DATE:

TEST FRAME: A B (C) D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5003	1.5009	1.5008	1.5006	1.4994	
AVERAGE THICKNESS:	.3784	.3795	.3773	.3782	.3768	.3772

AREA: .5677

R-Cal 18982 (8100)
Cal.S 43%

BASELINE STRESS: 33Ksi Apt 749

MAX. LOAD: 18735

CYCLES AT TERMINATION/FAILURE: 2Lives/___

@
STATIC LOAD A- 14.60K*
B- 14.30K*

origin lies on Bolt Hole surface near corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1423	.0229
	2480	1194	0224
	2380	0970	0186
	2280	0784	0137
	2180	0647	0118
	2080	0529	0096
	1980	0433	0065
	1880	0368	0047
	1780	0321	0049
	1680	0272	0049
	1580	0223	0034
	1480	0189	0040
	1380	0149	0028
One Life	1280	0121	0016
	1200	0105	0024
	1100	0081	0026
	1000	0055	0015
	900	0040	0010
	800	0030	0008
	700	0022	0007
	600	0015	0005
	500	0010	
	400		
	300		
	200		

SPECIMEN NUMBER: XWPB-15A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.4995	1.4986	1.4985	1.5006	1.5003	
AVERAGE THICKNESS:	.3791	.3820	.3782	.3809	.3773	.3773

AREA: .5684

R-Cal 18662 (7957)
Cal.S 42%

BASELINE STRESS: 33Ksi Apt 750

MAX. LOAD: 18757.2#

CYCLES AT [redacted]/FAILURE: * 2 Lives/___

@ 613357 L.P.'s = 2378.8 FLTS *

STATIC LOAD A- K*
B- K#

origin lies at corner Bolt Hole
Plate surfaces (A&B) were milled

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
Threelives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
* →	[redacted]	.3553	.0738
	2280	2415	0655
	2180	1760	0437
	2080	1323	0353
	1980	0970	0262
	1880	0708	0202
	1780	0506	0155
	1680	0351	0088
	1580	0263	0079
	1480	0184	0051
	1380	0133	0040
One Life	1280	0093	0023
	1200	0070	0022
	1100	0048	0014
	1000	0034	0010
	900	0024	0009
	800	0015	0005
	700	0010	
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
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FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-16A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F
1 2 3 4 5 6

AVERAGE WIDTH:	1.5008	1.5006	1.5015	1.5007	1.5005
AVERAGE THICKNESS:	3772	3793	3753	3800	3754	3760

AREA: .5661

R-Cal 17925 (7668)
Cal.S 41%

BASELINE STRESS: 33 KSI

Apst 741

MAX. LOAD: 18681.3

CYCLES AT [redacted]/FAILURE: * 2 Lives/

@ 404,526 L.P.'s = 1568.89 FLTS *

STATIC LOAD A- K*
B- K*

Origin lies at corner. Both Plate surfaces (A & B) were milled

FLTS	C.L.	Δa
100	0039	0059

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
* →	[redacted]	.4722	.1469
	1480	3262	0721
	1380	2481	0515
One Life	1280	1966	0482
	1200	1584	0335
	1100	1249	0296
	1000	0953	0202
	900	0757	0154
	800	0597	0156
	700	0441	0101
	600	0340	0087
	500	0253	0063
	400	0191	0057
	300	0133	0045
	200	0088	

SPECIMEN NUMBER: XWPB-21A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F
1 2 3 4 5 6

AVERAGE WIDTH:	1.5020	1.5022	1.5025	1.5027	1.5007
AVERAGE THICKNESS:	3731	3755	3705	3757	3722	3717

AREA: .5603

R-Cal 18982 (8109)
Cal.S 44%

BASELINE STRESS: 33 KSI

Apst 740

MAX. LOAD: 18489.9

CYCLES AT [redacted]/FAILURE: * 2 Lives/

@ 584,506 L.P.'s = 2266.91 *

STATIC LOAD A- K*
B- K*

Origin lies on Bott Hole Surface Both plate surfaces (A & B) were milled.

FLTS.	C.L.	Δ
100	0004	0004

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
* →	[redacted]	.5797	.2366
	2180	3431	0663
	2080	2768	0504
	1980	2264	0366
	1880	1898	0300
	1780	1598	0263
	1680	1335	0230
	1580	1105	0180
	1480	0925	0187
	1380	0738	0154
One Life	1280	0584	0113
	1200	0471	0122
	1100	0349	0096
	1000	0253	0068
	900	0185	0047
	800	0138	0032
	700	0104	0035
	600	0081	0023
	500	0058	0017
	400	0041	0015
	300	0026	0014
	200	0012	0008

GENERAL DYNAMICS
Fort Worth Division
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FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-22A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C (D) E F
1 2 3 4 5 6

AVERAGE WIDTH:	1.4996	1.4987	1.4995	1.5006	1.4998	
AVERAGE THICKNESS:	.3802	.3825	.3772	.3825	.3797	.3794

AREA: .5701

R-Cal 18478 (7804)
Cal.S 42%

BASELINE STRESS: 33 ksi

Apart 7.53

MAX. LOAD: 18813.3*

CYCLES AT [redacted]/FAILURE: * 2 Flives/

@ 507,624 L.P.S = 1968.73 FLTS.*

STATIC LOAD A- K*
B- K*

origin lies at corner. Both Plate surfaces (A&B) were milled.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2490		
	2380		
	2280		
	2180		
	2080		
* →	[redacted]	.5017	.2263
	1880	2754	0753
	1780	2001	0497
	1680	1504	0357
	1580	1147	0262
	1480	0885	0220
	1380	0665	0185
One Life	1280	0480	0101
	1200	0371	0095
	1100	0276	0070
	1000	0206	0054
	900	0152	0044
	800	0108	0033
	700	0075	0018
	600	0057	0011
	500	0038	0011
	400	0027	
	300		
	200		

SPECIMEN NUMBER: XWPB-23A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B (C) D E F
1 2 3 4 5 6

AVERAGE WIDTH:	1.4994	1.5008	1.4999	1.4985	1.4983	
AVERAGE THICKNESS:	.3803	.3802	.3805	.3806	.3801	.3803

AREA: .5703

R-Cal 18982 (8100)
Cal.S 43%

BASELINE STRESS: 33 ksi

Apart 7.53

MAX. LOAD: 18819

CYCLES AT [redacted]/FAILURE: *

@ 559,254 L.P.S = 2168.97 FLTS*

STATIC LOAD A- K*
B- K*

origin lies at corner. Both Plate surfaces (A&B) were milled

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
* →	[redacted]	.5207	.1793
	2080	3414	0729
	1980	2685	0497
	1880	2188	0359
	1780	1819	0298
	1680	1521	0238
	1580	1283	0214
	1480	1069	0195
	1380	0874	0144
One Life	1280	0730	0139
	1200	0591	0114
	1100	0477	0093
	1000	0384	0081
	900	0303	0078
	800	0225	0061
	700	0164	0048
	600	0116	0030
	500	0086	0026
	400	0060	
	300		
	200		

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FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-24B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C (D) E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5008	1.5014	1.5008	1.5004	1.5003	
AVERAGE THICKNESS: .3779	.3768	.3783	.3783	.3781	.3778	

AREA: .5671

R-Cal 18478 (7894)
Cal.S 42%

BASELINE STRESS: 38ksi Apt 749

MAX. LOAD: 18713

CYCLES AT TERMINATION/FAILURE: 2Lives/___

@

STATIC LOAD A-15.28 K*
B-13.00 K*

Origin lies on Bolt Hole surface near corner. Both plate surfaces A&B were milled.

FLT	Cb.
100	.0004

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1551	.0282
	2480	1269	0252
	2380	1017	0222
	2280	0795	0155
	2180	0640	0102
	2080	0538	0106
	1980	0432	0079
	1880	0353	0060
	1760	0293	0041
	1680	0252	0054
	1580	0198	0044
	1480	0154	0047
	1380	0107	0030
One Life	1280	0077	0018
	1200	0059	0011
	1100	0048	0010
	1000	0038	0009
	900	0029	0007
	800	0022	0004
	700	0018	0005
	600	0013	0003
	500	0010	0002
	400	0008	0001
	300	0007	0002
	200	0004	0004

SPECIMEN NUMBER: XWPB-25B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5010	1.5008	1.5006	1.5011	1.5012	
AVERAGE THICKNESS: .3840	.3818	.3831	.3848	.3847	.3853	

AREA: .5763

R-Cal 18652 (7957)
Cal.S 42%

BASELINE STRESS: 33ksi Apt 761

MAX. LOAD: 19017

CYCLES AT TERMINATION/FAILURE: 2Lives/___

@

STATIC LOAD A-13.06 K*
B-12.80 K*

Origin lies on Bolt Hole Surface. Both Plate surfaces A&B were milled

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.2508	.0350
	2480	2158	0399
	2380	1759	0316
	2280	1443	0289
	2180	1154	0287
	2080	0867	0205
	1980	0662	0184
	1880	0478	0145
	1780	0333	0084
	1680	0249	0066
	1580	0183	0045
	1480	0138	0039
	1380	0099	0021
One Life	1280	0078	0015
	1200	0063	0009
	1100	0054	0011
	1000	0043	0011
	900	0032	0007
	800	0025	0005
	700	0020	0003
	600	0017	
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-26B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME:	A 1	B 2	C 3	D 4	E 5	F 6
AVERAGE WIDTH:	1.5021	.4986	1.5028	1.5034	.5036	
AVERAGE THICKNESS:	.3844	.3837	.3842	.3850	.3845	.3846

AREA: .5774

R-Cal 19925 (7668)
Cal.S 40% *

BASELINE STRESS: 33K

Apt 7.62

MAX. LOAD: 19054

CYCLES AT [redacted]/FAILURE: * 2 Lives/____

@ 659,779 L.P.'s = 255894 Flts *

STATIC LOAD A- K*
B- K*

Origin lies on Bolt Hole Surface at base of Liner.

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
[redacted]	.4958	.1358
2480	.3000	0820
2380	.2180	0538
2280	.1642	0436
2180	.1206	0340
2080	0866	0235
1980	0631	0181
1880	0450	0116
1780	0334	0087
1680	0247	0074
1580	0173	0050
1480	0123	0033
1380	0090	0022
One Life 1280	0068	0013
1200	0055	0013
1100	0043	0008
1000	0034	0007
900	0027	0007
800	0020	0005
700	0015	0005
600	0009	
500		
400		
300		
200		

SPECIMEN NUMBER: XWPB-27B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME:	A 1	B 2	C 3	D 4	E 5	F 6
AVERAGE WIDTH:	1.5005	1.5000	1.5002	1.5009	1.5008	
AVERAGE THICKNESS:	.3791	.3769	.3771	.3771	.3768	.3824

AREA: .5688

R-Cal 18478 (7894)
Cal.S 42%

BASELINE STRESS: 33 ksi

Apt 7.51

MAX. LOAD: 18769

CYCLES AT TERMINATION/FAILURE: 2 Lives/____

@

STATIC LOAD A- 15.20 K*
B- 8.84 K*

Origin lies at corner

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560	.3325	0806
2480	.2519	0638
2380	.1882	0499
2280	.1383	0345
2180	.1038	0213
2080	0825	0170
1980	0655	0109
1880	0546	0098
1780	0448	0087
1680	0361	0060
1580	0301	0049
1480	0252	0050
1380	0202	0030
One Life 1280	0182	0027
1200	0155	0023
1100	0132	
1000		
900		
800		
700	Origin Damaged by	
600	Rubbing on itself	
500		
400		
300		
200		

FRACTOGRAPHIC DATA

(147)

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-28B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5017	1.5015	1.5010	1.5018	1.5024
AVERAGE THICKNESS: .3811	.3813	.3793	.3816	.3813	.3821

AREA: .5723

R-Cal 18652 (795)
Cal.S 42%

BASELINE STRESS: 33 ksi

Apt 7.55

MAX. LOAD: 18,887

CYCLES AT TERMINATION/FAILURE: 3Lives/___

@

STATIC LOAD A - 17.00 K*
B - 16.24 K*

origin lies at corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0708	.0076
	2480	0632	0083
	2380	0549	0078
	2280	0471	0055
	2180	0416	0044
	2080	0372	0042
	1980	0330	0036
	1880	0294	0030
	1780	0264	0036
	1680	0228	0035
	1580	0193	0033
	1480	0160	0030
	1380	0130	0014
One Life	1280	0116	0016
	1200	0100	0011
	1100	0089	0014
	1000	0075	0007
	900	0068	0010
	800	0058	0007
	700	0051	0006
	600	0045	
	500		
	400		
	300		
	200		

SPECIMEN NUMBER: XWPB-29A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E (F) / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5002	1.5004	1.5005	1.4999	1.4999
AVERAGE THICKNESS: .3854	.3843	.3841	.3846	.3866	.3874

AREA: .5782

R-Cal 17925 (766B)
Cal.S 40%

BASELINE STRESS: 33 ksi

Apt 7.63

MAX. LOAD: 19079

CYCLES AT TERMINATION/FAILURE: 2Lives/___

@

STATIC LOAD A - 12.74K*
B - 13.66K*

origin lies on Bolt Hole surface

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.2520	.0388
	2480	2132	0388
	2380	1744	0315
	2280	1429	0272
	2180	1157	0233
	2080	0924	0185
	1980	0739	0173
	1880	0566	0140
	1780	0426	0101
	1680	0325	0086
	1580	0239	0078
	1480	0161	0043
	1380	0118	0023
One Life	1280	0095	0016
	1200	0079	0014
	1100	0065	0011
	1000	0054	0008
	900	0046	0007
	800	0039	0004
	700	0035	0005
	600	0030	0005
	500	0025	0005
	400	0020	0004
	300	0016	0004
	200	0010	

(448)

Fits	CL.	Δ
100	0006	0004

GENERAL DYNAMICS
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FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-30B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B (C) D E F
1 2 (3) 4 5 6

AVERAGE WIDTH:	1.5000	1.4990	1.4996	1.5010	1.5005
AVERAGE THICKNESS:	.3827	.3806	.3817	.3813	.3844	.3853

AREA: .5739

R-Cal 8100 / 18982
Cal S 42.82

BASELINE STRESS: 33ksi Apt 7.58

MAX. LOAD: 18938.7 #

CYCLES AT [redacted]/FAILURE: * 2 Flives/____
@ 623699 L.P.F = 2418.91 * FLTS
Service Loads A- kW
B- kW

Origin lies on Bolt Hole surface near corner. Both plate surfaces (A&B) were milled.

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
* → [redacted]	.4589	.0964
2380	3545	0958
2280	2587	0555
2180	2032	0406
2080	1626	0295
1980	1331	0271
1880	1060	0211
1780	0849	0147
1680	0702	0127
1580	0575	0105
1480	0470	0092
1380	0378	0076
One Life 1280	0302	0054
1200	0248	0047
1100	0201	0042
1000	0159	0040
900	0119	
800		
700		
600		
500	Origin damaged by	
400	Putting in Stock	
300		
200		

SPECIMEN NUMBER: XWPB-31B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C (D) E F
1 2 3 (4) 5 6

AVERAGE WIDTH:	1.5013	1.5022	1.5027	1.5013	1.4993
AVERAGE THICKNESS:	.3821	.3822	.3783	.3824	.3839	.3840

AREA: .5736

R-Cal 7894 / 18478
Cal S 41.7

BASELINE STRESS: 33ksi Apt 7.57

MAX. LOAD: 18928.8

CYCLES AT [redacted]/FAILURE: * 2 Flives/____
@ 603111 L.P.F = 2339.06 FLTS *
Service Loads A- kW
B- kW

origin lies at corner. Both plate surface were milled (A&B)

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
* → [redacted]	.4402	.0974
2280	3428	0938
2180	2490	0578
2080	1912	0441
1980	1471	0372
1880	1099	0231
1780	0868	0199
1680	0669	0149
1580	0520	0103
1480	0418	0082
1380	0336	0070
One Life 1280	0266	0049
1200	0217	0044
1100	0173	0026
1000	0147	0040
900	0107	0027
800	0080	0018
700	0062	0009
600	0053	0008
500	0045	0010
400	0035	
300		
200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-32B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME:	A 1	B 2	C 3	D 4	(E) 5	F 6
AVERAGE WIDTH:	1.5006	1.5018	1.5010	1.5004	1.4994	
AVERAGE THICKNESS:	.3805	3795	3774	3793	3835	3830

AREA: .5709 R-Cal 7957/18652 Cal S 42.2

BASELINE STRESS: 33ksi Apt 7.54

MAX. LOAD: 18839.7

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

(1)

Terminal Load A-13.46 KN
B-13.98 KN

Origin lies on Bolt Hole surface at corner. Both plate surfaces were milled.

SPECIMEN NUMBER: XWPB-33B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME:	A 1	B 2	C 3	D 4	E 5	(F) 6
AVERAGE WIDTH:	1.5014	1.5010	1.5006	1.5019	1.5021	
AVERAGE THICKNESS:	3802	3816	3792	3816	3795	3794

AREA: .5708 R-Cal 7668/17925 Cal S 40.7

BASELINE STRESS: 33ksi Apt 7.53

MAX. LOAD: 18836.4

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

(2)

Terminal Load A-15.70 KN
B-13.84 KN

Origin lies at corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
Three Lives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3150		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1887	.0293
	2480	.1594	.0322
	2380	.1272	.0255
	2280	.1017	.0205
	2180	.0812	.0152
	2080	.0660	.0112
	1980	.0548	.0126
	1880	.0422	.0077
	1780	.0345	.0060
	1680	.0285	.0058
	1580	.0227	.0043
	1480	.0184	.0035
	1380	.0149	.0034
One Life	1280	.0115	.0025
	1200	.0090	.0022
	1100	.0068	.0016
	1000	.0054	.0010
	900	.0044	.0007
	800	.0037	.0011
	700	.0026	.0008
	600	.0018	.0005
	500	.0013	.0005
	400	.0008	
	300		
	200		

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
Three Lives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1594	.0270
	2480	.1324	.0265
	2380	.1059	.0212
	2280	.0847	.0183
	2180	.0664	.0140
	2080	.0524	.0121
	1980	.0403	.0063
	1880	.0340	.0052
	1780	.0288	.0047
	1680	.0241	.0044
	1580	.0197	.0029
	1480	.0168	.0028
	1380	.0140	.0028
One Life	1280	.0112	.0018
	1200	.0094	.0019
	1100	.0075	.0019
	1000	.0056	.0016
	900	.0040	
	800		
	700	Origin Damage by	
	600	Rubbing on Body	
	500		
	400		
	300		
	200		

(150)

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XWPB-34B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5014	1.5013	1.5011	1.5019	1.5014
AVERAGE THICKNESS:	.3822	.3915	.3861	.3858	.3799	.3806

AREA: .5738

R-Cal 16652 (7957)
Cal S 45%

BASELINE STRESS: 31 Ksi Apt 712

MAX. LOAD: 17709

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

(3)

Stress Levels A- 16.20 KSI
B 14.14 " "

Origin lies on Bolt Hole surface at the base of a sliver

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
Three Lives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1854	.0201
	2480	.1653	.0245
	2380	.1390	.0260
	2280	.1190	.0212
	2180	.0978	.0174
	2080	.0804	.0151
	1980	.0643	.0138
	1880	.0505	.0127
	1780	.0378	.0089
	1680	.0289	.0070
	1580	.0219	.0058
	1480	.0161	.0038
	1380	.0123	.0030
One Life	1280	.0093	.0016
	1200	.0077	.0025
	1100	.0064	.0010
	1000	.0054	
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

SPECIMEN NUMBER: XWPB-35A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5015	1.5012	1.5012	1.5024	1.5011
AVERAGE THICKNESS:	.3830	.3825	.3827	.3831	.3833	.3834

AREA: .5751

R-Cal 17925 (7668)
Cal S 43%

BASELINE STRESS: 31 Ksi Apt 713

MAX. LOAD: 17827

CYCLES AT TERMINATION/FAILURE: 3 Lives/___

(4)

Stress Levels A-15.36 KSI
B 15.64 " "

Origin lies on Bolt Hole surface at the base of a sliver.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
Three Lives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0848	.0143
	2480	.0705	.0148
	2380	.0557	.0122
	2280	.0435	.0098
	2180	.0337	.0079
	2080	.0258	.0055
	1980	.0203	.0034
	1880	.0168	.0027
	1780	.0141	.0021
	1680	.0120	.0021
	1580	.0099	.0016
	1480	.0083	.0011
	1380	.0072	.0011
One Life	1280	.0061	.0005
	1200	.0056	.0009
	1100	.0047	.0009
	1000	.0038	.0007
	900	.0031	.0004
	800	.0027	.0005
	700	.0022	.0003
	600	.0019	.0004
	500	.0015	.0005
	400	.0010	.0003
	300	.0007	.0005
	200	.0004	

(151)

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: KW 03-37B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME:	A 1	B 2	C 3	D 4	E 5	F 6
AVERAGE WIDTH:	1.5011			1.5018	1.5019	1.5007	1.4999
AVERAGE THICKNESS:	.3788	.3808	.3761	.3814	.3784	.3782

AREA: .5688

T-Cal 17925 (7668)
Cal S 43%

BASELINE STRESS: 31 ksi Apt 705

MAX. LOAD: 17635

CYCLES AT TERMINATION/FAILURE: Two Lives/

(2)

Simulated A-16.24 KH
B-14.26 KH

Origin lies on Bolt Hole surface from a Sliver defect.

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560	.1283	.0195
2480	0888	0185
2380	0703	0144
2280	0559	0127
2180	0432	0098
2080	0334	0052
1980	0215	0054
1880	0222	0044
1780	0178	0040
1680	0138	0032
1580	0106	0021
1480	0085	0017
1380	0068	0015
Con Life 1280	0053	0008
1200	0045	0012
1100	0033	0006
1000	0027	0005
900	0022	
800		
700		
600		
500		
400		
300		
200		

2.2.3 XQPF

FATIGUE TEST DATA

2 Lives

$a/2c = .2$

SPECIMEN NUMBER: XQPF-1 T

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 (90)

AVERAGE WIDTH: 1.5017

AVERAGE THICKNESS: .3769 // 3758 / 3735 / 3766 / 3795 / 3795

AREA: .5659 Rcal 18362

BASELINE STRESS: 34 KSI Cal 5-5 98.6

AX. LOAD: 19,241.6 # Apt 7.69

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A - 17.5 K#

B - 17.72 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN	INCREMENT IN.
40	16000	.00542 / .02594	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-2 T

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 (89)

AVERAGE WIDTH: 1.5025

AVERAGE THICKNESS: .3766 // 3751 / 3751 / 3756 / 3787 / 3792 /

AREA: .5659 RCAL 18627

BASELINE STRESS: 34 KSI Cal 5-5 96.8

AX. LOAD: 19,239.6 Apt 7.69

1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A - 16.58 K#

B - 16.08 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.06165	.00509
39	15600	.05656	.00662
38	15200	.04994	.00557
37	14800	.04437	.00540
36	14400	.03897	.00447
35	14000	.03450	.00486
34	13600	.02964	.00441
33	13200	.02523	.00300
32	12800	.02223	.00263
31	12400	.01960	.00273
30	12000	.01687	.00240
29	11600	.01447	.00197
28	11200	.01250	.00139
27	10800	.01111	.00111
26	10400	.01000	.00123
25	10000	.00877	.00110
24	9600	.00767	.00125
23	9200	.00642	.00078
22	8800	.00564	.00082
21	8400	.00482	.00075
20	8000	.00407	.00053
19	7600	.00354	.00051
18	7200	.00303	.00048
17	6800	.00255	.00034
16	6400	.00221	.00032
15	6000	.00189	.00033
14	5600	.00156	.00023
13	5200	.00133	.00034
12	4800	.00099	.00020
11	4400	.00079	.00019
10	4000	.00060	.00023
9	3600	.00037	.00016
8	3200	.00021	.00013
7	2800	.00008	
6	2400		
5	2000		
4	1600		
3	1200		(16-3)
2	800		
1	400		

9

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-4 A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6) (7)

VERAGE WIDTH: 1.5007

VERAGE THICKNESS: .3778 // 3775/3757/3763/3800/3797

REA: .5670 REAL 15094

ASELINE STRESS: 34 KSI CAL SWING 94.5

AX. LOAD: 19,278.8 # A POT 771 1 Life

YCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A - 16.56 K#
B - 17.76 K#

ORIGIN LIES ON SURFACE WHICH MATES WITH PLATE B NEAR CORNER

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.07510	00473
39	15600	.07037	00495
38	15200	06542	00513
37	14800	05967	00487
36	14400	05480	00410
35	14000	05070	00310
34	13600	04760	00252
33	13200	04508	00262
32	12800	04246	00361
31	12400	03885	00217
30	12000	03668	00261
29	11600	03407	00232
28	11200	03175	00209
27	10800	02966	00186
26	10400	02780	00216
25	10000	02564	00203
24	9600	02361	00193
23	9200	02168	00168
22	8800	02000	00180
21	8400	01820	00172
20	8000	01658	00168
19	7600	01490	00162
18	7200	01328	00128
17	6800	01200	00108
16	6400	01092	00089
15	6000	01003	00103
14	5600	00900	00107
13	5200	00793	00080
12	4800	00713	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-3 I

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 (88)

VERAGE WIDTH: 1.5013

VERAGE THICKNESS: .3837 // 3852/3822/3847/3832/3834

REA: .5761 REAL 18752

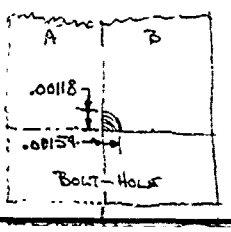
ASELINE STRESS: 34 KSI CAL SWING 95.7

AX. LOAD: 19,587.7 # A POT 783 1 Life

YCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A - 17.68 K#
B - 18.22 K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-5 A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5) (16)

VERAGE WIDTH: 1.5006

VERAGE THICKNESS: .3739 / .3724 / .3722 / .3726 / .3760 / .3765

REA: .5611

ASELINE STRESS: 34ksi

AX. LOAD: 19,078.6 #

YCLES AT TERMINATION/FAILURE:

2 Lives/_____

R CAL 18652

CAL SWING 98.2

1 Life

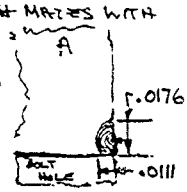
APOT 763

STATIC LOAD A - 17.40 K#

B - 17.54 K#

ORIGIN LIES ON SURFACE WHICH MATES WITH PLATE "B" NEAR CORNER

MATING SURFACES WERE MILLED



FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-6A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 88

VERAGE WIDTH: 1.4995

VERAGE THICKNESS: .3790 / .3813 / .3760 / .3822 / .3727 / .3779

REA: .5683

ASELINE STRESS: 34ksi

AX. LOAD: 19,323.6 #

YCLES AT TERMINATION/FAILURE:

2 Lives/_____

R CAL 18752

CAL SWING 97%

APOT 773

1 Life

STATIC LOAD - A - 16.3* K#

B - 16.36 K#

ORIGIN LIES ON SURFACE WHICH MATES WITH PLATE "B" NEAR CORNER. MATING SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	360[illegible]		
8	32[illegible]		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0676	.0056
39	15600	0620	0054
38	15200	0566	0046
37	14800	0525	0050
36	14400	0475	0035
35	14000	0440	0033
34	13600	0407	0036
33	13200	0371	0034
32	12800	0337	0022
31	12400	0315	0025
30	12000	0290	0027
29	11600	0263	0029
28	11200	0234	0027
27	10800	0207	0016
26	10400	0191	0017
25	10000	0174	0019
24	9600	0155	0019
23	9200	0136	0024
22	8800	0112	0020
21	8400	0092	0020
20	8000	0072	0014
19	7600	0058	0014
18	7200	0044	0012
17	6800	0032	0009
16	6400	0023	0006
15	6000	0017	0004
14	5600	0013	0003
13	5200	0011	0004
12	4800	0007	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-7A *

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 89

VERAGE WIDTH: 1.5023

VERAGE THICKNESS: .3781 //3805/3764/3798/3764/3772

REA: .5680 R. CAL. 18627

ASELINE STRESS: 34KSI CAL Setting 90

AX. LOAD: 19,310.6# Apr 772

1 Life

YCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,396,704 = 14,591.81

** ZERO FOR SECONDARY ORIGIN LIES .0930 INCHES FROM PRIMARY ORIGIN.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. PRIMARY	CRACK LENGTH IN. SECONDARY	INCREMENT IN. PRIMARY	INCREMENT IN. SECONDARY
40	16000				
39	15600				
38	15200				
37	[redacted]	.5104	.4204	0036	0036
36	14400	5068	4168	.1886	1386
35	14000	3682	2782	0674	0674
34	13600	3008	2108	0494	0494
33	13200	2514	1614	0333	0333
32	12800	2181	1281	0238	0238
31	12400	1943	1043	0183	0183
30	12000	1760	0860	0547	0155
29	11600	1213	0705	0149	0121
28	11200	1064	0584	0129	0108
27	10800	0935	0476	0111	0093
26	10400	0824	0383	0099	0054
25	10000	0725	0329	0076	0052
24	9600	0649	0277	0071	0064
23	9200	0578	0213	0057	0025
22	8800	0521	0188	0094	
21	8400	0477	**	0095	
20	8000	0432		0029	
19	7600	0403		0027	
18	7200	0376		0027	
17	6800	0349		0027	
16	6400	0322		0029	
15	6000	0293		0020	
14	5600	0273		0023	
13	5200	0250		0022	
12	4800	0228		0019	
11	4400	0209			
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-8A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

ERAGE WIDTH: 1.5063

ERAGE THICKNESS: .3840 //3856/3813/3850/3837/3845

EA: .5783

SELINE STRESS: 34KSI

X. LOAD: 19,663.4#

1 Life

CLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,187,527 = 12,406.5 FLT-HRS *

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	[redacted]	.5070	.0020
31	12400	5050	.1660
30	12000	3390	0468
29	11600	2956	0315
28	11200	2641	0397
27	10800	2244	0280
26	10400	1964	0160
25	10000	1804	0205
24	9600	1599	0104
23	9200	1495	0206
22	8800	1289	0179
21	8400	1110	0156
20	8000	0954	0150
19	7600	0804	0103
18	7200	0701	0087
17	6800	0614	0082
16	6400	0532	0060
15	6000	0472	0054
14	5600	0418	0047
13	5200	0371	0044
12	4800	0327	0041
11	4400	0286	0041
10	4000	0245	0035
9	3600	0210	0033
8	3200	0177	0033
7	2800	0144	0022
6	2400	0122	0023
5	2000	0099	0025
4	1600	0074	0025
3	1200	0049	
2	800		
1	400		(456)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-7A *

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 89

VERAGE WIDTH: 1.5023

VERAGE THICKNESS: .3781 // 3805 / 3764 / 3798 / 3764 / 3772

REA: .5680 R. CAL. 18627

ASELINE STRESS: 34KSI CAL SHOWS 90 -

AX. LOAD: 19,310.6# Apr 772

1 Life

YCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,396,704 = 14,591.81

** ZERO FOR SECONDARY ORIGIN LIES .0900 INCHES FROM PRIMARY ORIGIN.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. PRIMARY	CRACK LENGTH IN. SECONDARY	INCREMENT IN. PRIMARY	INCREMENT IN. SECONDARY
40	16000				
39	15600				
38	15200				
37	[redacted]	.5104	.4204	.0036	.0036
36	14400	.5068	.4168	.1886	.1396
35	14000	.3682	.2782	.0674	.0674
34	13600	.3008	.2108	.0494	.0494
33	13200	.2514	.1614	.0333	.0333
32	12800	.2181	.1281	.0238	.0238
31	12400	.1943	.1043	.0183	.0183
30	12000	.1760	.0860	.0547	.0155
29	11600	.1213	.0705	.0149	.0121
28	11200	.1064	.0584	.0129	.0108
27	10800	.0935	.0476	.0111	.0093
26	10400	.0824	.0383	.0099	.0054
25	10000	.0725	.0329	.0076	.0052
24	9600	.0649	.0277	.0071	.0064
23	9200	.0578	.0213	.0057	.0029
22	8800	.0521	.0184	.0094	
21	8400	.0477	**	.0095	
20	8000	.0432		.0029	
19	7600	.0403		.0027	
18	7200	.0376		.0027	
17	6800	.0349		.0027	
16	6400	.0322		.0029	
15	6000	.0293		.0020	
14	5600	.0273		.0023	
13	5200	.0250		.0022	
12	4800	.0228		.0019	
11	4400	.0209			
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-8A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6)

ERAGE WIDTH: 1.5063

ERAGE THICKNESS: .3840 // 3856 / 3813 / 3850 / 3837 / 3845

EA: .5783

SELINE STRESS: 34KSI

X. LOAD: 19,663.4#

1 Life

CLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,187,527 = 12,406.5 FLT-HRS *

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	[redacted]	.5070	.0020
31	12400	.5050	.1660
30	12000	.3390	.0468
29	11600	.2956	.0315
28	11200	.2641	.0397
27	10800	.2244	.0280
26	10400	.1964	.0160
25	10000	.1804	.0205
24	9600	.1599	.0104
23	9200	.1495	.0206
22	8800	.1289	.0179
21	8400	.1110	.0156
20	8000	.0954	.0150
19	7600	.0804	.0103
18	7200	.0701	.0087
17	6800	.0614	.0083
16	6400	.0532	.0060
15	6000	.0472	.0054
14	5600	.0418	.0047
13	5200	.0371	.0044
12	4800	.0327	.0041
11	4400	.0286	.0041
10	4000	.0246	.0035
9	3600	.0210	.0033
8	3200	.0177	.0033
7	2800	.0144	.0022
6	2400	.0122	.0023
5	2000	.0099	.0025
4	1600	.0074	.0025
3	1200	.0049	
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-9A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5) 16

VERAGE WIDTH: 1.5012

VERAGE THICKNESS: .3785 //3783/3758/3782/3796/3800

REA: .5681 R. Cal 18.32

ASELINE STRESS: 34 Ksi Cal Swing 93.5

AX. LOAD: 19,318.9 # Apr 7.72 1 Life

YCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD - A - 14.62 K#

B - 15.98 K#

ORIGIN LIES AT BOLT HOLE/SURFACE CORNER -

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1669	.0188
39	15600	1481	0165
38	15200	1316	0136
37	14800	1180	0123
36	14400	1057	0180
35	14000	0877	0077
34	13600	0800	0067
33	13200	0733	0058
32	12800	0675	0050
31	12400	0625	0041
30	12000	0584	0039
29	11600	0545	0039
28	11200	0506	0038
27	10800	0468	0033
26	10400	0435	0029
25	10000	0406	0025
24	9600	0381	0021
23	9200	0360	0025
22	8800	0335	0025
21	8400	0310	0018
20	8000	0292	0018
19	7600	0274	0021
18	7200	0253	0023
17	6800	0230	0025
16	6400	0205	0019
15	6000	0186	0017
14	5600	0169	
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-10

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

VERAGE WIDTH: 1.5034

VERAGE THICKNESS: .3790 //3810/3760/3811/3782/3785

RFA: .5697 R Cal 18.04

ASELINE STRESS: 34 Ksi Cal Swing 93.4

AX. LOAD: 19,370.8 # Apr 7.74 1 Life

YCLES AT TERMINATION/~~FAILURE~~:

2 Lives/_____

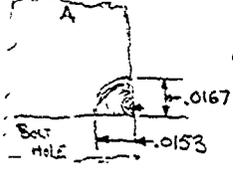
Started 5/17 15:7:46

FINAL 5/19 04:19:27

2 Lives ~~& 1 Time~~: 37:11:41

STATIC LOAD A - 17.62 K#

B - 18.10 K#



ORIGIN LIES ON SURFACE WHICH MATES WITH PLATE B NEAR CORNER. MATING SURFACES WERE MILLED

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		(45)
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPF - 11

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: ~~3~~ (2)

AVERAGE WIDTH:	1.5011	1.5006	1.4995	1.5022	1.5022	
AVERAGE THICKNESS:	.3785	.3774	.3762	.3770	.3811	.3810

AREA: .5682 RCAL. 18627

BASELINE STRESS: _____ CALS 96%

MAX. LOAD: 19319.7 A.POT. 773

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-17.98 K#
B-17.84 K#

MATING SURFACES WERE MILLED

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCR
40	16000	.0000	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-12B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5

ERAGE WIDTH: 1.5000

ERAGE THICKNESS: .3770 / 3756 / 3753 / 3762 / 3794 / 3787

EA: .5656 RCAL 18094

SELINE STRESS: 34 Ksi CAL ~~34~~ 34.1

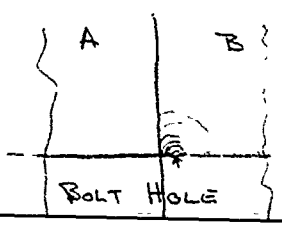
X. LOAD: 19229.0# APOT 769

1 Life

CLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-17.18 K#
B-17.36 K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0355	.0020
39	15600	0335	0015
38	15200	0320	0014
37	14800	0306	0013
36	14400	0293	0014
35	14000	0279	0013
34	13600	0266	0014
33	13200	0252	0015
32	12800	0237	0010
31	12400	0227	0012
30	12000	0215	0011
29	11600	0204	0013
28	11200	0191	0010
27	10800	0181	0013
26	10400	0168	0013
25	10000	0155	0010
24	9600	0145	0011
23	9200	0134	0012
22	8800	0122	0010
21	8400	0112	0209
20	8000	0103	0010
19	7600	0093	0012
18	7200	.0081	0011
17	6800	0070	0009
16	6400	0061	0009
15	6000	0052	0009
14	5600	0043	0007
13	5200	0036	0025
12	4800	0031	0006
11	4400	0025	0005
10	4000	0020	
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-13B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6 88

ERAGE WIDTH: 1.5018 | 1.5023 | 1.5016 | 1.5008 | 1.5012 |

ERAGE THICKNESS: .3782 | .3769 | 3774 | .3771 | .3797 | .3799 |

A: .5690 RCAL 18752

ELINE STRESS: 34ksi CS 97%

LOAD: 19311.3 A.P 772

1 Life

LES AT TERMINATION/FAILURE:

2 Lives/_____

TATIC LOAD A-16.74 K#
B-17.20 K#

ORIGIN LIES ON PLATE SURFACE, MATING SURFACES WERE MILLED. FATIGUE ORIGIN DUE TO TOOL MARKS & FRETTING.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0267	.0033
39	15600	0234	0026
38	15200	0208	0016
37	14800	0192	0020
36	14400	0172	0020
35	14000	0152	0021
34	13600	0131	0014
33	13200	0117	0018
32	12800	0099	
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

9/2C=.60

SPECIMEN NUMBER: XQPF-14B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 ~~6~~ 88

ERAGE WIDTH: ~~1.5~~ 1.4995

ERAGE THICKNESS: .3791 | .3779 | .3767 | .3777 | .3815 | .3816 |

EA: .5684 RCAL 18752

SELINE STRESS: 34KSI CAL SWING 97.6%

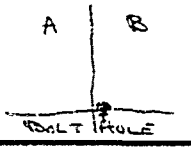
X. LOAD: 19,326.6# A POT 7.7V 1 Life

CLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-18.18 K#
B-17.53 K#

ORIGIN LIES ON BOLT HOLE SURFACE NEAR CORNER MATING PLATES SURFACES WERE MILLED



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0052 / 0086	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-15B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6 (89)

ERAGE WIDTH: 1.4998

ERAGE THICKNESS: .3803 / .3784 / .3794 / .3794 / .3822 / .3819 /

EA: .5703 R CAL 18627

SELINE STRESS: 34KSI Cal sw ng 96.1

X. LOAD: 19,390.7# Apnt 275

1 Life

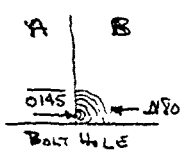
CLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-17.48 K#

B-17.64 K#

ORIGIN LIES ON SURFACE WHICH MATES WITH PLATE "A" NEAR CORNER



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0145	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-16B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6 (90)

ERAGE WIDTH: 1.4997

ERAGE THICKNESS: .3795 / .3795 / .3765 / .3796 / .3811 / .3809

EA: .5692 R CAL 18982

SELINE STRESS: 34KSI Cal sw ng 98.1

X. LOAD: 19,351.6# Apnt. 274

1 Life

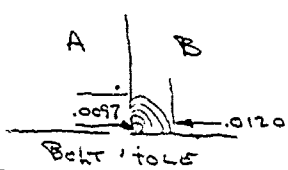
CLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-17.22 K#

B-17.70 K#

ORIGIN LIES ON SURFACE WHICH MATES WITH PLATE "A" NEAR CORNER.



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0097	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		(162)
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-19A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6 99

RAGE WIDTH: 1.5023 | 1.5024 | 1.5021 | 1.5025 | 1.5021

RAGE THICKNESS: .3817 | .3807 | .3905 | .3809 | .3835 | .3827

A: .5734 R.CAL 18627

KLINE STRESS: 34ksi C.S. 96%

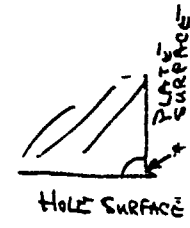
. LOAD: 19494.5 A.P. 7.80

1 Life

LES AT TERMINATION/FAILURE:

2 Lives/_____

TATIC LOAD A-16.06 K#
B-17.41 K#



ORIGIN* LIES ON PLATE SURFACE/BURR INTERFACE.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0141	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-18

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6) (16)

ERAGE WIDTH: 1.5001

ERAGE THICKNESS: .3795 | .3805 | .3758 | .3806 | .3798 | .3806

EA: .5692 E CAL 18652

SELINE STRESS: 34ksi CAL SW.# 96.4

X. LOAD: 19,353.8# APOT 7.74

1 Life

CLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-17.38 K#
B-17.69 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0000	.0000
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-19B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6) (17)

ERAGE WIDTH: 1.5001 ___ ___ ___

ERAGE THICKNESS: .3772 // 3755 / 3758 / 3760 / 3797 / 3792 /

EA: .5659 R Cal. 18478

SELINE STRESS: 34 KSI Cal Swing 96.0

X. LOAD: 19,240.5# 7.70

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A-17.59 K#

B-17.58 K#

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-20B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5 6

ERAGE WIDTH: 1.5001 ___ ___ ___

ERAGE THICKNESS: .3770 // 3738 / 3748 / 3790 / 3760 / 3764

EA: .5655 R Cal 18094

SELINE STRESS: 34 KSI Cal Swing 94.1%

X. LOAD: 19,228.3# Apor 7.69

1 Life

CLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-17.66 K#

B-17.08 K#

$\frac{a}{2c} = .49$

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0203	.0010
39	15600	.0193	.0013
38	15200	.0180	.0008
37	14800	.0172	.0009
36	14400	.0163	.0009
35	14000	.0154	.0010
34	13600	.0144	.0009
33	13200	.0135	.0010
32	12800	.0125	.0008
31	12400	.0117	.0007
30	12000	.0110	.0009
29	11600	.0101	.0007
28	11200	.0094	.0006
27	10800	.0088	.0006
26	10400	.0082	.0005
25	10000	.0077	.0006
24	9600	.0071	
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

COUNTED DOWN TO →

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0098 / 2c = .0202	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-21

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (17)

ERAGE WIDTH: 1.5000

ERAGE THICKNESS: .3820 //3850/3803/3836/3802/3810/

EA: .5730 RCAL 18478

SELINE STRESS: 34ksi cal swing 95%

X. LOAD: ~~19,880~~ 19,481.0# Apof 7.79

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/_____

OVERLOADED IN COMPRESSION (1004#)
SPECIMEN WAS DESTROYED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-21A

SPECTRUM: Fighter

TEST DATE: _____ 88

TEST FRAME: (1) 2 3 4 5 6

.RAGE WIDTH: 1.5021 | 1.5021 | 1.5023 | 1.5022 | 1.5018

'RAGE THICKNESS: .3794 | .3797 | .3785 | .3788 | .3795 | .3795

.A: .5699 RCAL 18752

'ELINE STRESS: 34ksi CS 97% AP 7.75

.. LOAD: 19376.5

1 Life

'LES AT TERMINATION/FAILURE:

2 Lives/_____

.TATIC LOAD A-17.24 K#
B-17.32 K#

ORIGIN LIES AT CORNER

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0324	.0024
39	15600	.0300	.0015
38	15200	.0285	.0014
37	14800	.0271	.0013
36	14400	.0258	.0014
35	14000	.0244	.0016
34	13600	.0228	.0015
33	13200	.0213	.0019
32	12800	.0197	.0017
31	12400	.0178	.0014
30	12000	.0161	.0016
29	11600	.0147	.0012
28	11200	.0131	.0014
27	10800	.0119	.0012
26	10400	.0105	.0015
25	10000	.0093	.0015
24	9600	.0078	.0015
23	9200	.0063	
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(163)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-22B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5) 16

ERAGE WIDTH: 1.5003 // 1.4996 / 1.5010 / 1.5010 / 1.4995

ERAGE THICKNESS: .3773 // 3760 / 3757 / 3759 / 3796 / 3795

EA: .5661 Rcal 18652

SELINE STRESS: 34ksi Cal Stang 97.0

X. LOAD: 19,248.2# Apor 7.70

1 Life

CLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A - 17.62 K#

B - 17.63 K#

$\frac{a}{2c} = .43$

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.006 / 2c = .014	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-23B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6) 17

ERAGE WIDTH: 1.4998 // 1.5005 / 1.4991 / 1.4989 / 1.5005 *

ERAGE THICKNESS: .3768 // 3753 / 3757 / 3757 / 3787 / 3787

EA: .5652 Rcal 18478

SELINE STRESS: 34ksi C.S. 96.1

X. LOAD: 19,215.3# A.P. 7.70

1 Life

CLES AT [redacted]/FAILURE: *

2 Lives/_____ *

@ 1,110,975 L.P. = 11,606.71 FLT-HRS

ORIGIN : AT CORNER

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	[redacted]	.5289	.0075
29	11600	5214	1095
28	11200	4119	0392
27	10800	3727	0317
26	10400	3410	0282
25	10000	3128	0276
24	9600	2852	0276
23	9200	2609	0196
22	8800	2408	0169
21	8400	2239	0154
20	8000	2085	0131
19	7600	1954	0089
18	7200	1855	0091
17	6800	1764	0061
16	6400	1703	0063
15	6000	1640	0063
14	5600	1577	0048
13	5200	1529	0049
12	4800	1480	0035
11	4400	1445	0056
10	4000	1389	
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(164)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-24B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 #3

ERAGE WIDTH: 1.5007 // 1.5005 / 1.5013 / 1.5004 / 1.5010

ERAGE THICKNESS: .3828 // 3824 / 3806 / 3821 / 3845 / 3834

EA: .5745 R.cal .8752

SELINE STRESS: 34 ksi CS 96%

X. LOAD: 17,531.9 # AP 7.81

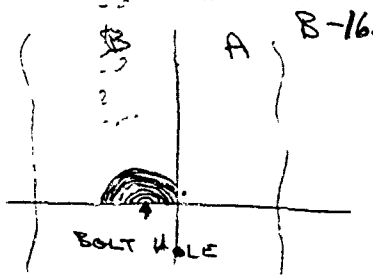
1 Life

CLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A - 16.62 K#

B - 16.62 K#



FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-25A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 #3

ERAGE WIDTH: 1.5004 // 1.5014 / 1.4994 / 1.5004 / 1.5013

ERAGE THICKNESS: .3787 // 3775 / 3773 / 3774 / 3804 / 3809

EA: .5683 RC 18627

SELINE STRESS: 34 ksi CS 96.4

X. LOAD: 19,320.9 # AP 7.73

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A - 15.2 K#

B - 16.98 K#

ORIGIN LIES ON SURFACE WHICH MATES WITH PLATE "B". PLATE MATING SURFACES WERE MILLED.

169

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0715	.0048
39	15600	0367	0035
38	15200	0332	0034
37	14800	0298	0035
36	14400	0263	0024
35	14000	0239	0020
34	13600	0219	0020
33	13200	0199	0016
32	12800	0183	0012
31	12400	0171	0013
30	12000	0158	0013
29	11600	0145	0011
28	11200	0134	0011
27	10800	0123	0010
26	10400	0113	0010
25	10000	0103	0009
24	9600	0094	0008
23	9200	0086	0008
22	8800	0078	0008
21	8400	0070	0007
20	8000	0063	0006
19	7600	0057	0006
18	7200	0049	0008
17	6800	0044	0005
16	6400	0041	0003
15	6000	0038	0004
14	5600	0034	
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0790	.0053
39	15600	0737	0062
38	15200	0675	0049
37	14800	0626	0046
36	14400	0580	0038
35	14000	0542	0036
34	13600	0506	0031
33	13200	0475	0032
32	12800	0443	0030
31	12400	0413	0026
30	12000	0387	0026
29	11600	0361	0023
28	11200	0338	0027
27	10800	0311	0021
26	10400	0290	0025
25	10000	0265	0020
24	9600	0245	0024
23	9200	0221	0021
22	8800	0200	5019
21	8400	0181	
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

165

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-26A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 90

ERAGE WIDTH: 1.5013 //1.5013/1.5013/1.5016/1.5010

ERAGE THICKNESS: .3790 //3790/3780/3795/3795/3792

EA: .5691

RC 18382
CS 98 %
AP 7.7Y

SELINE STRESS: 34ksi

X. LOAD: 19,347.8 #

1 Life

CLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD A - 16.86 K#
B - 17.10 K#

ORIGIN LIES AT CORNER

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0426	.0029
39	15600	0397	0023
38	15200	0374	0022
37	14800	0352	0014
36	14400	0338	0017
35	14000	0321	0015
34	13600	0306	0016
33	13200	0290	0011
32	12800	0279	0008
31	12400	0271	0012
30	12000	0259	0007
29	11600	0252	0010
28	11200	0242	0011
27	10800	0231	0007
26	10400	0224	0006
25	10000	0218	0010
24	9600	0208	0010
23	9200	0198	0010
22	8800	0188	0009
21	8400	0179	0009
20	8000	0170	0009
19	7600	0161	0007
18	7200	0154	0007
17	6800	0147	0010
16	6400	0137	0010
15	6000	0127	0008
14	5600	0119	
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-27B

SPECTRUM: Fighter

TEST DATE: _____ (16)

TEST FRAME: 1 2 3 4 5

ERAGE WIDTH: 1.4996 //1.4988/1.5002/1.5003/1.4992

ERAGE THICKNESS: .3802//3790/3795/3795/3807/3805

EA: .5701

RC 18652
CS 96.2%
AP 7.7S

SELINE STRESS: 34ksi

X. LOAD: 19,384.0#

1 Life

CLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD A-17.58 K#
B-14.34 K#

ORIGIN LIES AT CORNER STARTING FROM A "CURB".

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1184	.0149
39	15600	1035	0105
38	15200	0930	0171
37	14800	0759	0058
36	14400	0701	0051
35	14000	0650	0060
34	13600	0590	0032
33	13200	0558	0028
32	12800	0530	0027
31	12400	0503	0026
30	12000	0477	0025
29	11600	0452	0022
28	11200	0430	0024
27	10800	0406	0018
26	10400	0388	0020
25	10000	0368	0024
24	9600	0344	0020
23	9200	0324	0022
22	8800	0302	0019
21	8400	0283	0021
20	8000	0262	
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-28A

SPECTRUM: Fighter

TEST DATE: _____ (17)

TEST FRAME: 1 2 3 4 5

ERAGE WIDTH: 1.5014 //15020/15005/15002/15028

ERAGE THICKNESS: .3807 //3816/3793/3818/3802/3806

EA: .5715 RCAL 18054

SELINE STRESS: 34ksi CS 93.1%

X. LOAD: 19,431.8# AP 777

1 Life

CLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-14.14 K#
B-15.86 K#

ORIGIN LIES AT CORNER.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1332	.0119
39	15600	1213	0095
38	15200	1118	0095
37	14800	1023	0086
36	14400	0937	0069
35	14000	0868	0062
34	13600	0806	0067
33	13200	0739	0051
32	12800	0688	0045
31	12400	0643	0033
30	12000	0610	0047
29	11600	0563	0030
28	11200	0533	0031
27	10800	0502	0023
26	10400	0479	0027
25	10000	0452	0013
24	9600	0439	0017
23	9200	0422	0012
22	8800	0410	0013
21	8400	0397	0016
20	8000	0381	0013
19	7600	0368	0021
18	7200	0347	0015
17	6800	0332	0021
16	6400	0311	0023
15	6000	0288	0023
14	5600	0265	0025
13	5200	0240	0023
12	4800	0217	0020
11	4400	0197	0021
10	4000	0176	
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-29B

SPECTRUM: Fighter

TEST DATE: _____ (88)

TEST FRAME: (1) 2 3 4 5

ERAGE WIDTH: 1.4987 //1.4990/14984/14978/14997

ERAGE THICKNESS: .3807 //3802/3773/3802/3810/3811

EA: .5694 RCAL 18052
CS 96.9
AP 774

SELINE STRESS: 34ksi

X. LOAD: 19,361.2#

1 Life

CLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-17.16 K#
B-17.03 K#

ORIGIN LIES ON PLATE SURFACE NEAR CORNER.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0924	0018
39	15600	0906	0021
38	15200	0885	0019
37	14800	0866	0017
36	14400	0849	0015
35	14000	0834	0014
34	13600	0820	0017
33	13200	0803	0013
32	12800	0790	0012
31	12400	0778	0010
30	12000	0768	0011
29	11600	0757	0009
28	11200	0748	0010
27	10800	0738	0009
26	10400	0729	0009
25	10000	0720	0008
24	9600	0712	0007
23	9200	0705	0011
22	8800	0694	0008
21	8400	0686	0010
20	8000	0676	0011
19	7600	0665	0007
18	7200	0658	0009
17	6800	0649	
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		(167)
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-30A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 (80)

ERAGE WIDTH: 1.5029 // 1.5027 / 1.5030 / 1.5030 / 1.5030

ERAGE THICKNESS: .3809 // 3804 / 3799 / 3813 / 3818 / 3809

EA: .5724 Acal .8627

SELINE STRESS: 34 KSi Cs 957

X. LOAD: 19,461.4# AD 178

1 Life

CLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD A - 15.08 K#
B - 13.58 K#

ORIGIN LIES AT CORNER.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1962	.0211
39	15600	1751	0178
38	15200	1573	0152
37	14800	1421	0145
36	14400	1276	0145
35	14000	1131	0116
34	13600	1015	0075
33	13200	0930	0098
32	12800	0832	0080
31	12400	0752	0074
30	12000	0678	0075
29	11600	0603	0059
28	11200	0544	0034
27	10800	0510	0038
26	10400	0472	0042
25	10000	0430	0044
24	9600	0386	0036
23	9200	0350	0033
22	8800	0317	0024
21	8400	0293	0023
20	8000	0270	0027
19	7600	0243	0024
18	7200	0219	0024
17	6800	0195	0021
16	6400	0174	0019
15	6000	0155	0021
14	5600	0134	0014
13	5200	0120	
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives *

SPECIMEN NUMBER: XQPF-31B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 (90)

ERAGE WIDTH: 1.5043 // 1.5046 / 1.5040 / 1.5016 / 1.5070

ERAGE THICKNESS: .3794 // 3780 / 3778 / 3786 / 3816 / 3812

EA: .5708 Acal. 18982

SELINE STRESS: 34 KSi Cs 978

X. LOAD: 19,406.9# AD 776

1 Life

CLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,443,272 L.P.C. = 15,078.32 FLT-HRS *

ORIGIN LIES ON BOLT HOLE SURFACE STARTING FROM A SLIVER.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	[redacted]	.4413	.1179
37	14800	3234	0570
36	14400	2644	0590
35	14000	2174	0342
34	13600	1832	0282
33	13200	1590	0173
32	12800	1377	0166
31	12400	1211	0143
30	12000	1068	0130
29	11600	0938	0111
28	11200	0827	0099
27	10800	0728	0076
26	10400	0652	0058
25	10000	0459	0060
24	9600	0394	0046
23	9200	0348	0045
22	8800	0303	0031
21	8400	0272	0032
20	8000	0240	0026
19	7600	0214	0023
18	7200	0191	0023
17	6800	0168	0027
16	6400	0141	0022
15	5000	0119	0018
14	5600	0101	0017
13	5200	0084	0014
12	4800	0070	0015
11	4400	0055	0008
10	4000	0047	0009
9	3600	0038	
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-32B *

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5 (15)

ERAGE WIDTH: 1.5003 // 1.5002 / 1.5006 / 1.4996 / 1.5009

ERAGE THICKNESS: .3766 // .3759 / .3748 / .3753 / .3787 / .3784

EA: .5651 Acal. 18478

SELINE STRESS: 34Ksi C > 962

X. LOAD: 19,212.5# Ap. 770

1 Life

CLES AT [redacted]/FAILURE: *

2 Lives/_____

@ 1,404,990 L.P.F. = 14,678.37 FLT-HRS. *

Origin lies on Plate surface near corner.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37 →	[redacted]	.5415	.1700
36	14400	.3715	0768
35	14000	.2947	[redacted] 0425
34	13600	.2522	.312
33	13200	.2210	0.312
32	12800	.1948	0249
31	12400	.1699	0199
30	12000	.1500	0174
29	11600	.1326	0149
28	11200	.1177	0118
27	10800	.1059	0107
26	10400	.0952	0097
25	10000	.0855	0091
24	9600	.0764	0076
23	9200	.0688	0066
22	8800	.0623	0063
21	8400	.0560	0060
20	8000	.0500	0060
19	7600	.0440	0066
18	7200	.0374	0059
17	6800	.0315	0049
16	6400	.0267	0037
15	6000	.0230	
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

Fracture damaged by Rubbing

FATIGUE TEST DATA

SPECIMEN NUMBER: XQFF-33B *

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 15 (4)

AVERAGE WIDTH:	1.5007	1.5015	1.5016	1.5001	1.4999
AVERAGE THICKNESS:	.3771	.3793	.3764	.3784	.3760	.3755

AREA: .5659 RCAL. 18478

BASELINE STRESS: 34ksi CALS 96%

MAX. LOAD: 19242.1 A.POT. 770

CYCLES AT [redacted]/FAILURE: *

2 Lives/_____

1 @ 1,381,708 L.P.F. = 14,435.14 FLT-HRS *

STATIC LOAD A- K#

B- K#

Origin lies at Corner

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCR.
40	16000		
39	15600		
38	15200		
37 →	[redacted]	[redacted] .3651	.0025
36	14400	[redacted] .3626	0779
35	14000	.2847	0969
34	13600	.2378	0362
33	13200	.2016	0282
32	12800	.1734	0246
31	12400	.1488	0175
30	12000	.1313	0185
29	11600	.1148	0138
28	11200	.1010	0105
27	10800	.0905	0094
26	10400	.0811	0088
25	10000	.0723	0081
24	9600	.0642	0063
23	9200	.0579	0041
22	8800	.0538	0083
21	8400	.0485	0034
20	8000	.0451	0041
19	7600	.0410	0048
18	7200	.0362	0034
17	6800	.0328	
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

Fracture damaged by Rubbing

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-34B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6

RAGE WIDTH:	1.4982	1.4987	1.4993	1.4978	1.4969	
RAGE THICKNESS:	.3786	.3783	.3795	.3788	.3792	.3790

A: .5672

ELINE STRESS: 34ksi

. LOAD: 19283.4

LES AT TERMINATION/[redacted]:

2 Lives/_____

R.C.A.I. 18679
C.S. 97%
A.P. 7.71

1 Life

TATIC LOAD A-17.22 K#
B-11.34 K#

Origin lies at corner

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1769	.0239
39	15600	1530	.2184
38	15200	1346	0149
37	14800	1197	0129
36	14400	1068	0101
35	14000	0967	0092
34	13600	0875	0075
33	13200	0800	0060
32	12800	0740	0060
31	12400	0680	0044
30	12000	0636	0039
29	11600	0597	0034
28	11200	0563	0032
27	10800	0531	0025
26	10400	0506	0013
25	10000	0493	0021
24	9600	0472	0028
23	9200	0444	0028
22	8800	0416	0027
21	8400	0389	0021
20	8000	0368	0022
19	7600	0346	0024
18	7200	0322	0018
17	6800	0304	0023
16	6400	0281	0021
15	6000	0260	0022
14	5600	0238	0024
13	5200	.0214	
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

Test Damaged
Fatigue
by Fitting
Fracture

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-35A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6 90

RAGE WIDTH:	1.4989	1.4996	1.5000	1.4986	1.4977	
RAGE THICKNESS:	.3797	.3801	.3791	.3802	.3795	.3796

A: .5691

ELINE STRESS: 34ksi

. LOAD: 19350.5

LES AT TERMINATION/[redacted]:

2 Lives/_____

R.C.A.I. 18982
C.S. 98%
A.P. 7.74

1 Life

TATIC LOAD A-11.86 K#
B-11.36 K#

ORIGIN LIES AT CORNER STARTING FROM A BURR.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.2530	.0303
39	15600	2227	0279
38	15200	1948	0219
37	14800	1729	0203
36	14400	1526	0166
35	14000	1360	0120
34	13600	1240	0137
33	13200	1103	0093
32	12800	1010	0113
31	12400	0897	0082
30	12000	0815	0077
29	11600	0738	0075
28	11200	0663	0064
27	10800	0599	0054
26	10400	0545	0051
25	10000	0494	0049
24	9600	0445	0047
23	9200	0398	0046
22	8800	0352	0039
21	8400	0313	0043
20	8000	0270	0028
19	7600	0242	0022
18	7200	0220	0029
17	6800	0191	0019
16	6400	0172	0020
15	6000	0152	0022
14	5600	0130	0020
13	5200	0110	0018
12	4800	0092	
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(190)

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPF-36A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 88 (1)

AVERAGE WIDTH:	1.5021	1.5011	1.5018	1.5036	1.5026	
AVERAGE THICKNESS:	.3761	.3787	.3744	.3763	.3768	.3741

AREA: .5649 RCAL. 18752

BASELINE STRESS: 34 KSI CALS 98%

MAX. LOAD: 19205.9 A.POT. 7.68

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-16.53 K#
B-16.80 K#

ORIGIN LIES AT CORNER STARTING FROM A BURR.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCR
40	16000	[redacted] .0605	.0045
39	15600	.0560	.0035
38	15200	.0525	.0054
37	14800	.0471	.0032
36	14400	.0439	.0025
35	14000	.0414	.0019
34	13600	.0385	.0023
33	13200	.0362	.0019
32	12800	.0343	.0019
31	12400	.0324	.0022
30	12000	.0302	.0017
29	11600	.0285	.0014
28	11200	.0271	.0014
27	10800	.0257	.0015
26	10400	.0242	.0017
25	10000	.0225	.0013
24	9600	.0212	.0012
23	9200	.0200	.0012
22	8800	.0188	.0008
21	8400	.0180	
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPF 37A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 80 (3)

AVERAGE WIDTH:	1.5004	1.4993	1.5000	1.5013	1.5013	
AVERAGE THICKNESS:	.3809	.3805	.3811	.3801	.3816	.3816

AREA: .5716 RCAL. 18982

BASELINE STRESS: _____ CALS 98%

MAX. LOAD: 19435.2 A.POT. 7.77

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-17.85 K#
B-17.20 K#

ORIGIN LIES ON BOLT HOLE SURFACE

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCR
40	16000	.0105	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: XQPF-38A

SPECTRUM: Fighter

TEST DATE: _____ 15

TEST FRAME:	1	2	3	(4)	5	6
RAGE WIDTH:	1.4999	1.4997	1.499x	.5001	1.5007	
RAGE THICKNESS:	.3797	.3810	.3795	.3809	.3785	.3784

A: .5695

ELINE STRESS: 34 KSI

. LOAD: 19361.4

LES AT TERMINATION/[redacted]:

2 Lives/____

Real 18476
C595
AP 774

1 Life

TATIC LOAD A-12.44 K#
B-13,20 K#

ORIGIN LIES AT CORNER

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.2624	.0294
39	15600	2330	0239
38	15200	2091	0201
37	14800	1890	0215
36	14400	1675	0175
35	14000	1500	0168
34	13600	1332	0140
33	13200	1192	0113
32	12800	1079	0101
31	12400	0978	0094
30	12000	0884	0078
29	11600	0806	0061
28	11200	0745	0065
27	10800	0680	0054
26	10400	0616	0048
25	10000	0568	0048
24	9600	0520	0031
23	9200	0489	0044
22	8800	0445	0035
21	8400	0418	0026
20	8000	0384	0025
19	7600	0359	0028
18	7200	0331	0028
17	6800	0313	0026
16	6400	0297	0017
15	6000	0280	0021
14	5600	0259	0021
13	5200	0238	0025
12	4800	0213	0022
11	4400	0191	0023
10	4000	0168	0017
9	3600	0151	
8	3200		
7	2800		
6	2400	Fracture damaged	
5	2000	by Pulling on	
4	1600	Tab	
3	1200		
2	800		
1	400		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

2.2.4 XQPB

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-1B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH:	1.4989	1.4981	1.4977	1.4999	1.5004	
AVERAGE THICKNESS:	.3785	.3788	.3765	.3797	.3782	.3791

AREA: .5673 RCAL 8100

BASELINE STRESS: 33 Ksi CALC 43%

MAX. LOAD: 18721 A.POT. 749

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

1 @ 747,488 LP = 2899.00 FLTS *

STATIC LOAD A- K#
B- K#

origin lies on Bolt Hole surface near corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
* →	[redacted]	.4300	.0947
	2860	3353	.1006
	2760	2347	0624
	2660	1723	0457
Two Lives	2560	1266	0255
	2480	1011	0211
	2380	0800	0167
	2280	0633	0139
	2180	0499	0120
	2080	0374	0088
	1980	0294	0047
	1880	0247	0051
	1780	0196	0035
	1680	0161	0032
	1580	0129	0028
	1480	0101	
	1380		
One Life	1280		
	1200	Fracture Damaged	
	1100	by Rubbing on	
	1000	itself	
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-2B

SPECTRUM: Bomber

TEST DATE: _____

AVERAGE WIDTH:	1.5009	1.5016	1.5019	1.5005	1.4998	
AVERAGE THICKNESS:	.3785	.3769	.3721	.3769	.3736	.3730

AREA: .5621 RCAL 7894

BASELINE STRESS: 33 KSI CALC 43%

MAX. LOAD: 18549 A.POT. 742

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 737,092 LP = 2858.69 FLTS *

STATIC LOAD A- K#
B- K#

Origin lies at corner. Both plate surfaces were milled.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
* →	[redacted]	.5101	.1511
	2760	3590	0590
	2660	3060	[redacted] 0537
Two Lives	2560	[redacted] 2463	[redacted] 0322
	2480	2141	0376
	2380	1765	0313
	2280	1452	0251
	2180	1201	0193
	2080	1008	0177
	1980	0831	0133
	1880	0698	0104
	1780	0594	0075
	1680	0519	0068
	1580	0451	0051
	1480	0400	0058
	1380	0342	0044
One Life	1280	0298	0027
	1200	0271	0040
	1100	0231	0036
	1000	0195	
	900		
	800	Fracture Damaged	
	700	by Rubbing on itself	
	600		
	500		
	400		
	300		
	200		

(173)

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-3B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A 1 | B 2 | C 3,4 | D 5 | E | F 6

	A	B	C	D	E	F
AVERAGE WIDTH:	1.5012	1.506	1.5013	1.5013		1.5007
AVERAGE THICKNESS:	.3799	.3799	.3774	.3808	.3782	.3781

AREA: .5688 RCAL 16662 / 7957

BASELINE STRESS: 33 KSI CALS 42%

MAX. LOAD: 18769 A.POT. 7.51

CYCLES AT ~~TERMINATION~~/FAILURE: *

2 Lives/____

@ 706,204 L.P.'s = 2738.89 FLTS. *

STATIC LOAD A- K#
B- K#

Origin lies on Plate surface near corner. Fatigue initiation was due to Fretting

FRACTOGRAPHIC DATA

FLIGHT	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
* [redacted]	.4333	.1334
2660	.2999	.0779
Two Lives 2560	.2220	.0500
2480	.1820	.0421
2380	.1399	.0329
2280	.1070	.0260
2180	.0810	.0177
2080	.0633	.0138
1980	.0495	.0096
1880	.0399	.0075
1780	.0329	.0064
1680	.0260	.0058
1580	.0202	.0043
1480	.0159	.0039
1380	.0120	.0043
One Life 1280	.0087	.0035
1200	.0062	
1100		
1000		
900		
800		
700		
600		
500		
400		
300		
200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-4B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A 1 | B 2 | C 3,4 | D 5 | E | F 6

	A	B	C	D	E	F
AVERAGE WIDTH:	1.5014	1.5017	1.5017	1.5009		1.5012
AVERAGE THICKNESS:	.3752	.3766	.3744	.3757	.3748	.3747

AREA: .5634 RCAL ~~47925~~ / 7668

BASELINE STRESS: 33 KSI CALS 41%

MAX. LOAD: 18591 A.POT. 7.44

CYCLES AT ~~TERMINATION~~/FAILURE: *

2 Lives/____

@ 788,668 L.P. = 3058.71 FLTS. *

STATIC LOAD A- K#
B- K#

Origin lies on Both Hole surface near corner. Both plate surfaces were milled.

FRACTOGRAPHIC DATA

FLIGHT	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
* [redacted]	.3694	.1354
2960	.2340	.0679
2860	.1661	.0415
2760	.1376	.0286
2660	.0960	.0204
Two Lives 2560	.0756	.0107
2480	.0649	.0100
2380	.0549	.0082
2280	.0467	.0070
2180	.0397	.0060
2080	.0337	.0051
1980	.0286	.0038
1880	.0248	.0037
1780	.0211	.0037
1680	.0174	.0028
1580	.0136	.0024
1480	.0108	.0015
1380	.0083	.0014
One Life 1280	.0067	.0010
1200	.0053	.0008
1100	.0043	.0007
1000	.0035	
900	.0028	
800		
700		
600		
500		
400		
300		
200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-5B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B (C) D E F
1 2 3 4 5 6

AVERAGE WIDTH: 1.5003 / 1.4998 / 1.4998 / 1.5006 / 1.5007

AVERAGE THICKNESS: .3819 / .3818 / .3817 / .3824 / .3812 / .3823

AREA: .5729

R-Cal 1882 (8100)
Cal.S 43%

BASELINE STRESS: 33Ksi Apst 756

MAX. LOAD: 18906

CYCLES AT TERMINATION/[redacted]: 2 Lives/___

@

STATIC LOAD A-17.70 K#
B-16.60 K#

Origin lies on Plate Surface near corner origin initiation was due to fretting.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0408	.0058
	2480	.0350	.0048
	2380	.0302	.0039
	2280	.0263	.0032
	2180	.0231	.0034
	2080	.0197	.0023
	1980	.0174	.0022
	1880	.0157	.0017
	1780	.0135	.0017
	1680	.0118	.0020
	1580	.0098	.0015
	1480	.0083	.0011
	1380	.0072	.0009
One Life	1280	.0063	.0009
	1200	.0054	
	1100		
	1000	Fracture damaged	
	900	by Rubbing on	
	800	Test	
	700		
	600		
	500		
	400		
	300		
	200		

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-6B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C (D) E F
1 2 3 4 5 6

AVERAGE WIDTH: 1.5021 / 1.5033 / 1.5036 / 1.5014 / 1.5000

AVERAGE THICKNESS: .3765 / .3812 / .3760 / .3815 / .3774 / .3765

AREA: .5686

R-Cal 7834 (8100) (7834)
Cal.S 42%

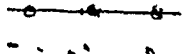
BASELINE STRESS: Apst 751

MAX. LOAD: 18763

CYCLES AT TERMINATION/[redacted]: 2 Lives/___

@

STATIC LOAD A-17.20 K#
B-17.52 K#



Origin lies at corner. Both surfaces rubbed. A secondary origin due to mill tool marks (relaxed tolerances?)

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	[redacted] .0428	.0035
	2480	.0256	[redacted] .0031
	2380	.0225	.0031
	2280	.0194	.0029
	2180	.0165	.0022
	2080	.0143	.0023
	1980	.0120	.0020
	1880	.0100	.0015
	1780	.0085	.0014
	1680	.0071	.0017
	1580	.0054	
	1480		
	1380		
One Life	1280	Fracture Surface	
	1200		
	1100	damaged by rubbing	
	900	on Test	
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
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FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-7A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH: 1.5018 / 1.4988 / 1.5010 / 1.5058 / 1.5016

AVERAGE THICKNESS: .3799 / .3824 / .3771 / .3825 / .3788 / .3791

AREA: .5707

R-Cal 18652 (7957)
Cal.S 42%

BASELINE STRESS: Apt 753

MAX. LOAD: 18832

CYCLES AT TERMINATION/[redacted]: 2 Lives/___

@

STATIC LOAD A-15.88 K#
B-14.58 K#

Origin big at corner. Both surfaces were milled.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0946	.0126
	2480	.0820	.0133
	2380	.0687	.0112
	2280	.0575	.0082
	2180	.0493	.0073
	2080	.0420	.0054
	1980	.0366	.0042
	1880	.0324	.0038
	1780	.0286	.0028
	1680	.0258	.0028
	1580	.0230	.0016
	1480	.0214	.0020
	1380	.0194	
One Life	1280		
	1200		
	1100	Fracture Damaged	
	1000	by Rubbing on Heat	
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

Fort Worth Division
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FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-8B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E (F) / 1 2 3 4 5 6

AVERAGE WIDTH: 1.4999 / 1.4997 / 1.5006 / 1.5003 / 1.4993

AVERAGE THICKNESS: .3796 / .3791 / .3771 / .3788 / .3768 / .3761

AREA: .5664

R-Cal 17925 (7668)
Cal.S 41%

BASELINE STRESS: Apt 748

MAX. LOAD: 18689

CYCLES AT TERMINATION/[redacted]: 2 Lives/___

@

STATIC LOAD A-14.89 K#
B-13.95 K#

Origin big at corner.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1674	.0258
	2480	.1416	.0285
	2380	.1131	.0207
	2280	.0924	.0173
	2180	.0751	.0137
	2080	.0614	.0115
	1950	.0499	.0100
	1880	.0399	.0076
	1780	.0323	.0045
	1680	.0278	.0035
	1580	.0243	.0040
	1480	.0203	.0032
	1380	.0171	.0035
One Life	1280	.0136	.0022
	1200	.0114	.0033
	1100	.0081	
	1000		
	900	Fracture Damaged	
	800		
	700	by Rubbing on Heat	
	600		
	500		
	400		
	300		

GENERAL DYNAMICS
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FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-9A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B (C) D E F
1 2 (3) 4 5 6

AVERAGE WIDTH: 1.4998 / 1.4997 / 1.5002 / 1.500: / 1.4991

AVERAGE THICKNESS: .3813 / .3817 / .3784 / .3822 / .3820 / .3823

AREA: .5719

R-Cal 8100
Cal.S 429

BASELINE STRESS: 33Ksi

Apt 7.55

MAX. LOAD: 18872.8

CYCLES AT TERMINATION/FAILURE: 2 Lives / 660078
@
STATICLOAD A-16.15 K#
B-17.86 K#

Origin lies on Plate surface near Corner due to fretting.

FRACTOGRAPHIC DATA

FLIGHT	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560	.0757	.0136
2480	.0621	.0124
2380	.0497	.0110
2280	.0387	.0084
2180	.0303	.0055
2080	.0248	.0056
1980	.0192	.0041
1880	.0151	.0033
1780	.0118	.0036
1680	.0082	
1580		
1480		
1380	Fracture Damaged	
One Life 1280	by Rubbing on Shell	
1200		
1100		
1000		
900		
800		
700		
600		
500		
400		
300		
200		

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-10B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B (C) D E F
1 2 (3) 4 5 6

AVERAGE WIDTH: 1.5045 / 1.5038 / 1.503 / 1.5056 / 1.5053

AVERAGE THICKNESS: .3798 / .3799 / .3794 / .3801 / .3798 / .3799

AREA: .5714

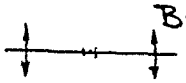
R-Cal 18082 (8100)
Cal.S 431

BASELINE STRESS: 33K

Apt 7.54

MAX. LOAD: 18857

CYCLES AT TERMINATION/FAILURE: 2 Lives / ___
@
STATICLOAD A-17.52 K#
B-17.50 K#



Origin lies on Bolt Hole surface

FLIGHT	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860	a 2c	a/2c = .53
2760		
2660		
Two Lives 2560	.0177 / .0333	.0055
2480	.0152	.0022
2380	.0130	.0019
2280	.0111	.0016
2180	.0095	.0014
2080	.0081	.0009
1980	.0072	.0008
1880	.0064	.0006
1780	.0058	.0008
1680	.0050	.0006
1580	.0044	.0003
1480	.0041	
1380		
One Life 1280		
1200	Origin Damaged by	
1100	Rubbing on Shell	
1000		
900		
800		
700		
600		
500		
400		
300		
200		

GENERAL DYNAMICS
Fort Worth Division
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FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-11B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C (D) E F
1 2 3 4 5 6

AVERAGE WIDTH: 1.4998 / 1.4988 / 1.4994 / 1.5007 / 1.5003

AVERAGE THICKNESS: .3808 / .3815 / .3801 / .3812 / .3813 / .3800

AREA: .5712

R-Cal 18478 (7894)
Cal.S 42%

BASELINE STRESS: 33 KSi Apt 7.54

MAX. LOAD: 18848

CYCLES AT TERMINATION/FAILURE: 2 Lives/___
@

STATIC LOAD A-16.01 K#
B-16.52 K#

Origin lies on Plate surface near corner due to fretting.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0516	.0049
	2480	0467	0052
	2380	0415	0045
	2280	0370	0046
	2180	0324	0033
	2080	0291	0029
	1980	0262	0034
	1880	0228	0032
	1780	0196	0027
	1680	0169	0022
	1580	0147	0021
	1480	0126	0022
	1380	0104	0017
One Life	1280	0087	0013
	1200	0074	0015
	1100	0059	0010
	1000	0049	2010
	900	0039	0012
	800	0027	
	700		
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB 12B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C (D) E F
1 2 3 4 5 6

AVERAGE WIDTH: 1.5002 / 1.4993 / 1.4945 / 1.5010 / 1.5008

AVERAGE THICKNESS: .3820 / .3820 / .3789 / .3804 / .3843 / .3844

AREA: .5731

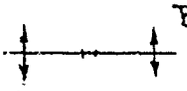
R-Cal 7894
Cal.S 41.7

BASELINE STRESS: 33 KSi Apt 7.57

MAX. LOAD: 18911.5

CYCLES AT TERMINATION/FAILURE: 2 Lives/___
@

STATIC LOAD A-17.88 K#
B-17.28 K#



Origin lies on Bolt Hole surface. Both plate surfaces were milled.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0198	.0036
	2480	0162	0030
	2380	0132	0021
	2280	0111	0017
	2180	0094	0015
	2080	0079	0014
	1980	0065	0011
	1880	0054	0007
	1780	0047	0008
	1680	0039	0007
	1580	0032	0005
	1480	0027	0004
	1380	0023	0004
One Life	1280	0015	0003
	1200	0014	0002
	1100	0012	0002
	1000	0012	0003
	900	0009	0002
	800	0007	0002
	700	0005	
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-13B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH: 1.5014 / 1.5018 / 1.5022 / 1.5015 / 1.5001

AVERAGE THICKNESS: .3833 / .3841 / .3831 / .3852 / .3818 / .3824

AREA: .5955

R-Cal 18652 (7957)
Cal S 42%

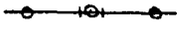
BASELINE STRESS: 33ksi Apt 7.60

MAX. LOAD: 18992

CYCLES AT TERMINATION/[redacted]: 2 Lives/___

@

STATICLOAD B-15.40 K#
A-17.98 K#



origin lies on bolt hole surface.
Both surfaces were milled.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0918	.0185
	2480	0735	0190
	2380	0545	0132
	2280	0413	0109
	2180	0304	0068
	2080	0236	0053
	1980	0183	0033
	1880	0150	0028
	1780	0122	0023
	1680	0100	0012
	1580	0088	0015
	1480	0073	0011
	1380	0062	0008
One Life	1280	0054	0004
	1200	0050	0008
	1100	0042	0004
	1000	0038	0006
	900	0032	0005
	800	0027	0004
	700	0021	
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-14A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH: 1.5002 / 1.4994 / 1.4997 / 1.5005 / 1.5010

AVERAGE THICKNESS: 3802 / 3814 / 3778 / 3783 / 3832 / 3824

AREA: .5704

R-Cal 7957
Cal S 42.3

BASELINE STRESS: 33ksi Apt 7.53

MAX. LOAD: 18823.4

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

@

STATICLOAD A-14.00 K#
B-15.88 K#

origin lies on Bolt Hole surface.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1434	.0342
	2480	1092	0325
	2380	0767	0229
	2280	0538	0158
	2180	0380	0093
	2080	0287	0069
	1980	0218	0047
	1880	0171	0037
	1780	0134	0027
	1680	0107	0025
	1580	0082	0019
	1480	0063	0015
	1380	0048	0009
One Life	1280	0039	0008
	1200	0031	
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-15 B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E (F) / 1 2 3 4 5 (6)

AVERAGE WIDTH: 1.5025 / 1.5021 / 1.5036 / 1.5017 / 1.5016

AVERAGE THICKNESS: .3818 / .3829 / .3798 / .3837 / .3809 / .3818

AREA: .5737

R-Cal 17925 (7668)
Cal.S 41%

BASELINE STRESS: 33 KSI

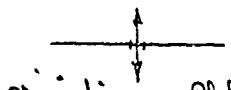
Apt 7.57

MAX. LOAD: 18932

CYCLES AT TERMINATION/FAILURE: 2 Slives/___

(2)

STATIC LOAD A-17.15 KT
B- KT?



origin lies on Plate surface near corner

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0783	.0134
	2480	.0649	.0114
	2380	.0535	.0073
	2280	.0462	.0096
	2180	.0496	.0057
	2080	.0349	.0047
	1980	.0302	.0044
	1880	.0258	.0045
	1780	.0213	.0027
	1680	.0186	.0027
	1580	.0159	.0021
	1480	.0138	.0022
	1380	.0116	.0015
One Life	1280	.0101	.0011
	1200	[redacted] .0090	
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-17B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E (F) / 1 2 3 4 5 (6)

AVERAGE WIDTH: 1.5032 / 1.5046 / 1.5048 / 1.5014 / 1.5018

AVERAGE THICKNESS: .3830 / .3852 / .3801 / .3851 / .3823 / .3822

AREA: .5757

R-Cal 7668
Cal.S 40.4

BASELINE STRESS: 33 KSI

Apt 7.60

MAX. LOAD: 18998.0

CYCLES AT TERMINATION/FAILURE: 2 Slives/___

(2)

STATIC LOAD A-18.01 KT
B-17.78 KT

$\frac{a}{2c} = .50$

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0075/.0150	
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-18A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B (C) D E F
1 2 3 4 5 6

AVERAGE WIDTH: 1.5026 // 1.5063 / 1.5053 / 1.5028 / 1.5024

AVERAGE THICKNESS: 3824 // 3823 / 3797 / 3814 / 3840 / 3846

AREA: .5745

R-Cal 8100 (18982)
Cal.S 42.7

BASELINE STRESS: 33Ksi Apst 7.58

MAX. LOAD: 18958.5

CYCLES AT TERMINATION/FAILURE: 2 Slives / 160078
@
STATIC LOAD A-15.72 K#
B-17.68 K#

origin lies on Plate surface near corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560	.1100	.0166
2480	0934	0170
2380	0764	0123
2280	0641	0104
2180	0537	0084
2080	0453	0060
1980	0393	0051
1880	0342	0042
1780	0300	0039
1680	0261	0038
1580	0223	0036
1480	0187	0034
1380	0153	0024
One Life 1280	0129	0019
1200	0110	0014
1100	0096	0016
1000	0080	0016
900	0059	
800	0041	
700	Specimen was Damaged	
600	by Rubbing on Shelf	
500		
400		
300		
200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-21A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D (E) F
1 2 3 4 5 6

AVERAGE WIDTH: 1.5012 / 1.5022 / 1.5074 / 1.4997 / 1.5002

AVERAGE THICKNESS: 3806 / 3793 / 3776 / 3795 / 3832 / 3832

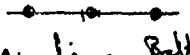
AREA: .5713

R-Cal 18052 (7957)
Cal.S 45%

BASELINE STRESS: 31 Ksi Apst 7.08

MAX. LOAD: 17709

CYCLES AT TERMINATION/FAILURE: 2 Slives / ___
@
STATIC LOAD A-16.08 K#
B-16.92 K#



Origin lies on Bolt Hole Surface.
Both plate surfaces were milled.

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560	.0253	.0039
2480	0219	0035
2380	0184	0033
2280	0151	0027
2180	0124	0019
2080	0105	0016
1980	0089	0016
1880	0073	0013
1780	0060	0011
1680	0049	0010
1580	0039	0008
1480	0031	0007
1380	0024	0005
One Life 1280	0019	0004
1200	0015	0002
1100	0013	0004
1000	0009	0002
900	0007	0001
800	0006	0001
700	0005	
600		
500		
400		
300		
200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-22B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B (C) D E F / 1 2 3 4 5 6

AVERAGE WIDTH: 1.5004 | 1.5016 | 1.5003 | 1.4998 | 1.5000

AVERAGE THICKNESS: .3812 | .3804 | .3785 | .3795 | .3813 | .3834

AREA: .5720

R-Cal 10982 (B100)
Cal.S 46%

BASELINE STRESS: 33 ksi Apt 7.10

MAX. LOAD: 17732

CYCLES AT TERMINATION/FAILURE: 3Lives/___

@

STATIC LOAD A-17.38 K*
B-17.56 K*

Origin lies at Corner. which mates with Plate A.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860	a b	
	2760		
	2660		
Two Lives	2560	.0180 / .0184	
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-23A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C (D) E F / 1 2 3 4 5 6

AVERAGE WIDTH: 1.5002 | 1.5005 | 1.5012 | 1.5004 | 1.4990

AVERAGE THICKNESS: .3801 | .3784 | .3781 | .3792 | .3823 | .3858

AREA: .5702

R-Cal 7894 (10478)
Cal.S 42.0

BASELINE STRESS: 33ksi Apt 7.53

MAX. LOAD: 18816.6

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

@

STATIC LOAD A-16.08 K*
B-16.40 K*

Origin lies at corner starting from a burr. Both plate surfaces were milled.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	2840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0534	.0076
	2480	.0458	.0074
	2380	.0384	.0066
	2280	.0318	.0051
	2180	.0267	.0043
	2080	.0224	.0042
	1980	.0182	.0031
	1880	.0151	.0026
	1780	.0125	.0019
	1680	.0106	.0019
	1580	.0087	.0024
	1480	.0063	.0010
	1380	.0053	.0006
One Life	1280	.0047	.0008
	1200	.0039	
	1100		
	1000		
	900	origin damaged by	
	800		
	700	Machining on sheet	
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-25A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C (D) E F / 1 2 3 4 5 6

AVERAGE WIDTH: 1.5028 | 1.5013 | 1.5024 | 1.5044 | 1.5029

AVERAGE THICKNESS: .3794 | .3807 | .3781 | .3819 | .3783 | .3781

AREA: .5702

R-Cal 18478 (7894)
Cal.S 45%

BASELINE STRESS: 31ksi Apt 7.07

MAX. LOAD: 17675

CYCLES AT TERMINATION/[redacted] 2Lives/___

@

STATICLOAD A-15.88 K#
B-17.84 K#

Origin lies on plate surface near corner. Both surfaces were milled.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1070	.0163
	2480	0907	0159
	2380	0748	0122
	2280	0626	0100
	2180	0526	0116
	2080	0410	0074
	1980	0336	0053
	1880	0283	0042
	1780	0241	0038
	1680	0203	0033
	1580	0170	0025
	1480	0145	0020
	1380	0125	0016
One Life	1280	0109	0009
	1200	0100	0011
	1100	0089	0006
	1000	0083	0008
	900	0075	0007
	800	0068	0007
	700	0061	0008
	600	0053	0006
	500	0047	
	400		
	300		
	200		

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-26B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH: 1.5020 / 1.5024 / 1.5017 / 1.5020 / 1.5022

AVERAGE THICKNESS: .3797 / .3820 / .3780 / .3825 / .3781 / .3783

AREA: .5703

R-Cal 7957 (18652)
Cal.S 42.3

BASELINE STRESS: 33ksi Apt 7.53

MAX. LOAD: 18819.9

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

@

STATICLOAD A-16.52 K#
B-16.46 K#

Origin lies on plate surface near corner. Origin due to fretting.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0475	.0052
	2480	0423	0068
	2380	0355	0055
	2280	0300	0053
	2180	0247	0045
	2080	0202	0041
	1980	0161	0020
	1880	0141	0030
	1780	0130	0023
	1680	0097	0018
	1580	0079	0019
	1480	0060	0013
	1380	0048	0011
One Life	1280	0037	0007
	1200	0030	
	1100		
	1000		
	900	Origin damaged by	
	800	Rubbing on Staff	
	700		
	600		
	500		
	400		
	300		
	200		

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GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-27B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E (F) 1 2 3 4 5 6

AVERAGE WIDTH: 1.4991 // 1.4986/1.4995/1.4996/1.4989

AVERAGE THICKNESS: .3828 // 3832/3806/3834/3833/3837

AREA: .5738

R-Cal 7668 (17923)
Cal.S 90.5

BASELINE STRESS: 33Ksi

Apt 7.57

MAX. LOAD: 18935.4

CYCLES AT [redacted]/FAILURE: * 2 Lives/166078

@ 630688 L.P.'s = 2446.02 *

STATICLOAD A- K**
B- K**

Origin lies on Bolt Hole surface

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	[redacted]	.6355	.1679
	2380	3676	0791
	2280	2885	0565
	2180	2320	0472
	2080	1848	0417
	1980	1431	0368
	1880	1063	0318
	1780	0745	0224
	1680	0521	0163
	1580	0358	0108
	1480	0250	0066
	1380	0184	0040
One Life	1280	0144	0024
	1200	0120	0025
	1100	0095	0018
	1000	0077	0018
	900	0059	0013
	800	0046	0010
	700	0036	0008
	600	0028	0007
	500	0021	0006
	400	0015	0004
	300	0011	0004
	200	0007	

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-28B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B (C) D E F 1 2 3 4 5 6

AVERAGE WIDTH: 1.5010 / 1.5006/1.5006/1.5015/1.5013

AVERAGE THICKNESS: .3808 / .3806/.3801/.3817/.3802/.3816

AREA: .5716

R-Cal 18992 (8100)
Cal.S 4396

BASELINE STRESS: 33Ksi

Apt 7.55

MAX. LOAD: 18864

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

@

STATICLOAD A-17.20 K**
B-17.90 K**

Origin lies on bolt Hole surface at the base of a sliver.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760	a 2c	a/2c
	2650		
Two Lives	2560	.0104/.0281	.37
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: X QPB-29 B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F
1 2 3 4 5 (6)

	A	B	C	D	E	F
AVERAGE WIDTH:	1.4999	1.5007	1.5004	1.4991	1.4994	
AVERAGE THICKNESS:	.3834	.3842	.3802	.3833	.3840	.3833

AREA: .5751

R-Cal 17925 (7668)
Cal.S 43%

BASELINE STRESS: 31 KSI

Apt 7.13

MAX. LOAD: 17827

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

@

STATIC LOAD A-17.82 K*
B-17.57 K*

origin lies at corner

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0218	.0016
	2480	0202	0019
	2380	0183	0018
	2280	0165	0019
	2180	0146	0018
	2080	0128	0020
	1980	0108	0014
	1880	0094	0014
	1780	0080	0010
	1680	0070	0010
	1580	0060	0010
	1480	0050	0008
	1380	0042	0005
One Life	1280	0037	0003
	1200	0032	0005
	1100	0029	0004
	1000	0025	0004
	900	0021	0004
	800	0017	
	700		
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-31 B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D (E) F
1 2 3 4 5 6

	A	B	C	D	E	F
AVERAGE WIDTH:	1.4997	1.4985	1.4991	1.5000	1.5004	
AVERAGE THICKNESS:	.3823	.3847	.3836	.3842	.3815	.3814

AREA: .5733

R-Cal 18652 (7957)
Cal.S 45%

BASELINE STRESS: 31 KSI

Apt 7.11

MAX. LOAD: 17773

CYCLES AT TERMINATION/[redacted] Lives/___

@

STATIC LOAD A-17.02 K*
B-16.21 K*

Origin lies on Plate surface. Fatigue origin was due to fretting and/or tool marks. Both surfaces were milled.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0542	.0071
	2480	0471	0060
	2380	0411	0047
	2280	0364	0044
	2180	0320	0044
	2080	0276	0037
	1980	0239	0034
	1880	0205	0027
	1780	0178	0026
	1680	0152	0024
	1580	0128	0021
	1480	0107	0016
	1380	0091	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

(185)

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-32B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C (D) E F
1 2 3 4 5 6

AVERAGE WIDTH: 1.6024 | 1.5023 | 1.5023 | 1.5031 | 1.5018

AVERAGE THICKNESS: .3843 | .3865 | .3812 | .3865 | .3836 | .3835

AREA: .5773

R-Cal 18478 (7891)
Cal.S 41%

BASELINE STRESS: 33ksi

Kpt 7.62

MAX. LOAD: 19051

CYCLES AT TERMINATION/FAILURE: 2 Slives/___

@

STATIC LOAD A-16.40 K#
B-16.12 K#

origin lies on Plate surface @ near corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0820	.0106
	2480	0714	0122
	2380	0592	0085
	2280	0507	0065
	2180	0442	0051
	2080	0391	0046
	1980	0345	0047
	1880	0298	0036
	1780	0262	0031
	1680	0231	0028
	1580	0203	0030
	1480	0172	0020
	1380	0152	0020
One Life	1280	0132	0011
	1200	0121	0017
	1100	0104	0018
	1000	0086	0022
	900	0064	0016
	800	0048	0011
	700	0037	0010
	600	0027	0007
	500	0020	0008
	400	0012	0006
	300	0006	
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-33B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D (E) F
1 2 3 4 5 6

AVERAGE WIDTH: 1.5008 | 1.5005 | 1.5012 | 1.5003 | 1.5005

AVERAGE THICKNESS: .3780 | .3788 | .3773 | .3792 | .3769 | .3770

AREA: .5674

R-Cal 18652 (7957)
Cal.S 42%

BASELINE STRESS: 33ksi

Kpt 7.49

MAX. LOAD: 18723

CYCLES AT TERMINATION/FAILURE: 2 Slives/___

@

STATIC LOAD B-10.28 K#
A-17.80 K#

origin lies on Bolt Hole surface near corner.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.2755	.0525
	2480	2230	0492
	2380	1738	0390
	2280	1348	0272
	2180	1076	0196
	2080	0880	0174
	1980	0706	0153
	1880	0553	0097
	1780	0456	0078
	1680	0368	0078
	1580	0290	0063
	1480	0227	0065
	1380	0187	0026
One Life	1280	0156	0019
	1200	0137	0032
	1100	0105	0033
	1000	0072	0027
	900	0045	0012
	800	0033	0009
	700	0024	0005
	600	0019	0006
	500	0013	0004
	400	0009	0004
	300	0005	0002
	200	0003	

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQP13-34A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH: 1.4993 | 1.4988 | 1.4991 | 1.5001 | 1.4993

AVERAGE THICKNESS: .3805 | .3803 | .3788 | .3807 | .3807 | .3818

AREA: .5704

R-Cal 18652 (7951)
Cal.S 45%

BASELINE STRESS: 31 Ksi

Apt 707

MAX. LOAD: 17683

CYCLES AT TERMINATION/[redacted] 8Lives/___

@

STATIC LOAD A-15.02 K*
B-14.70 K*

Origin lies on Bolt Hole surface.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0849	.0167
	2480	0682	0159
	2380	0523	0130
	2280	0393	0089
	2180	0304	0074
	2080	0230	0056
	1980	0174	0029
	1880	0145	0027
	1780	0118	0023
	1680	0095	0018
	1580	0077	0014
	1480	0063	0013
	1380	0050	0010
One Life	1280	0040	0005
	1200	0035	0007
	1100	0028	0006
	1000	0022	0004
	900	0018	0003
	800	0015	
	700		
	600		
	500		
	400		
	300		
	200		

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-36A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E (F) / 1 2 3 4 5 6

AVERAGE WIDTH: 1.5024 | 1.5026 | 1.5036 | 1.5019 | 1.5013

AVERAGE THICKNESS: .3833 | .3821 | .3820 | .3813 | .3852 | .3857

AREA: .5759

R-Cal 17926 (7668)
Cal.S 43%

BASELINE STRESS: 3 Ksi

Apt 714

MAX. LOAD: 17853

CYCLES AT TERMINATION/FAILURE: 3Lives/___

@

STATIC LOAD A-16.90 K*
B-17.96 K*

origin lies on Plate surface near corner. Both plate surface were milled fatigue origin due to setting.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0408	.0053
	2480	0355	0060
	2380	0295	0053
	2280	0242	0035
	2180	0207	0029
	2080	0178	0026
	1980	0152	0022
	1880	0130	0019
	1780	0111	0017
	1680	0094	0016
	1580	0078	0013
	1480	0065	0010
	1380	0055	0011
One Life	1280	0044	0007
	1200	0037	0010
	1100	0027	0007
	1000	0020	
	900		
	800	Damaged	
	700		
	600		
	500		
	400		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: XQPB-37B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E (1-5)

AVERAGE WIDTH: 1.4999 / 1.5011 / 1.5004 / 1.4985 / 1.4994

AVERAGE THICKNESS: .3828 / .3816 / .3823 / .3842 / .3817 / .3814

AREA: .5742

R-Cal 7075 (T6)
Cal.S 40%

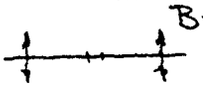
BASELINE STRESS: 33ksi Apt 7.58

MAX. LOAD: 18949

CYCLES AT TERMINATION/FAILURE: 2 Lives/___

@

STATIC LOAD A-16.60 K#
B-16.22-K#



ORIGIN LIES ON BOLT HOLE SURFACE.
BOTH SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0523	.0080
	2480	0448	0081
	2380	0367	0067
	2280	0300	0068
	2180	0252	0038
	2080	0214	0033
	1980	0181	0022
	1880	0159	0019
	1780	0140	0019
	1680	0121	0017
	1580	0104	0016
	1480	0090	0011
	1380	0079	0008
One Life	1280	0071	0005
	1200	0066	0008
	1100	0058	0008
	1000	0050	0004
	900	0046	0008
	800	0038	0006
	700	0032	0005
	600	0027	0004
	500	0021	0005
	400	0016	0006
	300	0010	0005
	200	0005	

AF4-4 CONTINUED FROM PREVIOUS PAGE

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT II
3 Lives	60	24000		
	59	23600		
✳ →	58	[redacted]	.39388	.01124
	57	22800	.38264	07806
	56	22400	30408	03962
	55	22000	26446	03286
	54	21600	23160	02567
	53	21200	20593	02304
	52	20800	18289	01834
	51	20400	16455	01669
	50	20000	14786	01524
	49	19600	13262	01296
	48	19200	11966	01265
	47	18800	10701	01079
	46	18400	09622	00922
	45	18000	08700	00810
	44	17600	07890	00818
	43	17200	07072	00676
	42	16800	06396	00586
	41	16400	05810	00503

Spec-AF-4 FRACTOGRAPHIC DATA

PATIGUE TEST DATA See next page for 4 Lives 2 Lives

SPECIMEN NUMBER: AF-4

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (R14)

VERAGE WIDTH: 1.503 1.503 1.503 1.503

VERAGE THICKNESS: .377 .377 .377 .377

REA: 567

ASELINE STRESS: 34 ksi CAI = 93.9

AX. LOAD: 19261# A = 7.70 1 Life

YCLES AT [redacted]/FAILURE:

2 Lives/____

@ 2,182,992 L.P.C. = 22,806.4 FLT-HRS

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I
40	16000	.03307	.00473
39	15600	02834	00464
38	15200	02370	00390
37	14800	01980	00354
36	14400	01626	00296
35	14000	01330	00292
34	13600	01038	00316
33	13200	00722	00262
32	12800	00460	00230
31	12400	00230	00230
30	12000	00000	00223
29	11600	01777	00207
28	11200	01570	00196
27	10800	01384	00169
26	10400	01215	00152
25	10000	01057	00162
24	9600	00895	00129
23	9200	00771	00112
22	8800	00679	00101
21	8400	00578	00088
20	8000	00490	00069
19	7600	00421	00058
18	7200	00363	00056
17	6800	00307	00037
16	6400	00270	00045
15	6000	00225	00040
14	5600	00185	00026
13	5200	00159	00024
12	4800	00135	00023
11	4400	00112	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

PATIGUE TEST DATA 2 Lives

SPECIMEN NUMBER: AF-1

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5 K15

VERAGE WIDTH: 1.5018 ___ ___ ___

VERAGE THICKNESS: .3701 ___ ___ ___

REA: .556

ASELINE STRESS: 34K Cal: 95?

AX. LOAD: 18904 A: 7.56 1 Life

YCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD – 29.3 K#

BOLT HOLE WAS POLISHED

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0643	.0069
39	15600	0574	0052
38	15200	0522	0042
37	14800	0480	0042
36	14400	0438	0038
35	14000	0400	0037
34	13600	0363	0032
33	13200	0331	0031
32	12800	0300	0022
31	12400	0278	0026
30	12000	0252	0020
29	11600	0232	0022
28	11200	0210	0020
27	10800	0190	0019
26	10400	0171	0018
25	10000	0153	0018
24	9600	0135	0016
23	9200	0117	0012
22	8800	0101	0014
21	8400	0089	0010
20	8000	0075	0010
19	7600	0065	0009
18	7200	0055	0005
17	6800	0046	0007
16	6400	0041	
15	6000	0034	
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

See Key Page for 4 Lives

SPECIMEN NUMBER: AF-5

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 (19)

ERAGE WIDTH: 1.497 1.497 1497 1497

ERAGE THICKNESS: .377 375 376 376

EA. .565

SELINE STRESS: 34KSI Cal = 970

X. LOAD: 19205 # A=7.68

CLES AT TERMINATION/FAILURE:

2 Lives/2,297,241

STATIC LOAD – 3225 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0044	0004
39	15600	0040	0004
38	15200	0036	0004
37	14800	0032	0002
36	14400	0030	0004
35	14000	0026	0002
34	13600	0024	0003
33	13200	0021	0001
32	12800	0020	0001
31	12400	0019	0001
30	12000	0018	0001
29	11600	0017	0001
28	11200	0016	0001
27	10800	0015	0001
26	10400	0014	0001
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: AF-35

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (89)

VERAGE WIDTH: 1.5028 ___ ___ ___

VERAGE THICKNESS: .3749 ___ ___ ___

REA: .563

ASELINE STRESS: 34K Cal: 967

AX. LOAD: 19142 A: 7.66

1 Life

YCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD – 33.0 K#

Δ to (2) 38849 cause mean on (5) (16)

kept shifting

New Cal 97.3

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0264	.0016
39	15600	0248	0019
38	15200	0229	0015
37	14800	0214	0014
36	14400	0200	0017
35	14000	0183	0015
34	13600	0170	0014
33	13200	0156	0013
32	12800	0143	0013
31	12400	0130	0011
30	12000	0119	0010
29	11600	0109	0009
28	11200	0100	0010
27	10800	0090	0010
26	10400	0080	0009
25	10000	0071	0007
24	9600	0064	0005
23	9200	0059	0007
22	8800	0052	0004
21	8400	0048	0004
20	8000	0044	0004
19	7600	0040	0004
18	7200	0036	0004
17	6800	0032	0002
16	6400	0030	0004
15	6000	0026	0003
14	5600	0024	0003
13	5200	0021	0001
12	4800	0020	0001
11	4400	0019	0001
10	4000	0018	0001
9	3600	0017	0001
8	3200	0016	0001
7	2800	0015	0001
6	2400	0014	
5	2000		
4	1600		
3	1200		(196)
2	800		
1	400		

AF-5 CONTINUED FROM PREVIOUS PAGE

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
3 Lives	60	24000	.0264	.0016
	59	23600	0248	0019
	58	23200	0229	0015
	57	22800	0214	0014
	56	22400	0200	0017
	55	22000	0183	0013
	54	21600	0170	0014
	53	21200	0156	0013
	52	20800	0143	0013
	51	20400	0130	0011
	50	20000	0119	0010
	49	19600	0109	0009
	48	19200	0100	0010
	47	18800	0090	0010
	46	18400	0080	0009
	45	18000	0071	0007
	44	17600	0064	0005
	43	17200	0059	0007
	42	16800	0052	0004
	41	16400	0048	0004

FATIGUE TEST DATA

See next page for 2 Lives

SPECIMEN NUMBER: AF-6

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 (88)

VERAGE WIDTH: 1.502 1.502 1.501 1.500

VERAGE THICKNESS: .377 .376 .378 .378

REA: .567

ASELINE STRESS: 34 KSI Col: 97.3

AX. LOAD: 19270 # A = 7.51

1 Life

YCLES AT [redacted]/FAILURE:*

2 Lives/_____

@ 2,259.5672 L.P.'s = 23,606.41 FLT.-HRS*

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0460	.0034
39	15600	.0426	.0036
38	15200	.0390	.0023
37	14800	.0367	.0028
36	14400	.0339	.0026
35	14000	.0313	.0023
34	13600	.0290	.0022
33	13200	.0268	.0020
32	12800	.0248	.0019
31	12400	.0227	.0021
30	12000	.0208	.0018
29	11600	.0190	.0016
28	11200	.0174	.0014
27	10800	.0160	.0016
26	10400	.0144	.0017
25	10000	.0127	
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

AF-6 Continued from Previous Page

FRACTOGRAPHIC DATA

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT II
3 Lives → *	60	[redacted]	.3105	.0012
	59	23600	.3093	0567
	58	23200	2526	0341
	57	22800	2185	0245
	56	22400	1940	0223
	55	22000	1717	0189
	54	21600	1528	0147
	53	21200	1381	0128
	52	20800	1253	0121
	51	20400	1132	0092
	50	20000	1040	0095
	49	19600	0945	0085
	48	19200	0860	0070
	47	18800	0790	0050
	46	18400	0740	0066
	45	18000	0674	0056
	44	17600	0618	0059
	43	17200	0569	0036
	42	16800	0533	0039
	41	16400	0494	0034

194

2.3 TASK III
2.3.1 YWPF

FATIGUE TEST DATA

See next page for 1 and 2 Lives

SPECIMEN NUMBER: YWPF-1A2 [2nd Bolt Hole Not Primary]

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AGE WIDTH: _____

AGE THICKNESS: _____

: See Primary Crack Growth YWPF-1B

R-CAL. _____

CAL-S _____

LINE STRESS: _____ APOT _____

LOAD: _____ 1 Life

ES AT TERMINATION/[redacted]:

2 Lives/_____

@ 1,819,753 L.P.'s = 19,011.53 FLT-HRS

ATIC LOAD A- K#

B- K#

ORIGIN LIES JUST IN FROM BOLT HOLE SURFACE (≈ .0001 INCHES)

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0135	.0016
39	15600	0119	0015
38	15200	0104	0013
37	14800	0091	0012
36	14400	0079	0011
35	14000	0068	0008
34	13600	0060	0006
33	13200	0054	0006
32	12800	0048	0003
31	12400	0045	0004
30	12000	0041	0004
29	11600	0037	0004
28	11200	0033	0003
27	10800	0030	0004
26	10400	0026	0002
25	10000	0024	0005
24	9600	0019	0002
23	9200	0017	
22	8800	0014	
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

See next page for 1 and 2 Lives

SPECIMEN NUMBER: YWPF-1B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5 15

ERAGE WIDTH: .5028 1.5042/1.5013/1.50[illegible]/1.5017

ERAGE THICKNESS: .3760 .377/.3776/.377[illegible]/.3762/.3778

EA: .5651 ℓ cal. 18094

cal surv. 94.2%

SELINE STRESS: >4 Ksi. Apot. 76.8

X. LOAD: 19212.8 1 Life

CLES AT TERMINATION/[redacted]:

3# Lives/2,297,241

@ 1,819,753 L.P.'s = 19,011.53

STATIC LOAD A - 15.30 K#

B - 10.00 K#

ORIGIN LIES ON SURFACE THAT MATES WITH PLATE "A" NEAR CORNER. MATING SURFACES WERE MILLED.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1293	.0105
39	15600	1188	0100
38	15200	1088	0097
37	14800	0991	0096
36	14400	0905	0074
35	14000	0831	0068
34	13600	0763	0063
33	13200	0700	0056
32	12800	0644	0067
31	12400	0577	0064
30	12000	0513	0057
29	11600	0456	0054
28	11200	0402	0032
27	10800	0370	0035
26	10400	0335	0036
25	10000	0299	0034
24	9600	0265	0032
23	9200	0233	0028
22	8800	0205	0024
21	8400	0181	0021
20	8000	0160	0021
19	7600	0139	0019
18	7200	0120	0018
17	6800	0102	
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

Continued from previous page

FRACTOGRAPHIC DATA

YWPF-1A2 (2nd BOLT HOLE NOT PRIMARY)

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I
3 Lives	60	24000		
	59	23600		
	58	23200		
	57	22800		
	56	22400		
	55	22000		
	54	21600		
	53	21200		
	52	20800		
	51	20400		
	50	20000		
	49	19600		
→	48	[redacted]	.0343	.0052
	47	18800	.0291	0026
	46	18400	0265	0024
	45	18000	0241	0020
	44	17600	0221	0024
	43	17200	0197	0022
	42	16800	0175	0022
	41	16400	0153	0018

FRACTOGRAPHIC DATA

YWPF-1B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I
3 Lives	60	24000		
	59	23600		
	58	23200		
	57	22800		
	56	22400		
	55	22000		
	54	21600		
	53	21200		
	52	20800		
	51	20400		
	50	20000		
	49	19600		
→	48	[redacted]	.2527	.0134
	47	18800	2393	0214
	46	18400	2179	0183
	45	18000	1996	0180
	44	17600	1816	0145
	43	17200	1671	0133
	42	16800	1538	0128
	41	16400	1410	0117

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-2B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5) 16

ERAGE WIDTH: 1.4987 1.4972 1.4968 1.5000 1.5007

ERAGE THICKNESS: .3791 .3790 .3752 .3796 .3811

EA: .5682

SELINE STRESS: 34 KSi

X. LOAD: 19317.0

RCAL 18652
CAL.S 945
Apol 7.73

1 Life

CLES AT TERMINATION/[redacted]:

3 Lives/____

@ 1,817,861 L.P.'s = 18,991.77

STATIC LOAD A-13.78 K#
B-11.82 K#

ORIGIN LIES AT THE CORNER. MATING SURFACES WERE MILLED.

See next page

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0817	.0066
39	15600	0751	0066
38	15200	0685	0065
37	14800	0620	0060
36	14400	0560	0037
35	14000	0523	0053
34	13600	0470	0044
33	13200	0426	0041
32	12800	0385	0040
31	12400	0345	0032
30	12000	0313	0035
29	11600	0278	0026
28	11200	0252	0024
27	10800	0228	0019
26	10400	0209	0016
25	10000	0193	0018
24	9600	0175	0018
23	9200	0157	0016
22	8800	0141	0014
21	8400	0127	0019
20	8000	0108	0009
19	7600	0099	0009
18	7200	0090	0006
17	6800	0084	0007
16	6400	0077	0008
15	6000	0069	0005
14	5600	0064	0008
13	5200	0056	0007
12	4800	0049	0006
11	4400	0043	0005
10	4000	0038	0006
9	3600	0032	0005
8	3200	0027	0005
7	2800	0022	0004
6	2400	0018	0004
5	2000	0014	
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-3B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6) 17

ERAGE WIDTH: 1.5000 1.5004 1.5001 1.4996 1.5000

ERAGE THICKNESS: .3761 .3753 .3754 .3757 .3772 .3772

EA: .5641

SELINE STRESS: 34 KSi

X. LOAD: 19180.4

R CAL. 18478
CN S. .96.3
Apol 7.67

1 Life

CLES AT TERMINATION/[redacted]:

3 Lives/____

@ 1,816,227 L.P.'s = 18,974.70

STATIC LOAD A-16.32 K#
B-16.83 K#

ORIGIN LIES ON CHAMFERED CORNER SURFACE

See next page

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0268	.0046
39	15600	0222	0028
38	15200	0194	0024
37	14800	0170	0015
36	14400	0155	0015
35	14000	0140	0017
34	13600	0123	0016
33	13200	0107	0010
32	12800	0097	0011
31	12400	0086	0007
30	12000	0079	0008
29	11600	0071	0009
28	11200	0062	0007
27	10800	0055	0005
26	10400	0050	0008
25	10000	0042	0005
24	9600	0037	0005
23	9200	0032	0007
22	8800	0025	0005
21	8400	0020	
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

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Continued from previous page

FRACTOGRAPHIC DATA

YWPF-2B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I'
3 Lives	60	24000		
	59	23600		
	58	23200		
	57	22800		
	56	22400		
	55	22000		
	54	21600		
	53	21200		
	52	20800		
	51	20400		
	50	20000		
	49	19600		
→	48	[illegible]	.1759	.0102
	47	18800	1657	0152
	46	18400	1505	0150
	45	18000	1355	0137
	44	17600	1218	0135
	43	17200	1083	0103
	42	16800	0980	0086
	41	16400	0894	0077

FRACTOGRAPHIC DATA

YWPF-3B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I'
3 Lives	60	24000		
	59	23600		
	58	23200		
	57	22800		
	56	22400		
	55	22000		
	54	21600		
	53	21200		
	52	20800		
	51	20400		
	50	20000		
	49	19600		
→	48	[illegible]	.0630	.0027
	47	18800	0603	0053
	46	18400	0550	0054
	45	18000	0496	0050
	44	17600	0446	0043
	43	17200	0403	0039
	42	16800	0364	0052
	41	16400	0312	0044

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

Delamed.

SPECIMEN NUMBER: YWPF-4A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5

ERAGE WIDTH: 1.519 1.5010/1.5008/1.5009/1.5027

ERAGE THICKNESS: .3791 .3787/.3759/.3778/.3817/.3813

EA: .5758

SELINE STRESS: 34KSI

X. LOAD: 19577.2

CLES AT [redacted]/FAILURE: *

3 Lives/____

@ 1,802,871 L.P.'s = 18,835.16 FLT-HRS *

ORIGIN LIES ON CHAMFERED CORNER SURFACE

2 Lives

1 Life

See next page

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Rcal 18752

Cal swing 95.8

Apot 783

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1243	.0169
39	15600	1074	.0143
38	15200	0931	0126
37	14800	0805	0105
36	14400	0700	0085
35	14000	0615	0087
34	13600	0528	0078
33	13200	0450	0053
32	12800	0397	0049
31	12400	0348	0046
30	12000	0302	0040
29	11600	0262	0035
28	11200	0227	0024
27	10800	0203	0024
26	10400	0179	0026
25	10000	0153	0024
24	9600	0129	0022
23	9200	0107	0021
22	8800	0086	0012
21	8400	0074	0014
20	8000	0060	0011
19	7600	0049	0009
18	7200	0040	0008
17	6800	0032	0007
16	6400	0025	0004
15	6000	0021	
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPF-5B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5

ERAGE WIDTH: 1.4975 1.4989/1.4638/1.5004/1.5008

ERAGE THICKNESS: .37766 3793/3787/3794/3764/3765

EA: .5655

SELINE STRESS: 34 KSI

X. LOAD: 19228.2

CLES AT TERMINATION/[redacted]:

3 Lives/____

@ 1,823,882 L.P.'s = 19,054.67

STATIC LOAD A- 15.48 K#
B- 13.88 K#

ORIGIN LIES ON SURFACE WHICH MATES WITH PLATE "A" NEAR THE CORNER. MATING SURFACES WERE MILLED.

2 Lives

1 Life

See next page

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Rcal 18627

Cal swing 96.9

Apot 770

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0978	.0066
39	15600	0912	0053
38	15200	0859	0046
37	14800	0813	0050
36	14400	0763	0049
35	14000	0714	0053
34	13600	0661	0048
33	13200	0613	0039
32	12800	0574	0041
31	12400	0533	0040
30	12000	0493	0040
29	11600	0453	0043
28	11200	0410	0043
27	10800	0367	0029
26	10400	0338	0035
25	10000	0303	0028
24	9600	0275	0025
23	9200	0250	0026
22	8800	0224	0026
21	8400	0198	0024
20	8000	0174	0019
19	7600	0155	0018
18	7200	0137	0017
17	6800	0120	0018
16	6400	0102	0015
15	6000	0087	0007
14	5600	0080	0018
13	5200	0072	0009
12	4800	0063	0008
11	4400	0055	0006
10	4000	0049	0006
9	3600	0043	
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

Continued from previous page

FRACTOGRAPHIC DATA

YWPF-4A

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I!
3 Lives	60	24000		
	59	23600		
	58	23200		
	57	22800		
	56	22400		
	55	22000		
	54	21600		
	53	21200		
	52	20800		
	51	20400		
	50	20000		
	49	19600		
* →	48	[redacted]	.3540	.0085
	47	18800	3455	0575
	46	18400	2880	0420
	45	18000	2460	0286
	44	17600	2174	0311
	43	17200	1863	0228
	42	16800	1635	0213
	41	16400	1422	0179

FRACTOGRAPHIC DATA

YWIF-5B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I!
3 Lives	60	24000		
	59	23600		
	58	23200		
	57	22800		
	56	22400		
	55	22000		
	54	21600		
	53	21200		
	52	20800		
	51	20400		
	50	20000		
	49	19600		
→	48	[redacted]	.1677	.0070
	47	18800	1607	0106
	46	18400	1501	0105
	45	18000	1396	0101
	44	17600	1295	0092
	43	17200	1203	0086
	42	16800	1117	0065
	41	16400	1052	0074

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-6B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 90

ERAGE WIDTH: 1.5016 — 1.5012 / 1.5008 / 1.5019 / 1.5025

ERAGE THICKNESS: .37784 — .3785 / .3781 / .3782 / .3762 / .3782

EA: .56740 — R.CAL. 18982

SELINE STRESS: 34 KSI. — CAL. = 98.4

X. LOAD: 19290.4 — APP 7.72

1 Life

CLES AT TERMINATION/[redacted]:

3 Lives/____

@ 1,824,260 L.P.'s = 19,058.62 FLT-HRS.

STATIC LOAD A-15.84 K#

B-12.00 K#

ORIGIN LIES ON SURFACE (NEAR CORNER) THAT MATES WITH PLATE "A". MATING SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1595	.0120
39	15600	1475	0107
38	15200	1368	0114
37	14800	1254	0111
36	14400	1143	0104
35	14000	1039	0099
34	13600	0940	0115
33	13200	0825	0065
32	12800	0760	0069
31	12400	0691	0064
30	12000	0627	0048
29	11600	0579	0057
28	11200	0522	0053
27	10800	0469	0046
26	10400	0423	0046
25	10000	0377	0040
24	9600	0337	0038
23	9200	0299	0048
22	8800	0251	0032
21	8400	0219	0036
20	8000	0183	0035
19	7600	0148	0037
18	7200	0121	0013
17	6800	0108	0016
16	6400	0092	0013
15	6000	0079	0013
14	5600	0066	0011
13	5200	0055	0005
12	4800	0050	0010
11	4400	0039	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

Deburred Specimens.

SPECIMEN NUMBER: YWPF-7A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6 @ 90

ERAGE WIDTH: 1.5020 — 1.5014 / 1.5023 / 1.5022 / 1.5019

ERAGE THICKNESS: .3765 — .3753 / .3742 / .3753 / .3788 / .3791

EA: .5656 — RC 18982

SELINE STRESS: 34 KSI — CS 98.7

X. LOAD: 19229.1 — AP 7.70

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives/ 1,531,494

(3)

STATIC LOAD A-10.13 K#

B-16.68 K#

ORIGIN LIES NEAR BOLT HOLE/CHAMFER SURFACE ON THE CHAMFER.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.2756	.0362
39	15600	2394	0305
38	15200	2089	0288
37	14800	1801	0214
36	14400	1587	0203
35	14000	1384	0186
34	13600	1198	0159
33	13200	1039	0142
32	12800	0897	0112
31	12400	0785	0095
30	12000	0690	0081
29	11600	0609	0081
28	11200	0528	0066
27	10800	0462	0054
26	10400	0408	0051
25	10000	0357	0049
24	9600	0308	0043
23	9200	0265	0037
22	8800	0228	0042
21	8400	0186	0033
20	8000	0153	0033
19	7600	0120	0025
18	7200	0095	0022
17	6800	0073	0016
16	6400	0057	
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

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Continued from previous page

FRACTOGRAPHIC DATA

YWPF-6B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I!
3 Lives	60	24000		
	59	23600		
	58	23200		
	57	22800		
	56	22400		
	55	22000		
	54	21600		
	53	21200		
	52	20800		
	51	20400		
	50	20000		
	49	19600		
→	48	[illegible]	.2840	.0130
	47	18800	.2710	0194
	46	18400	2516	0166
	45	18000	2350	0165
	44	17600	2185	0166
	43	17200	2019	0149
	42	16800	1870	0132
	41	16400	1738	0143

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPF-7A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH:	1.5042	1.5041	1.5033	1.5048	1.5047
AVERAGE THICKNESS:	.3831	.3820	.3804	.3819	.3853	.3860

AREA: .5763 RCAL. 18982

BASELINE STRESS: 34 KSI CALS 97%

MAX. LOAD: 19594 A.POT. 784

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-17.70 K#
B-18.04 K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.0428	.0049
39	15600	0379	0030
38	15200	0349	0022
37	14800	0327	0018
36	14400	0309	0024
35	14000	0285	0025
34	13600	0260	0024
33	13200	0236	0022
32	12800	0214	0025
31	12400	0189	0019
30	12000	0170	0017
29	11600	0153	0014
28	11200	0139	0014
27	10800	0125	0017
26	10400	0108	0014
25	10000	0094	0013
24	9600	0083	0011
23	9200	0072	0009
22	8800	0063	0012
21	8400	0051	0014
20	8000	0047	0005
19	7600	0042	0004
18	7200	0038	0005
17	6800	0033	0003
16	6400	0030	
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPF-8B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: D

AVERAGE WIDTH:	1.4999	1.5006	1.5002	1.4988	1.4998
AVERAGE THICKNESS:	.3714	.3772	.3758	.3759	.3813	.3798

AREA: .5570 RCAL. 18478

BASELINE STRESS: EZ CALS 98%

MAX. LOAD: 18939 A.POT. 758

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-16.20 K#
B-16.16 K#

ORIGIN LIES 0.0004 IN. BELOW HOLE SURFACE

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.0434	0077
39	15600	.0357	0059
38	15200	0298	0058
37	14800	0240	0042
36	14400	0198	0024
35	14000	0174	0015
34	13600	0156	0018
33	13200	0138	0014
32	12800	0124	0014
31	12400	0110	0012
30	12000	0098	0012
29	11600	0085	0012
28	11200	0073	0008
27	10800	0065	0009
26	10400	0056	0007
25	10000	0049	0008
24	9600	0041	0007
23	9200	0034	0007
22	8800	0027	0004
21	8400	0023	0004
20	8000	0019	0003
19	7600	0016	0002
18	7200	0014	0002
17	6800	0012	0001
16	6400	0011	0001
15	6000	0010	0001
14	5600	0009	
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPF-9B (YWPF-9)

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH:	1.5001	1.5005	1.4999	1.5006	1.5005	
AVERAGE THICKNESS:	.3738	.3783	.3774	.3796	.3824	.3825

AREA: .5698 RCAL. 18652

BASELINE STRESS 34Ksi CALS 96%

MAX. LOAD: 9373 A.POT. 775

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-18.10 K#
B-15.94 K#

TWO PRIMARY ORIGINS LIE ON SURFACE OF PLATE "B"
SECONDARY ORIGIN LIES ON HOLE SURFACE.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.0373	.0036
39	15600	.0337	.0031
38	15200	.0306	.0036
37	14800	.0270	.0032
36	14400	.0238	.0035
35	14000	.0203	.0027
34	13600	.0176	.0029
33	13200	.0147	.0025
32	12800	.0122	.0022
31	12400	.0100	.0019
30	12000	.0081	.0015
29	11600	.0066	.0012
28	11200	.0054	.0009
27	10800	.0045	.0006
26	10400	.0039	.0007
25	10000	.0032	.0005
24	9600	.0027	.0003
23	9200	.0024	
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPF-10B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH:	1.4997	1.5005	1.5002	1.4999	1.4992	
AVERAGE THICKNESS:	.3735	.3726	.3725	.3721	.3746	.3755

AREA: .5601 RCAL. 18982

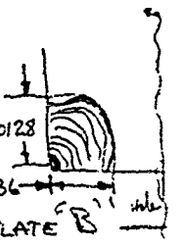
BASELINE STRESS: 34Ksi CALS 100%

MAX. LOAD: 19043 A.POT. 761

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-17.22K#
B-17.60K#



ORIGIN LIES ON SURFACE OF PLATE "B" NEAR CORNER. ALL 40 Blks (16000 FLT-HRS) ARE PRESENT.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-11B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	1	2	3	4	5	6 R 15
ERAGE WIDTH:	1.5023		1.508	1.508	1.5023	1.5025
ERAGE THICKNESS:	.3809		.3817	.3794	.3810	.3811 .3813

EA: .5722

R.C. 18478
C.S. 95.
AP 7.78

SELINE STRESS: 34KSI

X. LOAD: 19455.7

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives / 1531494

②

STATIC LOAD A-16.93 K#
B-15.78 K#

ORIGINS LIE ON BOLT HOLE SURFACE

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0749	.0059
39	15600	0690	0041
38	15200	0649	0043
37	14800	0606	0039
36	14400	0567	0036
35	14000	0531	0044
34	13600	0487	0034
33	13200	0453	0037
32	12800	0416	0033
31	12400	0383	0027
30	12000	0356	0030
29	11600	0326	0033
28	11200	0293	0030
27	10800	0263	0027
26	10400	0236	0026
25	10000	0210	0029
24	9600	0181	0018
23	9200	0163	0023
22	8800	0140	0023
21	8400	0117	0022
20	8000	0095	0019
19	7600	0076	0014
18	7200	0062	0012
17	6800	0050	0009
16	6400	0041	0008
15	6000	0033	0005
14	5600	0028	0004
13	5200	0024	0002
12	4800	0022	0002
11	4400	0020	0003
10	4000	0017	0003
9	3600	0014	0002
8	3200	0012	0002
7	2800	0010	0001
6	2400	0009	0002
5	2000	0007	0002
4	1600	0005	
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-12

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	1	2	3	4	5	6 R 16
ERAGE WIDTH:	1.5001		1.4996	1.4996	1.5005	1.5007
ERAGE THICKNESS:	.3747	.3746	.3726	.3734	.3767	.3770

EA: .5621

R C 18652
C.S 98.0
AP 7.65

SELINE STRESS: 34 KSI

X. LOAD: 19113.0

1 Life

CLES AT TERMINATION/FAILURE:

2 Lives / 1531494

②

STATIC LOAD A-14.64 K#
B-17.64 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1029	.0072
39	15600	0957	0070
38	15200	0887	0068
37	14800	0819	0072
36	14400	0747	0073
35	14000	0674	0072
34	13600	0602	0070
33	13200	0532	0067
32	12800	0465	0085
31	12400	0380	0050
30	12000	0330	0074
29	11600	0256	0057
28	11200	0199	0058
27	10800	0141	0046
26	10400	0095	
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

205

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-13A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6 (88)

ERAGE WIDTH:	1.5030	1.5042	1.5038	1.5011	1.5028	
ERAGE THICKNESS:	.3821	.3824	.3814	.3825	.3818	.3822

EA: .5742 R.Cal. 18752

SELINE STRESS: 34K CS 96%

X. LOAD: 19524.0 ΔP 78.1

1 Life

CLES AT TERMINATION/[redacted]

2 Lives/_____

②

STATIC LOAD A-14.07K#
B-15.88 K#

ORIGIN LIES ON THE BOLT HOLE SURFACE

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1345	.0133
39	15600	1212	0114
38	15200	1098	0093
37	14800	1005	0107
36	14400	0898	0076
35	14000	0822	0078
34	13600	0744	0086
33	13200	0658	0056
32	12800	0602	0053
31	12400	0549	0049
30	12000	0500	0049
29	11600	0451	0047
28	11200	0404	0039
27	10800	0365	0041
26	10400	0324	0034
25	10000	0290	0036
24	9600	0254	0041
23	9200	0213	0030
22	8800	0183	0032
21	8400	0151	0021
20	8000	0130	0022
19	7600	0108	0020
18	7200	0088	0014
17	6800	0074	0012
16	6400	0062	0010
15	6000	0052	0011
14	5600	0041	0011
13	5200	0030	0007
12	4800	0023	0004
11	4400	0019	0003
10	4000	0016	0004
9	3600	0012	0004
8	3200	0008	0003
7	2800	0005	
6	2400		
5	2000		
4	1600		
3	1200		
2	800	–	
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-14A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 (88)

ERAGE WIDTH:	1.5016	1.5012	1.5016	1.5019	1.5019	
ERAGE THICKNESS:	.3810	.3816	.3795	.3812	.3816	.3813

EA: .5722 R.Cal 18627

SELINE STRESS: 34K Cal Sing 95.7

X. LOAD: 19453.8 A.P 77.8

1 Life

CLES AT TERMINATION/[redacted]

2 Lives/_____

②

STATIC LOAD A-5.80 K#
B-17.58 K#

ORIGIN LIES ON RADIUS OF CORNER FROM SLIVER.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.4701	.1116
39	15600	3585	0542
38	15200	3043	0335
37	14800	2708	0260
36	14400	2448	0233
35	14000	2215	0223
34	13600	1992	0185
33	13200	1807	0160
32	12800	1647	0151
31	12400	1496	0125
30	12000	1371	0126
29	11600	1245	0112
28	11200	1133	0108
27	10800	1025	0077
26	10400	0948	0095
25	10000	0853	0081
24	9600	0772	0074
23	9200	0698	0075
22	8800	0623	0061
21	8400	2562	0062
20	8000	0500	0046
19	7600	0454	0070
18	7200	0384	0073
17	6800	0311	0053
16	6400	0258	0048
15	6000	0210	0031
14	5600	0179	0038
13	5200	0141	0039
12	4800	0102	0024
11	4400	0078	0016
10	4000	0062	0016
9	3600	0046	
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

206

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-15B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	1	2	3	4	5	6 R19
ERAGE WIDTH:	1.5013		1.5014	1.5002	1.5016	1.5020
ERAGE THICKNESS:	.3809		.3810	.3798	.3811	.3817	.3812

R.C 16034
CS03.
Ap 7.0B

EA: .5720

SELINE STRESS: 34 KSI.

X. LOAD: 19445.8

1 Life

'CLES AT TERMINATION/FAILURE:

2 Lives/ 1531494

②

STATIC LOAD A- 17.92 K#
B- 16.60 K#

ORIGIN LIES ON PLATE SURFACE, WHICH MATES WITH PLATE "A", NEAR THE CHAMFERED CORNER.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0395	.0025
39	15600	0370	0028
38	15200	0342	0022
37	14800	0320	0037
36	14400	0283	0025
35	14000	0258	0026
34	13600	0232	0032
33	13200	0200	0031
32	12800	0169	0027
31	12400	0142	0021
30	12000	0121	0024
29	11600	0097	0022
28	11200	0075	0016
27	10800	0059	0015
26	10400	0044	0011
25	10000	0033	0005
24	9600	0028	0004
23	9200	0024	0002
22	8800	0022	0003
21	8400	0019	
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-16A (Primary Bolt Hole NOT the Primary)

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AGE WIDTH: See Primary for Data

AGE THICKNESS: _____

R-CAL. _____
CAL-5 _____
Apot _____

i: _____

ILINE STRESS: _____

LOAD: _____

1 Life

ES AT TERMINATION/FAILURE:

2 Lives/_____

TATIC LOAD A- K#
B- K#

ORIGIN LIES ON RADIUS OF CORNER

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0081	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

207

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-17B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 | 2 | 3 | (4) | 5 | 6 (15)

ERAGE WIDTH:	1.5010	1.5002	1.4998	1.5020	1.5020	
ERAGE THICKNESS:	.3854	.3883	.3845	.3872	.3836	.3832

EA: .57784

SELINE STRESS: 34K

X. LOAD: 19666.5

CLES AT TERMINATION/[redacted]

2 Lives/____

1 Life

R CAL 18478
C.S. 93.9
A.S 786

(2)

STATIC LOAD A-17.68 K#
B-17.94 K#

ORIGIN LIES ON CHAMFERED CORNER SURFACE MATING SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0248	.0020
39	15600	.0228	.0023
38	15200	.0205	.0015
37	14800	.0190	.0015
36	14400	.0175	.0015
35	14000	.0160	.0017
34	13600	.0143	.0012
33	13200	.0131	.0011
32	12800	.0120	.0005
31	12400	.0115	.0008
30	12000	.0107	.0007
29	11600	.0100	.0009
28	11200	.0091	.0009
27	10800	.0082	.0006
26	10400	.0076	
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-18A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 | 2 | 3 | 4 | (5) | 6 (16)

ERAGE WIDTH:	1.5020	1.5007	1.5011	1.5032	1.5029	
ERAGE THICKNESS:	.3795	.3820	.3775	.3816	.3788	.3779

EA: .5700

SELINE STRESS: 34K

---n: 19380.3

CLES AT TERMINATION/[redacted]

2 Lives/____

1 Life

R CAL 18652
CAL.: 96.2
A.S 775

(2)

STATIC LOAD A-11.36 K#
B-13.74 K#

ORIGIN LIES ON MATING SURFACE NEAR RADIUS CORNER. ORIGIN WAS DUE TO FRETTING

212

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.3258	.0320
39	15600	2938	0262
38	15200	2676	0226
37	14800	2450	0222
36	14400	2228	0204
35	14000	2024	0214
34	13600	1810	0187
33	13200	1623	0191
32	12800	1432	0141
31	12400	1291	0166
30	12000	1125	0143
29	11600	0982	0134
28	11200	0848	0113
27	10800	0735	0095
26	10400	0640	0082
25	10000	0558	0076
24	9600	0482	0065
23	9200	0417	0062
22	8800	0355	0055
21	8400	0300	0043
20	8000	0257	0041
19	7600	0216	0033
18	7200	0183	0035
17	6800	0148	0038
16	6400	0110	
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-[redacted]19B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6 (7)

	1	2	3	4	5	6
ERAGE WIDTH:	1.5009		1.5007	1.5008	1.5013	1.5009
ERAGE THICKNESS:	.3781		.3794	.3774	.3776	.3784	.3778

EA: .5675

SELINE STRESS: >4K

X. LOAD: 19295.7

R CAL 18084
CAL S. 93.7
AP 772

1 Life

CLES AT TERMINATION [redacted]

2 Lives/____

(2)

STATIC LOAD A-17.59 K#
B-15.98 K#

ORIGIN LIES ON CHAMFER CORNER SURFACE.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0680	.0061
39	15600	0619	0047
38	15200	0572	0054
37	14800	0518	0055
36	14400	0463	0032
35	14000	0431	0037
34	13600	0394	0025
33	13200	0369	0035
32	12800	0334	0028
31	12400	0306	0022
30	12000	0284	0027
29	11600	0257	0029
28	11200	0228	0025
27	10800	0203	0024
26	10400	0179	0026
25	10000	0153	
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives *

SPECIMEN NUMBER: YWPF-20B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6

	1	2	3	4	5	6
AGE WIDTH:	1.5003	1.5002	1.5008	1.5002	1.4999	
AGE THICKNESS:	.3770	.3798	.3751	.3783	.3763	.3756

R-CAL. 18752
CAL-S 988
A-OOT 7.70

: .3656

ILINE STRESS: 34ksi

LOAD: 19231.8

1 Life

ES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,496,570 L.P.'s = 15,635.14 Flt.-Hrs. *

TATIC LOAD A- K#
B- K#

ORIGIN LIES ON PLATE B SURFACE.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	[redacted]	.2842	.0078
39	15600	2764	0532
38	15200	2232	0367
37	14800	1865	0270
36	14400	1595	0208
35	14000	1387	0163
34	13600	1224	0130
33	13200	1094	0094
32	12800	1000	0089
31	12400	0911	0079
30	12000	0832	0054
29	11600	0778	0055
28	11200	0723	0050
27	10800	0673	0044
26	10400	0629	0038
25	10000	0591	0042
24	9600	0549	0029
23	9200	0520	0032
22	8800	0488	0032
21	8400	0456	0031
20	8000	0425	0028
19	7600	0397	0029
18	7200	0368	0030
17	6800	0338	0026
16	6400	0312	0026
15	6000	0286	0022
14	5600	0264	0025
13	5200	0239	0024
12	4800	0215	0024
11	4400	0191	0020
10	4000	0171	0020
9	3600	0151	0018
8	3200	0133	
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-21B

SPECTRUM: Fighter

TEST DATE: _____ (89) *

TEST FRAME:	1	(2)	3	4	5	6
RAGE WIDTH:	1.4999	1.4998	1.5013	1.4998	1.4987	
RAGE THICKNESS:	.3806	.3800	.3804	.3792	.3823	.3813

A: .5709

ELINE STRESS: 34 KSI

. LOAD: 19411-3

LES AT [redacted]/FAILURE: *

Rcal 18627
C.S. 96%
A.P. 7.76

1 Life

2 Lives/____ *

@ 1,225,192 L.P.'s = 12,799.97 FLT-HRS

TATIC LOAD A- K#
B- K#

ORIGIN LIES ON PLATE SURFACE NEAR CORNER DUE TO TOOL MARKS (RELAX TOLERANCE!)

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	[redacted]	.4841	.1436
31	12400	3405	0621
30	12000	2784	0377
29	11600	2407	0344
28	11200	2063	0262
27	10800	1801	0214
26	10400	1587	0173
25	10000	1414	0154
24	9600	1260	0130
23	9200	1130	0128
22	8800	1002	0106
21	8400	0896	0088
20	8000	0808	0082
19	7600	0726	0075
18	7200	0651	0081
17	6800	0570	0067
16	6400	0503	0064
15	6000	0439	0055
14	5600	0384	0072
13	5200	0312	0051
12	4800	0261	0056
11	4400	0205	0057
10	4000	0148	0053
9	3600	0095	0030
8	3200	0065	0016
7	2800	0049	0019
6	2400	0030	0010
5	2000	0020	0009
4	1600	0011	0005
3	1200	0006	0002
2	800	0004	
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-22B

SPECTRUM: Fighter

TEST DATE: _____ (90)

TEST FRAME:	1	2	3	4	5	6
RAGE WIDTH:	1.5045	1.5043	1.5045	1.5046	1.5045	
RAGE THICKNESS:	.3821	.3827	.3808	.3826	.3818	.3826

A: .5749

ELINE STRESS: 34 KSI

. LOAD: 19545-6

LES AT TERMINATION [redacted]

R CAL. 18932
C.S. 97%
A.P. 7.82

1 Life

2 Lives/____

TATIC LOAD A-17.89 K#
B-16.02 K#

ORIGINS LIE ON PLATE "B" SURFACE FATIGUE INITIATION WAS FROM MILL TOOL MARKS. DUE TO RELAX TOLERANCE!

Blk #	FLIGHT HRS.	CRACK LENGTH IN *		INCREMENT IN.
40	16000	.0957	.0574	0077
39	15600	.0880	.0497	0079
38	15200	0801	0418	0053
37	14800	0748	0365	0045
36	14400	0703	0320	0043
35	14000	0660	0277	0044
34	13600	0616	0233	0035
33	13200	0581	0193	0022
32	12800	0559	0176	0019
31	12400	0540	0157	0026
30	12000	0514	0131	0014
29	11600	0500	0117	0011
28	11200	0489	0106	0012
27	10800	0477	0094	0023
26	10400	0454	0071	0012
25	10000	0442	0059	0005
24	9600	0437	0054	0004
23	9200	0433	0050	0005
22	8800	0428	0045	0007
21	8400	0421	0038	0007
20	8000	0414	0031	
19	7600			
18	7200			
17	6800			
16	6400			
15	6000			
14	5600			
13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	400			

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-23

SPECTRUM: Fighter — Lubricate with Tungsten disulfide

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6 (90) (SPECIMEN WAS measured before bolting fixture, see back of sheet)

ERAGE WIDTH: 1.5004

ERAGE THICKNESS: .3762

EA: .5645

SELINE STRESS: 34KSI — Rcal 18982 — T.S. 98.9

X. LOAD: 19193.0 — Ap 7.67 — 1 Life

CLES AT TERMINATION: [redacted]

3 Lives/____

(3)

STATIC LOAD A-15.96 K#
B-13.64 K#

ORIGIN LIES AT CORNER (CHAMFERED)
MATING SURFACES WERE MILLED.
TUNGSTEN DISULFIDE LUBRICANT HAS [redacted]
DESTROYED THE FRACTURE ORIGIN AREA.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.14025	.01842
39	15600	12183	01401
38	15200	10782	01149
37	14800	09633	00970
36	14400	08663	00963
35	14000	07700	00842
34	13600	06858	00727
33	13200	06131	00564
32	12800	05567	00563
31	12400	05004	00501
30	12000	04503	00435
29	11600	04068	00328
28	11200	03740	00294
27	10800	03446	00426
26	10400	03020	00343
25	10000	02677	00296
24	9600	02381	00209
23	9200	02172	00274
22	8800	01898	00211
21	8400	01687	00329
20	8000	01358	00196
19	7600	01162	
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-25B

SPECTRUM: Fighter

TEST DATE: _____ (15)

TEST FRAME:	1	2	3	(4)	5	6
RAGE WIDTH:	1.5011		1.5012	1.5012	1.5011	1.5008
RAGE THICKNESS:	.3808		.3821	.3798	.3806	.3812	.3804

A: .5716 — R.Cal. 18478 — CS 98%

ELINE STRESS: 34KSI — Ap 7.77

. LOAD: 19436.1 — 1 Life

LES AT TERMINATION/FAILURE:

2 Lives/____

TATIC LOAD A-17.20 K#
B-15.24 K#

ORIGIN LIES ON BOLT HOLE-SURFACE

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0690	.0066
39	15600	0624	0069
38	15200	0555	0061
37	14800	0494	0056
36	14400	0438	0053
35	14000	0385	0040
34	13600	0345	0033
33	13200	0312	0042
32	12800	0270	0028
31	12400	0242	0031
30	12000	0211	0028
29	11600	0183	0021
28	11200	0162	0019
27	10800	0143	0013
26	10400	0130	0010
25	10000	0120	0016
24	9600	0104	0016
23	9200	0088	0015
22	8800	0073	0011
21	8400	0062	0010
20	8000	0052	0010
19	7600	0042	0006
18	7200	0036	0006
17	6800	0030	
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(214)

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPF-26B

SPECTRUM: Fighter — Lubricate with MoS_2

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5) [redacted] (SPECIMEN WAS measured before cutting together, see Data sheet)

ERAGE WIDTH: 1.4983

ERAGE THICKNESS: .3957

EA: .5629 — RCAI 18652 CS 97.5 AP 7.66

SELINE STRESS: 34 Ksi

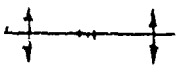
X. LOAD: 19138.6

CLES AT [redacted]/FAILURE: * — 1 Life

2 Lives/____

2) 1,458,278 L.P.'s = 15,235.09 FLT-HRS *

STATIC LOAD A-[redacted] K#
B-[redacted] K#



ORIGIN LIES AT CHAMFER/MATING SURFACE INTERFACE. MATING SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	[redacted]	.4270	.0204
38	15200	4066	.0806
37	14800	3260	.0415
36	14400	2845	0273
35	14000	2572	0236
34	13600	2336	0221
33	13200	2115	0202
32	12800	1913	0200
31	12400	1713	0190
30	12000	1523	0158
29	11600	1365	0162
28	11200	1203	0155
27	10800	1048	0140
26	10400	0908	0150
25	10000	0758	0120
24	9600	0638	0081
23	9200	0557	0081
22	8800	0476	0063
21	8400	0413	0065
20	8000	0348	0063
19	7600	0285	0058
18	7200	0227	0041
17	6800	0186	0041
16	6400	0145	0020
15	6000	0125	0022
14	5600	0103	
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPF-27A

SPECTRUM: Fighter — 2 Lives

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6 — 90

RAGE WIDTH:	1.5021	1.4999	1.4999	1.5042	1.5045	
RAGE THICKNESS:	.3763	.3774	.3736	.3775	.3757	.3775

A: .5653 — RCAI 18962 CS 99% AP 7.7

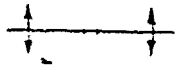
ELINE STRESS: 34 Ksi

. LOAD: 19220.2 — 1 Life

LES AT TERMINATION/FAILURE:

2 Lives/____

TATIC LOAD A-11.97 K#
B-12.50 K#



ORIGIN LIES ON CHAMFERED CORNER SURFACE.

MATING SURFACES WERE MILLED

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.2092	.0204
39	15600	1888	0167
38	15200	1721	0141
37	14800	1580	0139
36	14400	1441	0121
35	14000	1320	0120
34	13600	1200	0109
33	13200	1091	0081
32	12800	1010	0081
31	12400	0929	0082
30	12000	0847	0067
29	11600	0780	0058
28	11200	0722	0064
27	10800	0658	0055
26	10400	0603	0050
25	10000	0553	0048
24	9600	0505	0058
23	9200	0447	0057
22	8800	0390	0021
21	8400	0369	0025
20	8000	0344	0038
19	7600	0306	0041
18	7200	0265	
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

2/2

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-28A

SPECTRUM: Fighter

TEST DATE: _____ 15

TEST FRAME:	1	2	3	(4)	5	6
RAGE WIDTH:	1.4983		1.4962	1.4962	1.4998	1.5011
RAGE THICKNESS:	.3792		.3795	.3793	.3746	.3806	.3806

A: .5682

ELINE STRESS: 34ksi

LOAD: 19318.3

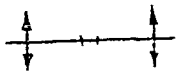
R Cal 18478
C S 96%
AP 773

1 Life

LES AT TERMINATION [redacted]

2 Lives/_____

TATIC LOAD A-14.26 K#
B-15.50 K#



ORIGIN LIES ON RADIUS OF CORNER. MATING SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0868	.0066
39	15600	.0802	.0045
38	15200	.0757	.0044
37	14800	.0713	.0043
36	14400	.0670	.0036
35	14000	.0634	.0030
34	13600	.0604	.0028
33	13200	.0576	.0026
32	12800	.0550	.0033
31	12400	.0517	.0029
30	12000	.0488	.0030
29	11600	.0458	.0030
28	11200	.0428	.0031
27	10800	.0397	.0029
26	10400	.0368	.0036
25	10000	.0332	.0024
24	9600	.0308	.0018
23	9200	.0290	.0021
22	8800	.0269	.0025
21	8400	.0244	
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-29A

SPECTRUM: Fighter

TEST DATE: _____ (88)

TEST FRAME:	(1)	2	3	4	5	6
RAGE WIDTH:	1.4985		1.4972	1.4987	1.4998	
RAGE THICKNESS:	.3808	.3814	.3822	.3802	.3804	.3798

A: .5706

ELINE STRESS: 34ksi

LOAD: 19401.4

R Cal 18752
C S 94.7
AP 774

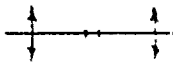
1 Life

LES AT TERMINATION/[redacted]:

2 Lives/_____

@ 1,076,801 L.P.'s = 11,242.37 FLT-HRS

TATIC LOAD A-16.30 K#
B-16.83 K#



ORIGIN LIES AT CORNER (WHICH HAD A RADIUS) MATING SURFACE WERE MILLED.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	[redacted]	.0279	.0041
28	11200	.0238	.0036
27	10800	.0202	.0034
26	10400	.0168	.0033
25	10000	.0135	.0026
24	9600	.0109	.0023
23	9200	.0086	.0019
22	8800	.0067	.0014
21	8400	.0053	.0010
20	8000	.0043	
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		(213)
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: YWPF-30B

SPECTRUM: Fighter

TEST DATE: _____ (89)

TEST FRAME:	1	(2)	3	4	5	6
RAGE WIDTH:	1.5042	1.5072	1.5112	1.5051	1.5041	
RAGE THICKNESS:	.3777	.3793	.3753	.3768	.3782	.3789

A: .5681 Rcal 18627

ELINE STRESS: 34KSI cs 96V

LOAD: 19316.6 AP 773 1 Life

LES AT TERMINATION/[redacted]:

2 Lives/_____

@ 1,076,957 F.P.'s = 11,241.91

TATIC LOAD A-17.92 K#

B-15.79 K#

ORIGIN LIES AT CORNER.

MATING SURFACES WERE MILLED

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	[redacted]	.0366	.0005
28	11200	.0361	.0021
27	10800	.0340	.0030
26	10400	.0320	.0019
25	10000	.0301	.0018
24	9600	.0283	.0019
23	9200	.0264	.0017
22	8800	.0247	.0017
21	8400	.0230	.0016
20	8000	.0214	.0016
19	7600	.0198	.0016
18	7200	.0182	.0014
17	6800	.0168	.0013
16	6400	.0155	.0014
15	6000	.0141	.0013
14	5600	.0129	
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

2.3.2 TWPB

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-1B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: (A) 1 | B 2 | C 3 | D 4 | E 5 | F 6

AVERAGE WIDTH:	1.4996	1.4995	1.4997	1.4997	1.4995
AVERAGE THICKNESS: .3815	.3813	.3796	.3818	.3828	.3819

AREA: .5721

R-Cal 18752 (7996)
Cal.S 42%

BASELINE STRESS: 33 ksi Apart 755

MAX. LOAD: 18878

CYCLES AT TERMINATION/FAILURE: 2Lives/___

@

STATIC LOAD A-17360 K#
B-15980 K#

Origin lies on Bolt Hole Surface.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	[redacted] .0393	.0095
	2480	.0298	.0073
	2380	.0225	.0059
	2280	.0166	.0045
	2180	.0121	.0029
	2080	.0092	.0019
	1980	.0073	.0017
	1880	.0056	.0014
	1780	.0042	.0007
	1680	.0035	.0007
	1580	.0029	.0006
	1480	.0022	.0004
	1380	.0018	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-2A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A | (B) 2 | C 3 | D 4 | E 5 | F 6

AVERAGE WIDTH:	1.5007	1.5004	1.5007	1.5009	1.5008
AVERAGE THICKNESS: .3848	.3860	.3823	.3853	.3857	.3847

AREA: .5775

R-Cal 18094 (7727)
Cal.S 41%

BASELINE STRESS: 33 ksi Apart 762

MAX. LOAD: 19056

CYCLES AT TERMINATION/FAILURE: 3Lives/___

@

STATIC LOAD A-15620 K#
B-17600 K#

origin lies at corner.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0958	.0177
	2480	.0781	.0163
	2380	.0618	[redacted] .0121
	2280	[redacted] .0497	.0078
	2180	.0419	.0077
	2080	.0342	.0060
	1980	.0282	.0036
	1880	.0246	.0039
	1780	.0212	.0031
	1680	.0181	.0031
	1580	.0150	.0028
	1480	.0122	.0023
	1380	.0099	.0018
One Life	1280	.0087	.0013
	1200	.0068	.0013
	1100	.0055	
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

[redacted] DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-3B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5014	1.5008	1.5009	1.5024	1.5015
AVERAGE THICKNESS: .3853	.3838	.3811	.3831	.3841	.3844

AREA: .5755

R-Col 18982 (8100)
Col.S 43%

BASELINE STRESS: 33ksi Apt 7760

MAX. LOAD: 18901

CYCLES AT TERMINATION/FAILURE: 3Lives/___

@

STATIC LOAD A-16840 K*
B-15440 K*

Origin lies on Plate B surface.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1052	.0223
	2480	0829	0217
	2380	0612	0147
	2280	0465	0113
	2180	0352	0059
	2080	0293	0061
	1980	0232	0055
	1880	0177	0038
	1780	0139	0038
	1680	0101	0034
	1580	0067	0028
	1480	0039	
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-4B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.4997	1.5012	1.5014	1.4981	1.4982
AVERAGE THICKNESS: .3842	.3861	.3817	.3854	.3843	.3837

AREA: .5763

R-Col 18478 (7894)
Col.S 42%

BASELINE STRESS: 33ksi Apt 7761

MAX. LOAD: 19016

CYCLES AT TERMINATION/FAILURE: 2Lives/___

@

STATIC LOAD A-17840 K*
B-15,500 K*

Origin lies at corner. Both Plate Surfaces (A&B) were milled.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1329	.0265
	2480	1064	0266
	2380	0798	0200
	2280	0598	0157
	2180	0441	0101
	2080	0340	0073
	1980	0267	0041
	1880	0226	0031
	1780	0195	0032
	1680	0163	0019
	1580	0144	0024
	1480	0120	0032
	1380	0088	0020
One Life	1280	0068	0010
	1200	0058	0011
	1100	0047	0012
	1000	0035	0010
	900	0025	0006
	800	0019	0006
	700	0013	
	600		
	500		
	400		
	300		
	200		

(16)

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-5B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5024	1.5033	1.5024	1.5019	1.5019
AVERAGE THICKNESS: (.3839)	.3863	.3787	.3858	.3832	.3832

AREA: .5761

R-Cal 18652 (7957)
Cal.S 429
Apst 760

BASELINE STRESS: 33 ksi

MAX. LOAD: 19010

CYCLES AT TERMINATION/~~FAILURE~~: 3Lives/___

@

STATIC LOAD A-17,400 K#
B-17060 K#

origin lies at corners.

FRACTOGRAPHIC DATA

FLIGHT ~~NUMBER~~		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0328	.0045
	2480	0283	0025
	2380	0258	0032
	2280	0226	0030
	2180	0196	0029
	2080	0167	0028
	1980	0139	0021
	1880	0118	0017
	1780	0101	0019
	1680	0082	0015
	1580	0067	0015
	1480	0052	0014
	1380	0038	0007
One Life	1280	0031	0008
	1200	0023	
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-6A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B (C) D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5018	1.5014	1.5011	1.5023	1.5024
AVERAGE THICKNESS: (.3838)	.3847	.3797	.3846	.3843	.3857

AREA: .5764

R-Cal 18982 (8100)
Cal.S 437
Apst 761

BASELINE STRESS: 33 ksi

MAX. LOAD: 19021

CYCLES AT TERMINATION/~~FAILURE~~: 2Lives/___

@

STATIC LOAD A-13820 K#
B-15,700 K#

origin lies at corners. Both Plate (A&B) Surfaces were milled.

FLIGHT ~~NUMBER~~		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1664	.0235
	2480	1429	0235
	2380	1194	0212
	2280	0982	0170
	2180	0812	0127
	2080	0685	009
	1980	0592	007+
	1880	0518	0065
	1780	0453	0065
	1680	0388	0063
	1580	0325	0057
	1480	0268	0047
	1380	0221	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

(247)

GENERAL DYNAMICS
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FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-7B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: 1 (2) 3 4 5 6

	A	B	C	D	E	F
AVERAGE WIDTH:	1.5004	1.5010	1.5027	1.4993	1.4986	
AVERAGE THICKNESS: .3864	.3878	.3882	.3833	.3864	.3865	

AREA: .5798

R-Cal 18094 (7727)
Cal.S 40%

BASELINE STRESS: 33K Apit 7.65

MAX. LOAD: 19139

CYCLES AT TERMINATION/FAILURE: 2 Lives/

@ STATIC LOAD A - 10,410 K#
B - 15,520 K#

Origin lies on Plate B surface due to relaxed tolerances (tool marks) Both Plate surfaces (A&B) were milled

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
Thr. 2Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560	[redacted] .0365	.0026
2480	.0340	.0029
2380	.0311	.0035
2280	.0276	.0036
2180	.0240	.0030
2080	.0210	.0030
1980	.0180	.0028
1880	.0152	.0031
1780	.0121	.0020
1680	.0101	.0018
1580	.0093	
1480		
1380		
One Life 1280		
1200		
1100		
1000		
900		
800		
700		
600		
500		
400		
300		
200		

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-8B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: 1 2 3 (4) 5 6

	A	B	C	D	E	F
AVERAGE WIDTH:	1.5000	1.5031	1.5039	1.4965	1.4965	
AVERAGE THICKNESS: .3832	.3850	.3788	.3846	.3845	.3831	

AREA: .5748

R-Cal 18418 (7834)
Cal.S 42%

BASELINE STRESS: 33 KSI Apit 7.59

MAX. LOAD: 19068

CYCLES AT [redacted]/FAILURE: * 3Lives/

@ STATIC LOAD A - K#
B - K#

This specimen had failed at approx. 2438 FLTS. No record of number of load points. Origin lies on Plate B surface due to relaxed tolerances (milled tool marks). Both plate surfaces (A&B) were milled

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
→ [redacted]	.4296	.1432
2380	.2864	.0799
2280	.2065	.0493
2180	.1572	.0363
2080	.1209	.0316
1980	.0893	.0280
1880	.0613	.0188
1780	.0425	.0135
1680	.0305	.0066
1580	.0239	.0035
1480	.0204	.0026
1380	.0178	.0048
One Life 1280	.0130	.0030
1200	.0100	.0015
1100	.0084	.0020
1000	.0064	.0018
900	.0046	.0013
800	.0033	.0005
700	.0028	
600		
500		
400		
300		
200		

GENERAL DYNAMICS
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FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-9B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D (E) F
1 2 3 4 5 6

AVERAGE WIDTH:	1.501	1.5007	1.5008	1.5010	1.5015
AVERAGE THICKNESS: .3860	.3866	.3850	.3862	.3864	.3858

AREA: .5794

R-Cal 18652 (7957)
Cal.S 42%

BASELINE STRESS: 33ksi Apart 765

MAX. LOAD: 19,120

CYCLES AT TERMINATION/[redacted]: 2Lives/___

@

STATIC LOAD A-17,480 K*
B-13,540 K*

Origin lies on Bolt Hole surface at corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560	.1448	[redacted] .0275
2480	[redacted] .1173	.0254
2380	.0919	.0192
2280	.0727	.0133
2180	.0594	.0105
2080	.0489	.0073
1980	.0416	.0079
1880	.0337	.0048
1780	.0289	.0037
1680	.0252	.0034
1580	.0218	.0030
1480	.0188	.0032
1380	.0156	.0027
One Life 1280	.0129	.0023
1200	.0106	.0020
1100	.0086	.0023
1000	.0063	.0013
900	.0050	.0010
800	.0040	
700		
600		
500		
400		
300		
200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-10B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (A) B C D E F
1 2 3 4 5 6

AVERAGE WIDTH:	1.5011	1.5016	1.5023	1.5005	1.4998
AVERAGE THICKNESS: .3965	.3987	.3856	.3885	.3918	.3848

AREA: .5801

R-Cal 18752 (7996)
Cal.S 42%

BASELINE STRESS: 33ksi Apart 7666

MAX. LOAD: 19,144

CYCLES AT TERMINATION/FAILURE: 3Lives/___

@

~~STATIC LOAD~~ A-___ K*
B-___ K*

This specimen had failed before 2 lives (2560 FLTS) between 2090 & 2100 FLTS. Origin lies on plate surface near corner. Both Plate surfaces (A&B) were milled

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
* → [redacted]	.4683	.0454
2080	.4229	.1359
1980	.2870	.0710
1880	.2160	.0512
1780	.1648	.0375
1680	.1273	.0302
1580	.0971	.0230
1480	.0741	.0151
1380	.0590	.0140
One Life 1280	.0450	.0085
1200	.0365	.0084
1100	.0281	.0063
1000	.0218	.0037
900	.0181	
800		
700		
600		
500		
400		
300		
200		

GENERAL DYNAMICS
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FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-11B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B (C) D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.4992	1.4977	1.4972	1.5005	1.5015
AVERAGE THICKNESS: .3821	.3801	.3800	.3802	.3819	.3851

AREA: .5728

R-Cal 18982 (8100)
Cal.S 43%

BASELINE STRESS: 33 Ksi Apst 7.56

MAX. LOAD: 18902

CYCLES AT [redacted]/FAILURE: * @Lives/___

@

STATIC LOAD A- K*
B- K*

* PLATE "B" FAILED IN LESS THAN 2 LIVES PLATE "A" SUSTAINED LOAD FOR 2 LIVES. THIS SPECIMEN FAILED AT 3806 FLTS. Origin lies on Bolt Hole surface. Both Plate surfaces (A&B) were Milled.

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
[redacted]	.4597	.1458
2480	3139	0837
2380	2342	0541
2280	1761	0398
2180	1363	0301
2080	1062	0221
1980	0841	0157
1880	0684	0122
1780	0562	0089
1680	0473	0069
1580	0404	0057
1480	0347	0063
1380	0284	0043
One Life 1280	0241	0045
1200	0196	0026
1100	0170	0054
1000	0116	0031
900	0085	0013
800	0072	0019
700	0053	0016
600	0037	0016
500	0021	
400		
300		
200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-12B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C (D) E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5013	1.5017	1.501	1.5015	1.5008
AVERAGE THICKNESS: .3816	.3803	.3802	.3820	.3818	.3838

AREA: .5729

R-Cal 18418 (7094)
Cal.S 42%

BASELINE STRESS: 33 Ksi Apst 7.56

MAX. LOAD: 18906

CYCLES AT [redacted]/FAILURE: * @Lives/___

@ 458,628 Lives = 1778.7 Flt's *

STATIC LOAD A- K*
B- K*

Origin lies on surface of Plate B which mates Plate A. Origin was due to fretting.

FLIG. [redacted]	CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2180		
2080		
1980		
1880		
[redacted]	.4731	.2000
1680	2731	0704
1580	1927	0571
1480	1356	0390
1380	0946	0308
One Life 1280	0638	0197
1200	0441	0132
1100	0349	0096
1000	0263	0063
900	0180	0043
800	0137	0043
700	0094	0027
600	0067	0026
500	0041	0019
400	0022	0007
300	0015	
200		

220
224

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FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-13A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5022	1.5016	1.5021	1.5029	1.5022
AVERAGE THICKNESS: .3840	.3838	.3795	.3861	.3842	.3866

AREA: .5769

R-Cal 18052 (7951)
Cal.S 42%

BASELINE STRESS: 33Ksi Apt 7.62

MAX. LOAD: 19,038

CYCLES AT TERMINATION/[redacted]: 2 @Lives/___

@
STATIC LOAD A-13,540 K#
B-16,240 K#

Origin lies at corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.3281	.0408
	2480	1873	0413
	2380	1460	0351
	2280	1109	0351
	2180	0858	0176
	2080	0682	0139
	1980	0543	0108
	1880	0435	0081
	1780	0354	0066
	1680	0288	0044
	1580	0244	0053
	1480	0191	0048
	1380	0143	0041
One Life	1280	0102	0027
	1200	0075	0035
	1100	0050	0027
	1000	0023	
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-14B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D E (F) / 1 2 3 4 5 6

AVERAGE WIDTH:	1.4996	1.4996	1.5000	1.4996	1.4992
AVERAGE THICKNESS: .3826	.3826	.3914	.3827	.3825	.3836

AREA: .5737

R-Cal 17925 (7668)
Cal.S 41%

BASELINE STRESS: 33Ksi Apt 7.57

MAX. LOAD: 18932

CYCLES AT TERMINATION/[redacted]: 2 @Lives/___

@
STATIC LOAD A-15,86 K#
B-14.04K#

Origin lies at corner.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1625	.0439
	2480	1286	0297
	2380	0989	0221
	2280	0768	0171
	2180	0597	0128
	2080	0469	0091
	1980	0378	0072
	1880	0306	0055
	1780	0251	0040
	1680	0211	0046
	1580	0165	0034
	1480	0131	0033
	1380	0098	0024
One Life	1280	0074	0014
	1200	0060	0010
	1100	0050	0008
	1000	0042	0009
	900	0033	
	800		
	700		
	600		
	500		
	400		
	300		
	200		

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FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-15B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: (A) 1 B 2 C 3 D 4 E 5 F 6

AVERAGE WIDTH:	1.5015	1.5012	1.5017	1.5016	1.5014
AVERAGE THICKNESS: .3965	.3841	.3844	.3862	.3873	.3867

AREA: .5804

R-Cal 18752 (7936)
Cal.S 42%

BASELINE STRESS: 33Ksi

Apst 7.66

MAX. LOAD: 19153

CYCLES AT [redacted]/FAILURE: * 3Lives/___

@ 577270 L.F.'s = [redacted] FLTS *

STATICLOAD A- K**
B- K**

NUMBER OF LOAD POINTS ABOVE IS NOT CORRECT. THIS SPECIMEN FAILED BETWEEN 2130 & 2190 FLTS. ORIGIN LIES ON BOLT HOLE SURFACE NEAR CORNER

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
* [redacted]			
	[redacted]	.5134	.1659
	2080	.3475	.0770
	1980	.2705	.0537
	1880	.2168	.0433
	1780	.1735	.0372
	1680	.1363	.0315
	1580	.1048	.0269
	1480	.0784	.0210
	1380	.0572	.0139
One Life	1280	.0433	.0075
	1200	.0358	.0073
	1100	.0295	.0063
	1000	.0232	.0050
	900	.0172	.0034
	800	.0138	.0034
	700	.0104	.0032
	600	.0072	.0020
	500	.0052	.0021
	400	.0031	.0016
	300	.0015	.0010
	200	.0005	

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-16B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A (1) B 2 C 3 D 4 E 5 F 6

AVERAGE WIDTH:	1.4981	1.4936	1.4933	1.5027	1.5029
AVERAGE THICKNESS: .3840	.385	.3796	.3846	.3845	.3860

AREA: .5753

R-Cal 18034 (7727)
Cal.S 41%

BASELINE STRESS: 33Ksi

Apst 7.59

MAX. LOAD: 18984

CYCLES AT TERMINATION/[redacted] 2 Lives/___

@

STATICLOAD A-14,300 K**
B-11,100 K**

Origin lies on Bolt Hole surface.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.2173	.0356
	2480	.1817	.0335
	2380	.1482	.0249
	2280	.1233	.0227
	2180	.1006	.0175
	2080	.0831	.0130
	1980	.0701	.0114
	1880	.0587	.0111
	1780	.0474	.0075
	1680	.0401	.0065
	1580	.0336	.0041
	1480	.0275	.0042
	1380	.0233	.0045
One Life	1280	.0198	.0023
	1200	.0165	.0039
	1100	.0126	.0033
	1000	.0093	.0024
	900	.0069	.0021
	800	.0048	.0016
	700	.0032	
	600		
	500		
	400		
	300		
	200		

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FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-17A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B (C) D E F
1 2 3 4 5 6

AVERAGE WIDTH:	1.5021	1.5014	1.5016	1.5023	1.5030
AVERAGE THICKNESS: (.3837)	.3860	.3818	.3855	.3827	.3824

AREA: .5763

R-Cal 10932 (8100)
Cal.S 43%

BASELINE STRESS: 33ksi Apst 761

MAX. LOAD: 19018

CYCLES AT TERMINATION/[redacted]: 2Lives/___

@
STATIC LOAD A-14,420 K#
B-14,960 K#

origin lies on Bott Hole surface.

FLTS	C.L. "a"	Δa
100	.0003	.0003

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1551	.0244
	2480	1307	0260
	2380	1047	0211
	2280	0836	0184
	2180	0652	0142
	2080	0510	0109
	1980	0401	0088
	1880	0313	0069
	1780	0244	0046
	1680	0198	0035
	1580	0163	0030
	1480	0133	0029
	1380	0104	0028
One Life	1280	0076	0015
	1200	0061	0013
	1100	0048	0012
	1000	0036	0006
	900	0030	0005
	800	0025	0005
	700	0020	0003
	600	0017	0003
	500	0014	0003
	400	0011	0003
	300	0008	0003
	200	0005	0003

GENERAL DYNAMICS
Fort Worth Division
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FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-18B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C (D) E F
1 2 3 4 5 6

AVERAGE WIDTH:	1.5006	1.4991	1.4998	1.5016	1.5015
AVERAGE THICKNESS: (.3899)	[redacted] (.3921)	.3867	.3924	.3888	.3896

AREA: .5851

R-Cal 18478 (7894)
Cal.S 41%

BASELINE STRESS: 33ksi Apst 772

MAX. LOAD: 19307

CYCLES AT [redacted]/FAILURE: * 3Lives/___

@ 55148 L.P.C. = 2138.83 FLTS *

STATIC LOAD A- K#
B- K#

origin lies on plate surface near corner. Fatigue origin was due to relaxed tolerances (Tool mill marks) Both plate surfaces (A&B) were milled.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
* →	[redacted]	.3914	.1248
	2080	2766	0886
	1980	1878	0587
	1880	1291	0377
	1780	0914	0260
	1680	0654	0156
	1580	0498	0131
	1480	0367	0068
	1380	0299	0054
One Life	1280	0245	0047
	1200	0198	0043
	1100	0155	0037
	1000	0118	0035
	900	0083	0027
	800	0056	0011
	700	0045	0008
	600	0037	
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-19A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5034	1.5035	1.5037	1.503	1.5031
AVERAGE THICKNESS: (.3801)	.3826	.3772	.3818	.3796	.3795

AREA: .5715

R-Cal 18652 (7950)
Cal.S 42%
Apt 7.54

BASELINE STRESS: 33 KSi

MAX. LOAD: 18859

CYCLES AT TERMINATION/[redacted]: 2 Lives/___

@

STATIC LOAD: A-12.00 K#
B-16.3 K#

Origin lies on Plate A surface.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1808	.0431
	2480	1377	0365
	2380	1012	0234
	2280	0778	0134
	2180	0644	0081
	2080	0563	0070
	1980	0493	0032
	1880	0461	0013
	1780	0448	0003
	1680	0445	
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-20A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B (C) D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5019	1.5023	1.5029	1.5014	1.5011
AVERAGE THICKNESS: (.3838)	.3862	.3800	.3864	.3830	.3832

AREA: .5764

R-Cal 18382 (8100)
Cal.S 44%
Apt 761

BASELINE STRESS: 33 KSi

MAX. LOAD: 19020

CYCLES AT TERMINATION/[redacted]: 2 Lives/___

@

STATIC LOAD A-16.080 K#
B-17.040 K#

Origin lies on Plate A surface.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0694	.0130
	2480	0564	0122
	2380	0442	0098
	2280	0344	0072
	2180	0272	0064
	2080	0208	0035
	1980	0173	0022
	1880	0151	0025
	1780	0126	0017
	1680	0109	0017
	1580	0092	0017
	1480	0075	0013
	1380	0062	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
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FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-21B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A 1 | B 2 | C 3 | (D 4) | E 5 | F 6

AVERAGE WIDTH:	1.4934	1.4934	1.5007	1.4993	1.4980
AVERAGE THICKNESS: .3853	.3865	.3817	.3865	.3861	.3856

AREA: .5717

R-Cal 18478 (7624)
Cal.S 41%

BASELINE STRESS: 33ksi

Apt 763

MAX. LOAD: 19063

CYCLES AT TERMINATION/FAILURE: * ~~3 Lives~~ /

@

STATICLOAD A- K#
B- K#

* This specimen had failed before 2 lives (2560 FLTS) between 2080 and 2090 FLTS origin lies on Bolt Hole surface. Both Plate surfaces (A & B) were milled

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
* →	[redacted]	.4216	.0317
	2080	3349	1139
	1980	2760	0619
	1880	2147	0438
	1780	1708	0350
	1680	1358	0304
	1580	1054	0242
	1480	0812	0197
	1380	0615	0198
One Life	1280	0417	0118
	1200	0299	0107
	1100	0192	0083
	1000	0149	0036
	900	0113	0036
	800	0077	0033
	700	0044	0016
	600	0028	0010
	500	0018	0007
	400	0011	0003
	300	0008	0003
	200	0005	

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-22B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A 1 | B 2 | C 3 | D 4 | (E 5) | F 6

AVERAGE WIDTH:	1.4980	1.4966	1.4972	1.4990	1.4991
AVERAGE THICKNESS: .3936	.3853	.3847	.3901	.3841	.3840

AREA: .5747

R-Cal 18652 (7957)
Cal.S 42%

BASELINE STRESS: 33ksi

Apt 759

MAX. LOAD: 18965

CYCLES AT TERMINATION/[redacted]: 2 Lives/

@

STATICLOAD A-16.74 K#
B-14.53 K#

origin lies at corner. Both Plate surfaces (A & B) were milled.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0872	.0131
	2480	0741	0154
	2380	0587	0119
	2280	0468	0076
	2180	0392	0056
	2080	0336	0054
	1980	0292	0044
	1880	0238	0037
	1780	0201	0029
	1680	0172	0025
	1580	0147	0023
	1480	0120	0013
	1380	0107	0010
One Life	1280	0097	0007
	1200	0090	0017
	1100	0073	0012
	1000	0061	0016
	900	0051	0009
	800	0042	0012
	700	0030	0008
	600	0022	0007
	500	0015	0005
	400	0010	
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-23B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (A B C D E F G)

AVERAGE WIDTH:	1.4999	1.5002	1.5008	1.4992	1.4994
AVERAGE THICKNESS: .3817	.3844	.3782	.3851	.3801	.3806

AREA: .5724

R-Cal 17325 (7668)
Cal.S 414.

BASELINE STRESS: 38ksi Apt 7.56

MAX. LOAD: 18895

CYCLES AT TERMINATION/FAILURE: 2Lives/___ @

STATIC LOAD A-17.07 K*
B-15.66 K*

Origin lies ~~on~~ on Plate B surface near corner. Both Plate surfaces (A&B) were milled.

FRACTOGRAPHIC DATA

FLIGHT		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0418	.0062
	2480	0356	0063
	2380	0293	0051
	2280	0242	0036
	2180	0206	0032
	2080	0174	0029
	1980	0145	0025
	1880	0120	0023
	1780	0097	0023
	1680	0074	0015
	1580	0059	0019
	1480	0045	0009
	1380	0036	0007
One Life	1280	0029	0007
	1200	0022	0003
	1100	0019	0005
	1000	0014	0005
	900	0009	
	800		
	700		
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-24 ~~B~~ A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: 1 (A) 2 3 4 5 6 (B C D E F)

AVERAGE WIDTH:	~~1.5003~~	1.5009	1.5005	1.4994	1.5004
AVERAGE THICKNESS: .3808	.3831	.3805	.3827	.3785	.3792

AREA: .5714

R-Cal 18094 (7727)
Cal.S 416

BASELINE STRESS: 33ksi Apt 7.54

MAX. LOAD: 18855

CYCLES AT TERMINATION/~~FAILURE~~: 2Lives/___ @

STATIC LOAD A-16.63 K*
B-17.80 K*

Origin lies on Bolt Hole surface near corner.

FLIGHT		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0424	.0045
	2480	0379	0047
	2380	0332	0050
	2280	0282	0044
	2180	0238	0033
	2080	0205	0033
	1980	0172	0020
	1880	0152	0022
	1780	0130	0018
	1680	0112	0020
	1580	0092	0012
	1480	0080	0013
	1380	0067	0015
One Life	1280	0052	0006
	1200	0046	0007
	1100	0039	0005
	1000	0034	0005
	900	0029	0004
	800	0025	0003
	700	0022	
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-25B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C (D) E F / 1 2 3 4 5 6

	A	B	C	D	E	F
AVERAGE WIDTH:	1.4991	1.4991	1.4985	1.4997	1.5000	
AVERAGE THICKNESS: .3854	.3852	.3807	.3853	.3828	.3820	

AREA: .5748

R-Cal 18478 (7894)
Cal.S 42%

BASELINE STRESS: 33Ksi Apt 7.59

MAX. LOAD: 18969

CYCLES AT TERMINATION/[redacted]: 2 Lives/___

@

STATIC LOAD A-16.24 K*
B-15.14 K*

Origin lies on Plate B surface due to relaxed milling tolerances. Tool marks were the cause for initiation of fatigue. Both Plates Surfaces (A&B) were milled.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3050		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.0760	.0115
	2480	0645	0135
	2380	0510	0091
	2280	0419	0065
	2180	0354	0057
	2080	0297	0054
	1980	0243	0034
	1880	0209	0024
	1780	0185	0034
	1680	0151	0010
	1580	0141	0018
	1480	0123	0031
	1380	0092	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-26B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D (E) F / 1 2 3 4 5 6

	A	B	C	D	E	F
AVERAGE WIDTH:	1.4980	1.4984	1.4986	1.4975	1.4976	
AVERAGE THICKNESS: .3818	.3819	.3813	.3824	.3817	.3817	

AREA: .5719

R-Cal 18652 (7957)
Cal.S 42%

BASELINE STRESS: 33Ksi Apt 7.55

MAX. LOAD: 18874

CYCLES AT TERMINATION/[redacted]: 2 Lives/___

@

STATIC LOAD A-17.72 K*
B-9.46 K*

Origin lies on Bolt Hole surface. Both Plate surfaces (A&B) were milled.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.3229	.0698
	2480	2531	0579
	2380	1952	0442
	2280	1510	0387
	2180	1123	0314
	2080	0809	0241
	1980	0568	0160
	1880	0408	0101
	1780	0307	0062
	1680	0245	0052
	1580	0193	0039
	1480	0154	0034
	1380	0120	0027
One Life	1280	0093	0017
	1200	0076	0018
	1100	0058	0017
	1000	0041	0013
	900	0029	0008
	800	0021	0003
	700	0018	0003
	600	0015	0003
	500	0012	0002
	400	0010	
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-27B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D E (F) / 1 2 3 4 5 6

AVERAGE WIDTH:	1.4995	1.4987	1.4991	1.5001	1.5000	
AVERAGE THICKNESS:	.3819	.3811	.3808	.3813	.3803	.3801

AREA: .5727 R-Col 17925 (7668)
Col S 41%
BASELINE STRESS: 33 Ksi Apt 7.51
MAX. LOAD: 18898
CYCLES AT TERMINATION/FAILURE: @Lives/___
@
STATIC LOAD A-17.07 K#
B-15.08 K#

Originates on Plate B surface due to relaxed milling tolerances (tool marks) Both Plate surfaces (A&B) were milled.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	.1105	.0149
	2480	0956	0157
	2380	0799	0141
	2280	0656	0093
	2180	0563	0081
	2080	0482	0078
	1980	0404	0066
	1880	0338	0047
	1780	0291	0052
	1680	0239	0040
	1580	0199	0035
	1480	0164	0020
	1380	0144	
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-28A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: (A) B C D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5020	1.5019	1.5025	1.5023	1.5014	
AVERAGE THICKNESS:	.3833	.3828	.3826	.3811	.3845	.3845

AREA: .5758 R-Col 18752 (7994)
Col S 42%
BASELINE STRESS: 33 Ksi Apt 7.60
MAX. LOAD: 18999
CYCLES AT TERMINATION/FAILURE: ~~Failure~~/___
@

This specimen did not go 2 lives but only [redacted] between 2240 & 2250 FLTS Origin lies at corner.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560	[redacted]	
	2480		
	2380		
*	[redacted]	.4437	
	2180	2947	
	2080	2100	
	1980	1552	
	1880	1162	
	1780	0870	
	1680	0645	
	1580	0495	
	1480	0378	
	1380	0278	
One Life	1280	.0221	
	1200	0176	
	1100	0138	
	1000	0102	
	900	0066	
	800		
	700	Fracture damaged by	
	600	drilling on stand	
	500		
	400		
	300		
	200		

(28)

L ERAL DYNAMICS
Fort Worth Division
TATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-29A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F
1 2 3 4 5 6

	1	2	3	4	5	6
AVERAGE WIDTH:	1.4999	1.4993	1.4999	1.5009	1.5002	
AVERAGE THICKNESS:	.3810	.3823	.3798	.3825	.3799	.3806

AREA: .5715

R-Cal 18094 (7727)
Cal S 41%

BASELINE STRESS: 33 Ksi \ pat 7.54

MAX. LOAD: 18859

CYCLES AT TERMINATION/FAILURE: 2 Blivos/
(3)

This specimen had failed before 2 live (2560 Flts.) between 2450 & 2460 Flts. origin lies on both hole surface. Both plate surfaces (A & B) were milled.

FRACTOGRAPHIC DATA

FLIGHT	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
* [redacted]	.5380	.1715
2380	.3665	.0637
2280	.3028	.0500
2180	.2528	.0432
2080	.2096	.0327
1980	.1769	.0325
1880	.1384	.0287
1780	.1097	.0223
1680	.0874	.0180
1580	.0694	.0143
1480	.0551	.0127
1380	.0424	.0098
One Life 1280	.0326	.0063
1200	.0263	.0063
1100	.0200	.0051
1000	.0149	.0038
900	.0111	.0029
800	.0082	.0019
700	.0064	.0012
600	.0052	.0008
500	.0044	
400		
300		
200		

FATIGUE TEST DATA

SPECIMEN NUMBER: YWPB-30A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F
1 2 3 4 5 6

	1	2	3	4	5	6
AVERAGE WIDTH:	1.509	1.5019	1.5017	1.5018	1.5022	
AVERAGE THICKNESS:	.3834	.3821	.3815	.3841	.3846	.3847

AREA: .5758

R-Cal 18982 (8100)
Cal S 43%

BASELINE STRESS: 33 Ksi \ pat 760

MAX. LOAD: 19002

CYCLES AT TERMINATION [redacted] 2 Blivos/
(3)

Stress Ratio R = 13.06 ksi
R = 15.86 ksi

origin lies at corner.

FLIGHT	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560	.2357	.0397
2480	.1954	.0426
2380	.1528	.0330
2280	.1198	.0286
2180	.0912	.0214
2080	.0698	.0158
1980	.0540	.0112
1880	.0428	.0075
1780	.0353	.0068
1680	.0285	.0057
1580	.0228	.0046
1480	.0182	.0044
1380	.0138	
One Life 1280		
1200		
1100		
1000		
900		
800		
700		
600		
500		
400		
300		
200		

(229)

2.3.3 HTWPF

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: HYWPF-1B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6 R 88

ERAGE WIDTH: 1.4995 | 1.4970 | 1.4989 | 1.5012 | 1.5010

ERAGE THICKNESS: .3766 | .3773 | .3737 | .3769 | .3772 | .3774

EA: .5647

R cal. 18752
C.S. 81.4
Apot 9.22

SELINE STRESS: 40.8 KSI

X. LOAD: 23041.5

1 Life

CLES AT [redacted]/FAILURE: *

1 Lives / 765747

② 613,210 L.P.'s = 6406.40 FLT-HRS *

STATIC LOAD A- K#
B- K#

ORIGIN LIES ON BOLT HOLE SURFACE
MATING SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	[redacted] * →	.2454	0021
16	6400	2433	0725
15	6000	1708	0413
14	5600	1295	0291
13	5200	1004	0263
12	4800	0741	0180
11	4400	0561	0139
10	4000	0427	0127
9	3600	0295	0111
8	3200	0184	0073
7	2800	0111	0027
6	2400	0084	0027
5	2000	0057	0018
4	1600	0039	0017
3	1200	0022	
2	800		
1	400		

PATICUE TEST DATA

2 Lives

SPECIMEN NUMBER: HYWPF-2A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6 R 89

ERAGE WIDTH: 1.5010 | 1.5023 | 1.5040 | 1.5000 | 1.4975

ERAGE THICKNESS: .3758 | .3773 | .3729 | .3779 | .3750 | .3761

EA: .5641

RC 18629
CS 80.9
AP 9.21

SELINE STRESS: 40.8 KSI

X. LOAD: 23016.7

1 Life

CLES AT [redacted]/FAILURE: *

1 Lives / 765747

② 607,686 = 6348.69 FLT-HRS *

STATIC LOAD A- K#
B- K#

ORIGIN LIES ON BOLT HOLE SURFACE
MATING SURFACES WERE MILLED.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	[redacted] * →	.4932	.2177
15	6000	2755	0761
14	5600	1994	0439
13	5200	1555	0302
12	4800	1253	0282
11	4400	0971	0242
10	4000	0729	0254
9	3600	0475	0205
8	3200	0270	0125
7	2800	0155	0053
6	2400	0102	0031
5	2000	0071	0026
4	1600	0045	0015
3	1200	0030	0016
2	800	0014	
1	400		

R30

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: HYWPF-3A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6 (38)

ERAGE WIDTH:	1.4998	1.5018	1.5018	1.4978	1.4975	
ERAGE THICKNESS:	.3782	.3793	.3751	.3775	.3735	.3736

EA: .5672 (Rcal, 18752)

SELINE STRESS: 40.8 KSI C.S. 81%

A.P. 925

X. LOAD: 23142.8

1 Life

CLES AT TERMINATION/[redacted]:

2 Lives/_____

② 459448 L.P.'s = 4800 FLT-HRS

STATIC LOAD A-12.89 K#

B-13.72 K#

ORIGIN LIES AT CHAMFER/SURFACE CORNER MATING SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
→ 12	4800	.1110	.0225
11	4400	0885	0187
10	4000	0698	0164
9	3600	0534	0120
8	3200	0414	0126
7	2800	0288	0106
6	2400	0182	0079
5	2000	0103	0031
4	1600	0072	0030
3	1200	0042	0016
2	800	0026	
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: HYWPF-4B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6 (39)

ERAGE WIDTH:	1.4982	1.4954	1.4963	1.5007	1.5002	
ERAGE THICKNESS:	.3806	.3808	.3789	.3816	.3811	.3814

EA: .5703 (Rcal 18627)

SELINE STRESS: 40.8 KSI C.S. 80%

A.P. 930

X. LOAD: 23268.4

1 Life

CLES AT TERMINATION/[redacted]:

2 Lives/_____

② 459448 L.P.'s = 4800 FLT-HRS

STATIC LOAD A-15.72 K#

B-15.74 K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10300		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
→ 12	4800	.0288	.0067
11	4400	0221	0053
10	4000	0168	0031
9	3600	0137	0043
8	3200	0094	0032
7	2800	0062	0025
6	2400	0037	0017
5	2000	0020	0006
4	1600	0014	0005
3	1200	0009	0005
2	800	0004	0003
1	400	~ 0001	

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: HYWPF-5A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6 (90)

ERAGE WIDTH:	1.5041	1.5038	1.5037	1.5053	1.5036	
ERAGE THICKNESS:	.3801	.3805	.3776	.3805	.3803	.3804

R Cal 1.0982
Cs 81.3%
Kp 93.3

EA: .5716

SELINE STRESS: 40.8 KSI

X. LOAD: 23323.2

1 Life

CLES AT TERMINATION/[redacted]

2 Lives/____

2) 459448 L.P.'s = 4800 FLT-HRS
16.60

STATIC LOAD A-[redacted] K#
B-[redacted] K#
15.98

ORIGIN LIES ON SURFACE WHICH MATES WITH PLATE "B" (NEAR HOLE CORNER) MATING SURFACES WERE MILLED. ORIGIN APPEARS TO START FROM P. MILL TOOL MARK

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
→ 12	4800	.0456	.0084
11	4400	0372	0064
10	4000	0306	0058
9	3600	0248	0046
8	3200	0202	0041
7	2800	0161	0031
6	2400	0130	0028
5	2000	0102	0013
4	1600	0089	0011
3	1200	0078	0010
2	800	0068	
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: HYWPF-6A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5 6 (15)

ERAGE WIDTH:	1.5001	1.5019	1.5012	1.4982	1.4989	
ERAGE THICKNESS:	.3816	.3823	.3790	.3816	.3824	.3826

E Cal. 1.8478
Cs 79.1
Kp 93.4

EA: .5724

SELINE STRESS: 40.8 KSI

X. LOAD: 23354.3

1 Life

CLES AT TERMINATION/[redacted]

2 Lives/____

2) 459448 L.P.'s = 4800 FLT-HRS

STATIC LOAD A-13.15 K#
B-15.69 K#

ORIGIN LIES AT PLATE SURFACE/RADIUS CORNER. MATING SURFACES WERE MILLED.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
→ 12	4800	.1182	.0302
11	4400	0880	.0186
10	4000	0694	0171
9	3600	0523	0156
8	3200	0367	0139
7	2800	0228	0106
6	2400	0168	0060
5	2000	0122	0046
4	1600	0087	0035
3	1200	0054	0033
2	800	0030	0013
1	400	0017	

(232)

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: HYWPF-7B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 (5) 6 (16)

ERAGE WIDTH:	1.4984	1.4997	1.5006	1.4966	1.4968	
ERAGE THICKNESS:	.3791	.3788	.3764	.3782	.3808	.3801

EA: .5679 Rcal 18652 C = 80.5 AP. 927

SELINE STRESS: 40.8 KSI

X. LOAD: 23173.7 1 Life

CLES AT TERMINATION/[redacted]:

2 Lives/____

② 459448 L.P.'s = 4800 FLT-HRS

STATIC LOAD A-16.78 K#

B-15.91 K#

ORIGIN LIES ON BOLT-HOLE SURFACE

MATING SURFACES PLATES WERE MILLED.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
→ 12	4800	.0163	.0056
11	4400	.0107	.0039
10	4000	.0068	.0024
9	3600	.0044	.0014
8	3200	.0030	.0010
7	2800	.0020	.0006
6	2400	.0014	.0004
5	2000	.0010	.0003
4	1600	.0007	.0003
3	1200	.0004	.0002
2	800	.0002	.0001
1	400	.0001	

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: HYWPF-8B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 (6) (11)

ERAGE WIDTH:	1.4906	1.4905	1.4902	1.4908	1.4909	
ERAGE THICKNESS:	.3781	.3785	.3763	.3784	.3785	.3786

EA: .5636 Rcal 18084 C = 78.6 AP 919

SELINE STRESS: 40.8 KSI

X. LOAD: 22994.7 1 Life

CLES AT TERMINATION/[redacted]

2 Lives/____

② 459448 L.P.'s = 4800 FLT-HRS

STATIC LOAD A-14.50 K#

B-13.22 K#

ORIGIN LIES ON BOLT HOLE SURFACE NEAR CORNER OF MATING SURFACES.

MATING SURFACES WERE MILLED

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
→ 12	4800	.1150	.0265
11	4400	.0885	.0172
10	4000	.0713	.0143
9	3600	.0570	.0137
8	3200	.0433	.0107
7	2800	.0326	.0112
6	2400	.0214	.0109
5	2000	.0115	.0067
4	1600	.0058	.0025
3	1200	.0033	.0019
2	800	.0014	.0009
1	400	.0005	

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: HYWPF-9

SPECTRUM: Fighter

TEST DATE: 90

TEST FRAME:	1	2	(3)	4	5	6
ERAGE WIDTH:	1.5066		1.5088	1.5030	1.5047	1.5050
ERAGE THICKNESS:	.3789		.3805	.3760	.3786	.3795	.3799

EA: .5709

R. CAL 18982
C SLOPE 81.5
AP.T 93.2

SELINE STRESS: 40.8 KSI

X. LOAD: 23,292.7#

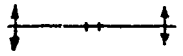
1 Life

CLES AT TERMINATION/[redacted]

2 Lives/ 459,448 L.P.S
↳ 4800 FLT-HRS

③

STATIC LOAD A-15.64 K#
B-15.76 K#



ORIGIN LIES ON BOLT HOLE SURFACE
MATING SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
→ 12	4800	.02121	.00603
11	4400	01518	00309
10	4000	01214	00269
9	3600	00945	00180
8	3200	00765	00185
7	2800	00580	00157
6	2400	00423	00141
5	2000	00282	00084
4	1600	00198	00068
3	1200	00130	00055
2	800	00075	00040
1	400	~ 00035	

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: HYWPF-10

SPECTRUM: Fighter

TEST DATE:

TEST FRAME:	1	2	3	4	(5)	6	(16)
ERAGE WIDTH:	1.5042		1.5030	1.5038	1.5053	1.5047	
ERAGE THICKNESS:	.3781		.3802	.3767	.3771	.3765	.3788

EA: .5687

R CAL 10652
CS-BC.V
AP-92.8

SELINE STRESS: 40.8 KSI

X. LOAD: 23,202.1 #

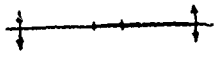
1 Life

CLES AT TERMINATION/[redacted]

2 Lives/ 459,448 L.P.S.
↳ 4800 FLT-HRS

③

STATIC LOAD A-12.96 K#
B-14.37 K#



ORIGIN LIES ON BOLT HOLE SURFACE.
MATING SURFACES WERE MILLED.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
→ 12	4800	.12177	.04459
11	4400	07718	02776
10	4000	04942	01706
9	3600	03236	01277
8	3200	01959	00846
7	2800	01113	00441
6	2400	00672	00937
5	2000	00335	00142
4	1600	00193	00051
3	1200	00142	00037
2	800	00105	
1	400		

GENERAL DYNAMICS
Fort Worth Division

2.3.4 HYWPB

FATIGUE TEST DATA

SPECIMEN NUMBER: HYWPB-1A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F
(1) 2 3 4 5 6

AVERAGE WIDTH: 1.4984 | 1.4985 | 1.4981 | 1.4984 | 1.4986

AVERAGE THICKNESS: .3842 | .3845 | .3828 | .3848 | .3843 | .3848

AREA: .5757 39.6

R-Coil 18062 (7726)
Coil S 357

BASELINE STRESS: [illegible] Ksi Pot 9.12

MAX. LOAD: 23800

CYCLES AT [redacted]/FAILURE: * Flivos/

(3) 224,015 L.P. = 868.80 Flts *

Origin Lies on Bolt Hole Surface

Flts	C.L. "a"	Δa
100	0010	0010

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
Three Lives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
* →	[redacted]	.3195	.1389
	800	.1806	.0733
	700	.1073	.0369
	600	.0704	.0248
	500	.0456	.0161
	400	.0295	.0145
	300	.0150	.0115
	200	.0035	.0025

GENERAL DYNAMICS
Fort Worth Division

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: HYWPB-2B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A (B) C D E F
1 (2) 3 4 5 6

AVERAGE WIDTH: 1.4991 | 1.4993 | 1.4990 | 1.4996 | 1.4993

AVERAGE THICKNESS: .3852 | .3848 | .3828 | .3858 | .3873 | .3856

AREA: .5775 39.6

R-Coil 18094 (7727)
Coil S 349

BASELINE STRESS: [illegible] Ksi Pot 915

MAX. LOAD: 23868

CYCLES AT TERMINATION/[redacted] Flivos/

(3)

Origin Lies on Bolt Hole Surface.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
Three Lives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280	.1990	.0530
	1200	.1460	.0454
	1100	.1006	.0293
	1000	.0713	.0214
	900	.0499	.0149
	800	.0350	.0117
	700	.0213	.0073
	600	.0140	.0058
	500	.0082	.0035
	400	.0047	.0022
	300	.0025	
	200		

GENERAL DYNAMICS
Fort Worth Division
TATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: HYWPB-BB

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.4998	1.5004	1.5005	1.4993	1.4991
AVERAGE THICKNESS:	.3815	.3832	.3813	.3835	.3787	.3798

AREA: .5722 .396

B.C.D 18382 (7110)
C.L.S .357
Pct 9.06

BASELINE STRESS: [redacted] Ksi

MAX. LOAD: 22658

CYCLES AT [redacted]/FAILURE: #Lives/

(3) 303952 L.P. = 1178.83 FLTS *

origin lies on Bolt Hole surface near corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2180		
2080		
1980		
1880		
1780		
1680		
1580		
1480		
1380		
One Life 1280		
* [redacted]	.3244	.1432
1100	1812	0750
1000	1062	0363
900	0699	0209
800	0490	0129
700	0361	0098
600	0263	0058
500	0205	0054
400	0151	0063
300	0082	0049
200	0033	

FATIGUE TEST DATA

SPECIMEN NUMBER: HYWPB-4B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B C D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5007	1.5004	1.5007	1.5011	1.5006
AVERAGE THICKNESS:	.3893	.3915	.3864	.3918	.3887	.3882

AREA: .5843 .396

B.C.D 18478 (7834)
C.L.S .347
Pct .225

BASELINE STRESS: [redacted] Ksi

MAX. LOAD: 23136

CYCLES AT [redacted]/FAILURE: * #Lives/

(3) 257529 L.P. = 998.78 FLTS *

origin lies on Bolt Hole surface at corners.

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2180		
2080		
1980		
1880		
1780		
1680		
1580		
1480		
1380		
One Life 1280		
1200		
1100		
* [redacted]	.3361	.1891
900	1470	0549
800	0930	0307
700	0623	0301
600	0422	0137
500	0285	0102
400	0183	0076
300	0107	0058
200	0049	0046

Flts	C.L. a'	Δa
100	0003	0003

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: HYWPB-5B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: 1 2 3 4 5 6

	A	B	C	D	E	F
AVERAGE WIDTH:	1.5028	1.5036	1.5036	1.5023	1.5016	
AVERAGE THICKNESS:	.3863	.3859	.3831	.3881	.3856	.3857

AREA: .5805 39.6 — R-Cal Cal S 33%

BASELINE STRESS: 39.6 Ksi — Apt 9.19

MAX. LOAD: 22987

CYCLES AT TERMINATION/[redacted] /Lives/

(3) Service Lives A=1622 FH B=15.62 In II — 18020 (7687)

Origin lies on Bolt Hole Surface.

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2180		
2080		
1980		
1880		
1780		
1680		
1580		
1480		
1380		
One Life 1280	.0706	.0201
1200	.0505	.0167
1100	.0338	.0107
1000	.0231	.0082
900	.0159	.0052
800	.0107	.0044
700	.0063	.0024
600	.0039	.0016
500	.0023	.0010
400	.0013	.0005
300	[redacted] .0008	
200		

Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: HYWPB-6A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: 1 2 3 4 5

	A	B	C	D	E
AVERAGE WIDTH:	1.5024	1.5021	1.5028	1.5032	1.5015
AVERAGE THICKNESS:	.3857	.3829	.3913	.3837	.3954	.3848

AREA: .5764 39.6 — R-Cal [redacted] Cal S 34%

BASELINE STRESS: 39.6 Ksi — Apt 9.13

MAX. LOAD: 22826

CYCLES AT [redacted] /FAILURE: * /Lives/

(3) 319448 L.P. = 1238.93 FLTS *

Service Lives A [redacted] FH — 17925 (7668)
B [redacted] In II

Origin lies on Bolt Hole Surface near corner.

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2180		
2080		
1980		
1880		
1780		
1680		
1580		
1480		
1380		
* → One Life [redacted]	.3580	.1074
1200	.2506	.0961
1100	.1545	.0551
1000	.0994	.0343
900	.0651	.0223
800	.0438	.0125
700	.0303	.0114
600	.0189	.0074
500	.0115	.0057
400	.0058	.0036
300	.0023	

(237)

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: HYWPB-7A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A 1 | B 2 | C 3 | D 4 | E 5 | F 6

AVERAGE WIDTH:	1.4994	1.5001	1.5004	1.4987	1.4984	
AVERAGE THICKNESS:	.3827	.3850	.3786	.3852	.3815	.3821

AREA: .5738 — 39.6 Ksi — R-Ld 18020 (7685) — Calc S 33.8% — Kmt 9.10

MAX. LOAD: 22,722

CYCLES AT TERMINATION/FAILURE: 1 Lives/330039LF

(3)

Three Lives: A = 10.48 in
B = 12.66 in

Origin lies on Bolt Hole Surfaces. Both Plate surfaces (A&B) were milled

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2180		
2080		
1980		
1880		
1780		
1680		
1580		
1480		
1380		
One Life 1280	.3003	.0929
1200	.2074	.0662
1100	.1412	.0513
1000	.0899	.0410
900	.0489	.0262
800	.0227	.0198
700	.0119	.0051
600	.0068	.0028
500	.0040	.0021
400	.0019	.0009
300	.0010	
200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: HYWPB-8A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A 1 | B 2 | C 3 | D 4 | E 5 | F 6

AVERAGE WIDTH:	1.4993	1.5002	1.5005	1.4989	1.4976	
AVERAGE THICKNESS:	.3824	.3957	.3801	.3844	.3813	.3817

AREA: 1.5737 — 39.6 Ksi — R-Ld 17925 (7669) — Calc S 34% — Kmt 9.10

MAX. LOAD: 22,718

CYCLES AT [redacted] FAILURE: * [redacted]/

(3) 257,529LF = 998.78 * 1 LIFE = 330039

Three Lives: A = [illegible] in
B = [illegible] in

Origin lies on Bolt Hole surface. Both Plate surfaces were milled.

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
3760		
3660		
3560		
3460		
3360		
3260		
3160		
3060		
2960		
2860		
2760		
2660		
Two Lives 2560		
2480		
2380		
2280		
2180		
2080		
1980		
1880		
1780		
1680		
1580		
1480		
1380		
One Life 1280		
1200		
1100		
* → [redacted]	.3072	.1592
900	.1480	.0651
800	.0829	.0349
700	.0480	.0209
600	.0271	.0123
500	.0148	.0082
400	.0066	.0029
300	.0037	.0016
200	.0012	.0008

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FLTS	C.L.@	Δa
100	.0004	.0004

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: HywPB-9A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B (C) D E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.4979	1.4934	1.4998	1.4962	1.4963
AVERAGE THICKNESS: .3857	.3843	.3812	.3850	.3830	.3850

AREA: .5748

R-Cal 1882 (8100)
Cal.S 36%

BASELINE STRESS: _____ Apt 9.10

MAX. LOAD: 22760

CYCLES AT TERMINATION/FAILURE: ____ Lives/____
@ 2988[illegible] P.= 1158.87 FLTS

STATIC LOAD A- K#
B- K#

Origin lies at Bolt Hole Surface/Corner transition.

FRACTOGRAPHIC DATA

FLIGHT [illegible]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
* →	[illegible]	.3769	.1597
	1100	2172	0859
	1000	1313	0426
	900	0887	0239
	800	0698	0185
	700	0463	0147
	600	0316	0129
	500	0187	0099
	400	0088	0042
	300	0046	0032
	200	0014	

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: HywPB-10B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C (D) E F / 1 2 3 4 5 6

AVERAGE WIDTH:	1.5002	1.4988	1.4994	1.5014	1.5013
AVERAGE THICKNESS: .3833	.3855	.3806	.3861	.3822	.3820

AREA: .5750

R-Cal 1847B (7894)
Cal.S 35%

BASELINE STRESS: 39.6 Apt 9.11

MAX. LOAD: 22770

CYCLES AT [illegible]/FAILURE: * Lives/____
@ 2575296 P. = 998.78 FLTS *

STATIC LOAD A- K#
B- K#

Origin lies on Plate B surface. Both Plate surfaces (A&B) were milled.

FLIGHT [illegible]		CRACK LENGTH INCH	INCREMENT INCH.
ThreeLives	3840		
	3760		
	3660		
	3560		
	3460		
	3360		
	3260		
	3160		
	3060		
	2960		
	2860		
	2760		
	2660		
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1960		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
* →	[illegible]	.2841	.1507
	900	1334	0547
	800	0787	0293
	700	0495	0167
	600	0328	0115
	500	0213	0095
	400	0118	0067
	300	0051	0016
	200	0035	

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2.3.5 LYWPF

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: LYWPF-1B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: ① 2 3 4 5 6 (88)

ERAGE WIDTH:	1.4995	1.4985	1.4990	1.5008	1.4999	
ERAGE THICKNESS:	.3804	.3822	.3813	.3818	.3784	.3782

EA: .5704

SELINE STRESS: 30.6 KSI

X. LOAD: 19453.6

1 Life

CLES AT TERMINATION/FAILURE:

3 Lives/_____

② STATIC LOAD A-18.030 K#
B-16.92 K#

R CAL. 18752
C S 45.8
A P 698

See next page

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.00622	.00029
39	15600	.00593	.00033
38	15200	.00560	.00038
37	14800	.00522	.00024
36	14400	.00498	.00031
35	14000	.00467	.00027
34	13600	.00440	.00034
33	13200	.00406	.00029
32	12800	.00377	.00026
31	12400	.00351	.00013
30	12000	.00338	.00019
29	11600	.00319	.00023
28	11200	.00296	.00022
27	10800	.00274	.00016
26	10400	.00258	.00013
25	10000	.00245	.00017
24	9600	.00228	.00010
23	9200	.00218	.00009
22	8800	.00209	.00009
21	8400	.00200	.00012
20	8000	.00188	.00016
19	7600	.00172	.00002
18	7200	.00170	.00005
17	6800	.00165	.00015
16	6400	.00150	.00002
15	6000	.00148	.00010
14	5600	.00138	.00011
13	5200	.00127	.00010
12	4800	.00117	.00007
11	4400	.00110	.00006
10	4000	.00104	.00004
9	3600	.00100	.00004
8	3200	.00096	.00008
7	2800	.00088	
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: LYWPF-2B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 ② 3 4 5 6 (99)

ERAGE WIDTH:	1.4999	1.5015	1.5005	1.4982	1.4985	
ERAGE THICKNESS:	.3783	.3780	.3755	.3767	.3809	.3803

EA: .5674

SELINE STRESS: 30.6 KSI

X. LOAD: 17361.9

1 Life

CLES AT TERMINATION/FAILURE:

3 Lives/_____

② STATIC LOAD A-16.85 K#
B-15.44 K#

ORIGIN LIES ON SURFACE WHICH MATES WITH PLATE "A". MATING SURFACES WERE MILLED.

R CAL 18627
CALS. 45.8
A.P. 694

See next page

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.01935	.00215
39	15600	.01720	.00170
38	15200	.01550	.00153
37	14800	.01397	.00150
36	14400	.01247	.00142
35	14000	.01105	.00127
34	13600	.00978	.00121
33	13200	.00857	.00129
32	12800	.00728	.00107
31	12400	.00621	.00093
30	12000	.00528	
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

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Continued from previous page

FRACTOGRAPHIC DATA

L4WPF-1B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I'
3 Lives	60	24000	.02181	.00116
	59	23600	02065	00149
	58	23200	01916	00134
	57	22800	01782	00145
	56	22400	01637	00116
	55	22000	01521	00124
	54	21600	01397	00117
	53	21200	01280	00093
	52	20800	01187	00076
	51	20400	01111	00055
	50	20000	01056	00073
	49	19600	00983	00054
	48	19200	00929	00030
	47	18800	00899	00046
	46	18400	00853	00052
	45	18000	00801	00044
	44	17600	00757	00027
	43	17200	00730	00032
	42	16800	00698	00035
	41	16400	00663	00041

FRACTOGRAPHIC DATA

L4WPF-2B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I'
3 Lives	60	24000	.09120	.00627
	59	23600	08493	00479
	58	23200	08014	00514
	57	22800	07500	00554
	56	22400	06946	00532
	55	22000	06414	00349
	54	21600	06065	00343
	53	21200	05722	00369
	52	20800	05353	00362
	51	20400	04991	00349
	50	20000	04642	00337
	49	19600	04305	00279
	48	19200	04026	00271
	47	18800	03755	00329
	46	18400	03426	00313
	45	18000	03113	00302
	44	17600	02811	00199
	43	17200	02612	00265
	42	16800	02347	00215
	41	16400	02132	00197

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FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: LyWPF-3B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6 (90)

ERAGE WIDTH:	1.5010	1.5004	1.5000	1.5018	1.5019	
ERAGE THICKNESS:	.3786	.3774	.3767	.3765	.3813	.3810

EA: .5682

SELINE STRESS: 30.6 KSI

X. LOAD: 17389.3

R cal 18382
C.S 44.6%
AP 6.96
1 Life

CLES AT TERMINATION/FAILURE:

3 Lives/____

②

STATIC LOAD A-17.54 K#
B-15.95 K#

ORIGIN LIES ON BOLT HOLE SURFACE NEAR CORNER. MATING SURFACES WERE MILLED.

See next page

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.01016	.00103
39	15600	00913	00102
38	15200	00801	00107
37	14800	00694	00090
36	14400	00604	00073
35	14000	00531	00060
34	13600	00471	00063
33	13200	00408	00097
32	12800	00361	00043
31	12400	00318	00033
30	12000	00285	00031
29	11600	00254	00032
28	11200	00222	00029
27	10800	00193	00024
26	10400	00169	00023
25	10000	00146	00018
24	9600	00128	00016
23	9200	00112	00019
22	8800	00093	00008
21	8400	00085	00018
20	8000	00067	00009
19	7600	00058	00010
18	7200	00048	00014
17	6800	00044	00007
16	6400	00037	00004
15	6000	00033	
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: LyWPF-4B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 (4) 5 6 (15)

ERAGE WIDTH:	1.5019	1.5018	1.5013	1.5020	1.5024	
ERAGE THICKNESS:	.3816	.3818	.3800	.3817	.3820	.3823

EA: .5731

SELINE STRESS: 30.6 KSI

X. LOAD: 17535.8

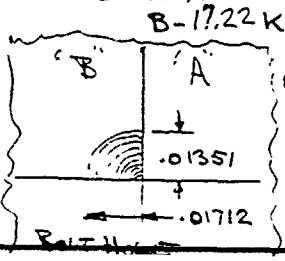
R.CAL, 18478
C.S 45.0%
A.P. 701
1 Life

CLES AT TERMINATION/[redacted]

3 Lives/____

②

STATIC LOAD A-17.88 K#
B-17.22 K#



ORIGIN LIES AT THE [redacted] CORNER RADIUS

See next page

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

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Continued from previous page

FRACTOGRAPHIC DATA

LyWPF-3B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I'
3 Lives	60	24000	.05665	.00571
	59	23600	05094	.00378
	58	23200	04716	00295
	57	22800	04421	00298
	56	22400	04123	00285
	55	22000	03838	00267
	54	21600	03571	239
	53	21200	03332	00219
	52	20800	03113	00177
	51	20400	02936	00198
	50	20000	02738	00148
	49	19600	02590	00230
	48	19200	02360	00225
	47	18800	02135	00202
	46	18400	01933	00193
	45	18000	01740	00177
	44	17600	01563	00168
	43	17200	01395	00131
	42	16800	01264	00136
	41	16400	01128	00112

FRACTOGRAPHIC DATA

LyWPF-4B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I'
3 Lives	60	24000	.01351	
	59	23600		
	58	23200		
	57	22800		
	56	22400		
	55	22000		
	54	21600		
	53	21200		
	52	20800		
	51	20400		
	50	20000		
	49	19600		
	48	19200		
	47	18800		
	46	18400		
	45	18000		
	44	17600		
	43	17200		
	42	16800		
	41	16400		

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FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: L4WPF-5A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	1	2	3	4	(5)	6	(16)
ERAGE WIDTH:	1.5007		1.5005	1.5006	1.5008	1.5009	
ERAGE THICKNESS:	.3795		.3797	.3780	.3803	.3797	.3797

EA: .5695

SELINE STRESS: 30.6KSI

X. LOAD: 17426.3

CLES AT [redacted]/FAILURE: *

2 Lives/____

③ 1,802,871 L.P.'s = 18835.16 FLT-HRS. *

STATIC LOAD A- K#
B- K#

ORIGIN LIES ON PLATE SURFACE WHICH MATES WITH PLATE "B". INITIATION WAS DUE TO FRETTING.

R, CAL 18652
CAL & 45.7
AP 6.89
1 Life

See next page

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.1842	.0168
39	15600	1674	0176
38	15200	1498	0150
37	14800	1348	0164
36	14400	1184	0135
35	14000	1049	0139
34	13600	0910	0111
33	13200	0799	0087
32	12800	0712	0098
31	12400	0614	0077
30	12000	0537	0067
29	11600	0470	0056
28	11200	0414	0046
27	10800	0368	0042
26	10400	0326	0039
25	10000	0287	0037
24	9600	0250	0042
23	9200	0208	0038
22	8800	0170	0032
21	8400	0138	0022
20	8000	0116	0017
19	7600	0099	
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: L4WPF-6B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	1	2	3	4	5	(6)	(17)
ERAGE WIDTH:	1.5004		1.5003	1.4998	1.5000	1.5015	
ERAGE THICKNESS:	.3743		.3750	.3744	.3748	.3739	.3735

EA: .5616

SELINE STRESS: 30.6KSI

X. LOAD: 171859

CLES AT TERMINATION/[redacted]

3 Lives/____

③ a/2c = .53

STATIC LOAD A-17.63 K#
B-17.58 K#

THIS ORIGIN LIES ON BOLT HOLE SURFACE

RCAL 18094
C.S. 45.0
AP 6.89
1 Life

See next page

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

Continued from previous page

FRACTOGRAPHIC DATA

LyWPF-5A

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I
3 Lives	60	24000		
	59	23600		
	58	23200		
	57	22800		
	56	22400		
	55	22000		
	54	21600		
	53	21200		
	52	20800		
	51	20400		
	50	20000		
	49	19600		
* →	48	[illegible]	.4335	.0184
	47	18800	4151	0712
	46	18400	3439	0393
	45	18000	3046	0284
	44	17600	2762	0261
	43	17200	2501	0236
	42	16800	2265	0235
	41	16400	2030	0180

FRACTOGRAPHIC DATA

LyWPF-6B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I
3 Lives	60	24000	.00991/2c =	01875
	59	23600		
	58	23200		
	57	22800		
	56	22400		
	55	22000		
	54	21600		
	53	21200		
	52	20800		
	51	20400		
	50	20000		
	49	19600		
	48	19200		
	47	18800		
	46	18400		
	45	18000		
	44	17600		
	43	17200		
	42	16800		
	41	16400		

245

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: L4WPF-7B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (1) 2 3 4 5 6

ERAGE WIDTH:	1.5023	1.5020	1.5023	1.5023	1.5024	
ERAGE THICKNESS:	.3797	.3800	.3784	.3786	.3803	.3810

EA: .5704

SELINE STRESS: 30.6 KSI

X. LOAD: 17453.1

1 Life

CLES AT TERMINATION/FAILURE:

3 Lives/_____

③

STATIC LOAD A-15.94 K#
B-15.98 K#

ORIGIN LIES AT CORNER.

See next page

88

R. CAL. 18756
C S-4 45.8
APT 7.00

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.01754	.00101
39	15600	01653	00098
38	15200	01555	00101
37	14800	01454	00088
36	14400	01366	00088
35	14000	01278	00066
34	13600	01212	00071
33	13200	01141	00079
32	12800	01067	00062
31	12400	01005	
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: L4WPF-8B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 (2) 3 4 5 6

ERAGE WIDTH:	1.5018	1.5030	1.5022	1.5012	1.5008	
ERAGE THICKNESS:	.3794	.3811	.3763	.3817	.3794	.3784

EA: .5638

SELINE STRESS: 30.6 KSI

X. LOAD: 17434.4

1 Life

CLES AT TERMINATION/FAILURE:

3 Lives/_____

③

STATIC LOAD A-17.78 K#
B-16.20 K#

ORIGIN LIES ON CHAMFERED CORNER SURFACE.

See next page

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R. CAL. 18627
CS 45.6
APT 6.57

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.01244	.00106
39	15600	01138	.00064
38	15200	01074	00101
37	14800	00973	00103
36	14400	00870	00083
35	14000	00787	00067
34	13600	00720	00062
33	13200	00658	00043
32	12800	00625	00052
31	12400	00573	00051
30	12000	00522	00074
29	11600	00448	00060
28	11200	00388	00046
27	10800	00342	00043
26	10400	00299	00034
25	10000	00265	00037
24	9600	00228	00039
23	9200	00189	00021
22	8800	00168	
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

Continued from previous page

FRACTOGRAPHIC DATA

L4WPF-7B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I
3 Lives	60	24000	.07482	.00632
	59	23600	06850	.00562
	58	23200	06288	00446
	57	22800	05842	00370
	56	22400	05472	00360
	55	22000	05112	00358
	54	21600	04754	00329
	53	21200	04425	00336
	52	20800	04089	00336
	51	20400	03753	00209
	50	20000	03544	00176
	49	19600	03368	00214
	48	19200	03149	00219
	47	18800	02930	00176
	46	18400	02754	00146
	45	18000	02608	00261
	44	17600	02347	00218
	43	17200	02129	00151
	42	16800	01978	00139
	41	16400	01839	00085

FRACTOGRAPHIC DATA

L4WPF-8B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I
3 Lives	60	24000	.07009	.00469
	59	23600	06540	00490
	58	23200	06050	00470
	57	22800	05580	00395
	56	22400	05185	00398
	55	22000	04787	00425
	54	21600	04362	00260
	53	21200	04102	00304
	52	20800	03798	00295
	51	20400	03503	00217
	50	20000	03286	00369
	49	19600	02917	00279
	48	19200	02638	00205
	47	18800	02433	00208
	46	18400	02225	00219
	45	18000	02004	00202
	44	17600	01802	00129
	43	17200	01673	00203
	42	16800	01470	00097
	41	16400	01373	00129

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: LWPF-9A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	1	2	3	4	5	6
ERAGE WIDTH:	1.4999		1.4997	1.5003	1.5002	1.4995
ERAGE THICKNESS:	.3826		.3840	.3813	.3825	.3828	.3823

EA: .5738 RCAL 18178

SELINE STRESS: 30.6ksi CS. 450

X. LOAD: 17559.3 AP 702

1 Life

CLES AT TERMINATION/FAILURE:

3 Lives/____

STATIC LOAD A-14.24 K#
B-16.33 K#

1/r

ORIGIN OCCURRED AT THE BASE OF A SLIVER. THE SLIVER WAS GENERATED DURING THE BREAKING (DEBURRING) OF THE CORNER.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.03912	.00285
39	15600	03627	00288
38	15200	03339	00292
37	14800	03047	00267
36	14400	02780	00265
35	14000	02515	00270
34	13600	02245	00268
33	13200	01977	00244
32	12800	01733	00251
31	12400	01482	00162
30	12000	01320	00154
29	11600	01166	00144
28	11200	01022	00134
27	10800	00888	00091
26	10400	00797	00109
25	10000	00688	00080
24	9600	00608	00068
23	9200	00540	00047
22	8800	00493	00035
21	8400	00458	00036
20	8000	00422	00032
19	7600	00390	00024
18	7200	00366	00027
17	6800	00339	00022
16	6400	00317	
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: LWPF-10B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	1	2	3	4	5	6
ERAGE WIDTH:	1.4997		1.4999		1.4992	1.5007	1.5000
ERAGE THICKNESS:	.3775	.3785	.3787	.3792	.3753	.3756

EA: .5661 RCAL 18094

SELINE STRESS: 30.6ksi CS 450

X. LOAD: 17321.9 AP 697

1 Life

CLES AT TERMINATION/FAILURE:

3 Lives/____

STATIC LOAD A-17.72 K#
B-18.12 K#

a/2c = .34

ORIGIN LIES ON BOLT HOLE SURFACE. MATING SURFACES WERE MILLED.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

Continued from previous page

FRACTOGRAPHIC DATA

LYWPF-9A

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I
3 Lives	60	24000	.14612	.00854
	59	23600	13758	00676
	58	23200	13082	00729
	57	22800	12353	00675
	56	22400	11678	00728
	55	22000	10950	00644
	54	21600	10306	00632
	53	21200	09674	00594
	52	20800	09080	00617
	51	20400	08463	00575
	50	20000	07888	00445
	49	19600	07443	00561
	48	19200	06882	00410
	47	18800	06472	00436
	46	18400	06036	00432
	45	18000	05604	00366
	44	17600	05238	00366
	43	17200	04872	00366
	42	16800	04506	00299
	41	16400	04207	00295

FRACTOGRAPHIC DATA

LYWPF-10B

	Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I
3 Lives	60	24000	.00328/2C = .00958	
	59	23600		
	58	23200		
	57	22800		
	56	22400		
	55	22000		
	54	21600		
	53	21200		
	52	20800		
	51	20400		
	50	20000		
	49	19600		
	48	19200		
	47	18800		
	46	18400		
	45	18000		
	44	17600		
	43	17200		
	42	16800		
	41	16400		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

2.3.6 LYWPB

FATIGUE TEST DATA

SPECIMEN NUMBER: LYWPB-1A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: (A) B C D E F
1 (2) 3 4 5 6

AVERAGE WIDTH: 1.5005

AVERAGE THICKNESS: 3821

AREA: .5734

R-Cal 17853 (7996)
Cal S 47%

BASELINE STRESS: 29.7 Ksi Apt 681

MAX. LOAD: 17,030

CYCLES AT [redacted]/FAILURE: * 3Lives/___

(1)

Stress Lead A- KW
B- KW

Origin lies on Plate A surface near corner on extrusion formed during drilling. Both plate surfaces (A&B) were milled. This specimen failed between 3340 & 3350 FLTS.

FRACTOGRAPHIC DATA

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840		
3760		
3660		
3560		
* → 3460	.4708	.1558
3260	.3150	.0693
3160	.2457	.0488
3060	.1969	.0371
2960	.1598	.0284
2860	.1314	.0263
2760	.1051	.0202
2660	.0849	.0182
Two Lives 2560	.0667	.0098
2480	.0569	.0103
2380	.0466	.0083
2280	.0383	.0065
2180	.0318	.0060
2080	.0258	.0057
1980	.0210	.0048
1880	.0162	.0025
1780	.0137	.0028
1680	.0109	.0017
1580	.0092	.0010
1480	.0072	.0018
1380	.0054	.0017
One Life 1280	.0042	.0005
1200	.0042	.0005
1100	.0037	.0006
1000	.0031	.0006
900	.0025	.0004
800	.0021	.0003
700	.0018	.0003
600	.0015	
500		
400		
300		
200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: LYWPB-2B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A (B) C D E F
1 2 3 4 5 6

AVERAGE WIDTH: 1.5028 | 1.5034 | 1.5018 | 1.5028 | 1.5030

AVERAGE THICKNESS: 3834 | 3853 | 3818 | 3859 | 3817 | 3822

AREA: .5761

R-Cal 18094 (7727)
Cal S 45.2%

BASELINE STRESS: 29.7 Ksi Apt 684

MAX. LOAD: 17110

CYCLES AT [redacted]/FAILURE: * 3Lives/___

(1) [redacted] *

Not correct number of L.P.S' AT FAILURE @ 966657 L.P.S = 3749.01 FLT

Origin lies on Plate B surface near corner. This specimen failed at approx 3648 FLT's.

FLIGHT [redacted]	CRACK LENGTH INCH	INCREMENT INCH
Three Lives 3840		
* → [redacted]		
* → [redacted]	.4873	.1299
3560	.3574	.0557
3460	.3016	.0433
3360	.2583	.0377
3260	.2206	.0315
3160	.1891	.0295
3060	.1596	.0288
2960	.1308	.0227
2860	.1081	.0196
2760	.0885	.0152
2660	.0733	.0133
Two Lives 2560	.0600	.0087
2480	.0513	.0075
2380	.0438	.0061
2280	.0377	.0060
2180	.0317	.0039
2080	.0278	.0035
1980	.0253	.0045
1880	.0228	.0027
1780	.0206	.0029
1680	.0178	.0024
1580	.0154	.0020
1480	.0134	.0021
1380	.0113	.0012
One Life 1280	.0101	.0012
1200	.0089	.0007
1100	.0082	.0013
1000	.0069	.0010
900	.0059	.0009
800	.0050	.0006
700	.0044	.0006
600	.0038	.0004
500	.0034	.0004
400	.0030	
300		
200		

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GENERAL DYNAMICS
Fort Worth Division
TAB OR ATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: LywPB-3A

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A B (C) D E F
1 2 3 4 5 6

AVERAGE WIDTH:	1.5007	1.5013	1.5016	1.5005	1.4992	
AVERAGE THICKNESS:	.3824	.3805	.3785	.3811	.3853	.3856

AREA: .5739 29.7

R-Ult 18982 (8100)
Cal S 48%

BASELINE STRESS: [redacted] Ksi Apt 682

MAX. LOAD: 17044

CYCLES AT TERMINATION/FAILURE: 3Lives/___

(3)

A 15.16 in
B 15.46 in

origin lies on Plate A surface due to tool mark defects generated by the relaxed tolerance in milling similar to that in the factory production. Both plates (A&B) were milled.

FRACTOGRAPHIC DATA

FLIGHT	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840	.1138	.0126
3760	1012	01128
3660	0884	.0119
3560	0765	0119
3460	0646	0084
3360	0557	0076
3260	0481	0080
3160	0401	0071
3060	0330	0058
2960	0272	0040
2860	0232	0031
2760	0201	0026
2660	0175	0022
Two Lives 2560	0153	0006
2480	0147	0013
2380	0134	0007
2280	0127	0007
2180	0120	0005
2080	0115	0006
1980	0109	0005
1880	0104	
1780		
1680		
1580		
1480		
1380		
One Life 1280		
1200		
1100		
1000		
900		
800		
700		
600		
500		
400		
300		
200		

TAB OR ATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: LywPB-4B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: (A) B C D E F
1 2 3 4 5 6

AVERAGE WIDTH:	1.5003	1.5006	1.5004	1.5014	1.5015	
AVERAGE THICKNESS:	.3851	.3842	.3826	.3884	.3854	.3827

AREA: .5780 29.7

R-Ult 18752 (7996)
Cal S 47%

BASELINE STRESS: [redacted] Ksi Apt 6.87

MAX. LOAD: 17167

CYCLES AT TERMINATION/FAILURE: 3Lives/___

(3)

A 17.72 in
B 17.46 in

origin lies on Plate B surface. Both plates (A&B) were milled.

FLIGHT	CRACK LENGTH INCH	INCREMENT INCH
ThreeLives 3840	.0852	.0032
3760	0820	0034
3660	0786	0024
3560	0762	0024
3460	0738	0019
3360	0719	0018
3260	0701	0015
3160	0686	0008
3060	0678	0011
2960	0667	0019
2860	0648	0010
2760	0638	0008
2660	0630	
Two Lives 2560		
2480		
2380		
2280		
2180		
2080		
1980		
1880		
1780		
1680		
1580		
1480		
1380		
One Life 1280		
1200		
1100		
1000		
900		
800		
700		
600		
500		
400		
300		
200		

GENERAL DYNAMICS
Fort Worth Division
FABRICATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: LYWPB-5A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C (D) E F
1 2 3 (4) 5 6

AVERAGE WIDTH:	1.5021	1.5022	1.5025	1.5020	1.5017	
AVERAGE THICKNESS:	.3878	.3874	.3865	.3865	.3897	.3887

AREA: .5825

R-Ld 18478 (7894)
Cut S 46%
Part 6.82

BASELINE STRESS: ~~33~~ 29.7 Ksi

MAX. LOAD: 17299

CYCLES AT TERMINATION/FAILURE: 3Lives/____

(3) Service Lives ∧ = 7.40 ksi
Y = 13.74 ksi

Origin lies on Bolt hole [redacted] surface near corner.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
Three Lives	3840	.4063	.0874
	3760	3189	0665
	3660	2524	0493
	3560	2029	0393
	3460	1636	0322
	3360	1314	0244
	3260	1070	0192
	3160	0878	0167
	3060	0711	0138
	2960	0573	0113
	2860	0460	0094
	2760	0366	0078
	2660	0293	0064
Two Lives	2560	0244	0032
	2480	0211	0030
	2380	0179	0029
	2280	0149	0019
	2180	0126	0016
	2080	0107	0015
	1980	0091	0013
	1880	0076	0011
	1780	0063	0008
	1680	0052	0009
	1580	0044	
	1480	0035	
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FATIGUE TEST DATA

SPECIMEN NUMBER: LYWPB-6B

SPECTRUM: Bomber

TEST DATE: _____ *

TEST FRAME: A B C (D) E F
1 2 3 (4) 5 6

AVERAGE WIDTH:	1.5005	1.5009	1.5013	1.5000	1.4997	
AVERAGE THICKNESS:	.3832	.3852	.3894	.3844	.3834	.3837

AREA: .5750

R-Ld 18478 (7894)
Cut S 46%
Part 6.83

BASELINE STRESS: ~~33~~ 29.7 Ksi

MAX. LOAD: 17078

CYCLES AT [redacted]/FAILURE: 3Lives/____

(3) 891,819 L.P.'s = 3458.77 Flt's *
Service Lives ∧ = ____ ksi
Y = ____ ksi

Origin lies on Plate B surface but Relaxed Milling Tolerances. Both plate surfaces (A & B) were milled.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
Three Lives	3840		
	3760		
	3660		
	3560		
* →	[redacted]	.5263	.1497
	3360	.3755	.0766
	3260	.2989	.0482
	3160	.2507	.0370
	3060	.2137	.0349
	2960	.1788	.0319
	2860	.1469	.0241
	2760	.1228	.0243
	2660	.0985	.0187
Two Lives	2560	.0798	.0211
	2480	.0677	.0130
	2380	.0547	.0095
	2280	.0452	.0084
	2180	.0368	.0052
	2080	.0316	.0036
	1980	.0280	.0028
	1880	.0252	.0026
	1780	.0226	.0019
	1680	.0207	.0073
	1580	.0134	.0038
	1480	.0096	.0013
	1380	.0083	.0008
One Life	1280	.0075	.0005
	1200	.0070	.0007
	1100	.0063	.0007
	1000	.0055	.0008
	900	.0047	.0006
	800	.0041	.0008
	700	.0033	.0005
	600	.0028	.0003
	500	.0025	.0004
	400	.0021	.0004
	300	.0017	
	200		

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GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: LYWPB-7B

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D (E) F
1 2 3 4 (5) 6

AVERAGE WIDTH:	1.4996	1.5007	1.5008	1.4987	1.4983
AVERAGE THICKNESS:	.3842	.3868	.3847	.3872	.3823	.3833

AREA: .5762 R-Cal 18652(7057)
Cal S 46%

BASELINE STRESS: ~~33~~ 29.7 Ksi pt 684

MAX. LOAD: 17112

CYCLES AT TERMINATION/FAILURE: 3Lives/___
(3)

Theoretical Loads A-18.25 kN
B-17.3 kN

origin lies at corner. Both plate surfaces (A&B) were milled.

FRACTOGRAPHIC DATA

FLIGHT		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.0326	.0035
	3760	.0291	.0047
	3660	.0244	.0041
	3560	.0203	.0032
	3460	.0171	.0026
	3360	.0145	.0015
	3260	.0130	.0014
	3160	.0116	.0013
	3060	.0103	.0011
	2960	.0092	.0006
	2860	.0086	.0005
	2760	.0081	.0008
	2660	.0073	
Two Lives	2560		
	2480		
	2380		
	2280		
	2180		
	2080		
	1980		
	1880		
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

FATIGUE TEST DATA

SPECIMEN NUMBER: LYWPB-8A

SPECTRUM: Bomber

TEST DATE: _____

TEST FRAME: A B C D E (F)
1 2 3 4 5 (6)

AVERAGE WIDTH:	1.5001	1.5003	1.5005	1.4999	1.4998
AVERAGE THICKNESS:	.3824	.3825	.3821	.3819	.3820	.3827

AREA: .5737 R-Cal 17925 (7668)
Cal S 45%

BASELINE STRESS: ~~33~~ 29.7 Ksi pt 682

MAX. LOAD: 17039

CYCLES AT TERMINATION/FAILURE: 3Lives/___
(3)

Theoretical Loads A-18.30 kN
B-15,660 kN

origin lies on tip of a extrusion at the corner caused by the drilling of the bolt hole. Both Plate surfaces (A&B) were milled.

FLIGHT		CRACK LENGTH INCH	INCREMENT INCH
ThreeLives	3840	.2517	.0285
	3760	.2232	.0304
	3660	.1928	.0274
	3560	.1650	.0254
	3460	.1396	.0218
	3360	.1178	.0187
	3260	.0991	.0159
	3160	.0832	.0138
	3060	.0694	.0108
	2960	.0586	.0109
	2860	.0477	.0084
	2760	.0393	.0069
	2660	.0324	.0056
Two Lives	2560	.0268	.0033
	2480	.0235	.0032
	2380	.0203	.0029
	2280	.0174	.0029
	2180	.0145	.0025
	2080	.0120	.0028
	1980	.0092	.0008
	1880	.0084	.0015
	1780	.0069	.0010
	1680	.0059	
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: LYWPB-9B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A (B) C D E F
1 2 3 4 5 6

AVERAGE WIDTH: 1.4990 | 1.4996 | 1.4999 | 1.4996 | 1.4990

AVERAGE THICKNESS: .3816 | .3845 | .3816 | .3932 | .3798 | .3784

AREA: .5720 297

R-Val 18752 (7996)
C&S 47%

BASELINE STRESS: [redacted] Ksi

Pmax 6.80

MAX. LOAD: 16988

CYCLES AT TERMINATION/FAILURE: 3Lives/___
(3)

Surface Loads A- 17.27 ksi
B- 17.04 " "

Origin lies on Bolt Hole surface.
Both Plate surfaces (A&B) were milled.

FRACTOGRAPHIC DATA

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
Three Lives	3840	.0320	.0046
	3760	.0274	.0050
	3660	.0224	.0037
	3560	.0187	.0039
	3460	.0148	.0026
	3360	.0122	.0022
	3260	.0100	.0018
	3160	.0082	.0012
	3060	.0070	.0011
	2960	.0059	.0008
	2860	.0051	.0007
	2760	.0044	.0003
	2660	.0041	.0003
Two Lives	2560	.0038	.0001
	2480	.0037	.0006
	2380	.0031	.0003
	2280	.0028	.0005
	2180	.0023	.0003
	2080	.0020	.0003
	1980	.0017	.0003
	1880	.0014	.0002
	1780	.0012	
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: LYWPB-10B

SPECTRUM: Bomber

TEST DATE:

TEST FRAME: A (B) C D E F
1 2 3 4 5 6

AVERAGE WIDTH: 1.5009 | 1.5005 | 1.4997 | 1.5020 | 1.5012

AVERAGE THICKNESS: .3832 | .3809 | .3824 | .3826 | .3865 | .3857

AREA: .5752 297

R-Val 18094 (7777)
C&S 45%

BASELINE STRESS: [redacted] Ksi

Pmax 6.80

MAX. LOAD: 17083

CYCLES AT TERMINATION/FAILURE: 3Lives/___
(1)

Surface Loads A- 18.00 ksi
B- 15.90 " "

Origin lies on Bolt Hole surface.
Both Plate surfaces (A&B) were milled.

FLIGHT [redacted]		CRACK LENGTH INCH	INCREMENT INCH
Three Lives	3840	.0451	.0090
	3760	.0361	.0077
	3660	.0284	.0075
	3560	.0209	.0052
	3460	.0157	.0035
	3360	.0122	.0027
	3260	.0095	.0020
	3160	.0075	.0014
	3060	.0061	.0010
	2960	.0051	.0006
	2860	.0045	.0007
	2760	.0038	.0004
	2660	.0034	.0004
Two Lives	2560	.0030	.0002
	2480	.0028	.0004
	2380	.0024	.0003
	2280	.0021	.0002
	2180	.0019	.0002
	2080	.0017	.0003
	1980	.0014	.0002
	1880	.0012	
	1780		
	1680		
	1580		
	1480		
	1380		
One Life	1280		
	1200		
	1100		
	1000		
	900		
	800		
	700		
	600		
	500		
	400		
	300		
	200		

554

2.3.7 XWIF

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-1A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH:	1.5018	1.5015	1.5029	1.5020	1.5018	
AVERAGE THICKNESS:	.3776	.3801	.3767	.3792	.3782	.3756

AREA: .5670 ECAL 18675 (75T)

BASELINE STRESS: 34 Ksi CALC 97%

MAX. LOAD: 19279 A.V.T. 771

CYCLES AT TERMINATION [redacted]

2 Lives/____

STATIC LOAD A-16.44 KN
B-17.74 KN

Origin lies on Plate surface.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.1728	.0103
39	15600	1625	0141
38	15200	1484	0115
37	14800	1369	0103
36	14400	1266	0078
35	14000	1188	0076
34	13600	1112	0074
33	13200	1038	0065
32	12800	0973	0051
31	12400	0922	0053
30	12000	0869	0062
29	11600	0807	0059
28	11200	0748	0047
27	10800	0701	0040
26	10400	0661	0042
25	10000	0619	0045
24	9600	0574	0041
23	9200	0533	0042
22	8800	0491	0041
21	8400	0450	0033
20	8000	0417	0025
19	7600	0392	0038
18	7200	0354	0029
17	6800	0325	0030
16	6400	0295	0025
15	6000	0270	0030
14	5600	0240	0035
13	5200	0205	0028
12	4800	0177	0021
11	4400	0156	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	[illegible]		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-2A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH:	1.5008	1.5022	1.5015	1.5001	1.4993	
AVERAGE THICKNESS:	.3865	.3901	.3849	.3884	.3853	.3837

AREA: .5800 ECAL 18670 (77GB)

BASELINE STRESS: 34 Ksi CALC 95%

MAX. LOAD: 19721 A.V.T. 789

CYCLES AT TERMINATION [redacted]

2 Lives/____

STATIC LOAD A-12.77 KN
B-13.84 KN

origin lies on Bolt Hole Surface.
Both Plate surfaces (A&B) were milled.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.0337	.0043
39	15600	0294	0027
38	15200	0267	0024
37	14800	0243	0024
36	14400	0219	0026
35	14000	0193	0018
34	13600	0175	0018
33	13200	0157	0019
32	12800	0138	0015
31	12400	0123	0012
30	12000	0111	0012
29	11600	0099	0011
28	11200	0088	0010
27	10800	0078	0008
26	10400	0070	0004
25	10000	0066	0006
24	9600	0060	0005
23	9200	0055	0004
22	8800	0051	0003
21	8400	0048	0006
20	8000	0042	0003
19	7600	0039	0004
18	7200	0035	0003
17	6800	[illegible] 0032	0004
16	6400	0028	0003
15	6000	0025	0003
14	5600	0022	0003
13	5200	0019	0002
12	4800	0017	0003
11	4400	0014	0002
10	4000	0012	0002
9	3600	0010	0001
8	3200	0009	0001
7	2800	0008	0001
6	2400	0007	0001
5	2000	0006	0001
4	1600	0005	0001
3	1200	0004	0001
2	800	0003	
1	[illegible]		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-3B

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.4993 | 1.4994 | 1.4988 | 1.5002 | 1.5003

AVERAGE THICKNESS: .3773 | .3793 | .3745 | .3798 | .3859 | .3769

AREA: .5657 SCALE 1906 (B168)

BASELINE STRESS: 34ksi CALC 99%

MAX. LOAD: 19233 A.K.T. 7.70

CYCLES AT T[redacted]/FAILURE: *

2 Lives/____

@ 1,493,196 L.P.'s = 15,599.89 FLT-HRS. *

STATIC LOAD A- K+

B- K''

Origin lies on Plate surface "B" near corner upset bulk. Both plate surfaces (A&B) were milled.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000		
39 →	[redacted]	.4375	.1271
38	15200	3004	0470
37	14800	2534	0342
36	14400	2192	0286
35	14000	1906	0250
34	13600	1656	0221
33	13200	1435	0169
32	12800	1266	0136
31	12400	1130	0146
30	12000	0984	0114
29	11600	0870	0086
28	11200	0784	0078
27	10800	0706	0078
26	10400	0628	0068
25	10000	0560	0059
24	9600	0501	0061
23	9200	0440	0033
22	8800	0407	0049
21	8400	0358	0043
20	8000	0316	0051
19	7600	0265	0034
18	7200	0231	0036
17	6800	0195	0028
16	6400	0167	0027
15	6000	0140	0025
14	5600	0115	0022
13	5200	0093	0018
12	4800	0075	0013
11	4400	0063	0007
10	4000	0056	0009
9	3600	0047	0009
8	3200	0038	0006
7	2800	0032	0004
6	2400	0028	0005
5	2000	0023	0004
4	1600	0019	
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-4A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.4990 | 1.4987 | 1.4983 | 1.4993 | 1.4998

AVERAGE THICKNESS: .3821 | .3861 | .3795 | .3831 | .3821 | .3790

AREA: .5728 SCALE 1906 (B75)

BASELINE STRESS: 34ksi CALC 96%

MAX. LOAD: 19475 A.K.T. 779

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,455,532 L.P.'s = 15,206.4 FLT-HRS *

STATIC LOAD A- K+

B- K''

Origin lies at corner. Both plate surfaces (A&B) were milled.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000		
39 →	[redacted]	.4203	.0004
38	15200	4199	.0949
37	14800	3250	0380
36	14400	2870	0316
35	14000	2554	0244
34	13600	2310	0230
33	13200	2080	0209
32	12800	1871	0180
31	12400	1691	0158
30	12000	1533	0135
29	11600	1398	0129
28	11200	1269	0125
27	10800	1149	0096
26	10400	1048	0098
25	10000	0950	0082
24	9600	0868	0076
23	9200	0792	0080
22	8800	0712	0074
21	8400	0638	0057
20	8000	0581	0059
19	7600	0522	0037
18	7200	0485	0046
17	6800	0439	0040
16	6400	0399	0040
15	6000	0359	
14	5600		
13	5200		
12	4800	Fracture noted	
11	4400	on Teely	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-5A *

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH:	1.4988	1.4983	1.4976	1.4992	1.4999	
AVERAGE THICKNESS:	.3716	.3764	.3748	.3802	.3776	.3788

AREA: .5659 SCAL 18675 (7807)

BASELINE STRESS: _____ CALS @ 97%

MAX. LOAD: 19240 A.POT. 770

CYCLES AT ~~TERMINATION~~/FAILURE: *

@ 1,404,686 L.P.'s = 14675.20 FLT-HRS * (2 Lives?)

STATIC LOAD A- K#

B- K#

Origin lies on Bolt Hole Surface

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000		
39	15600		
38	15200		
37 →	[redacted]	.5756	.2139
36	14400	3617	0768
35	14000	2849	0407
34	13600	2442	0290
33	13200	2152	0214
32	12800	1938	0190
31	12400	1748	0196
30	12000	1552	0146
29	11600	1406	0147
28	11200	1259	0119
27	10800	1140	0097
26	10400	1043	0085
25	10000	0958	0076
24	9600	0882	0064
23	9200	0818	0066
22	8800	0752	0048
21	8400	0694	0052
20	8000	0642	0046
19	7600	0596	0049
18	7200	0547	0043
17	6800	0504	0049
16	6400	0455	
15	6000		
14	5600		
13	5200	Fracture damaged	
12	4800		
11	4400		
10	4000	by Pratt&Whitney itself	
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-6A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH:	1.5004	1.5003	1.5004	1.5005	1.5003	
AVERAGE THICKNESS:	.3814	.3823	.3809	.3828	.3800	.3808

AREA: .5722 SCAL 18670 (7946)

BASELINE STRESS: 34 KSI CALS 96%

MAX. LOAD: 19455 A.POT. 778

CYCLES AT TERMINATION/~~FAILURE~~: **

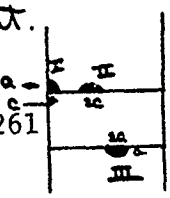
@ 760,461 L.P.'s = 7944.78 FLT-HRS ** (2 Lives)

** STATIC LOAD A-17.40K#

B-17.53K#

Computer put specimen in full compression - Buckling it.

Fatigue crack size at Approx. one life.



Blk #	FLIGHT HRS.	a CRACK LENGTH IN.	c or 2c	INCREMENT
40	16000			
39	15600			
38	15200 I	.0095	.0355	
37	14800 II	.0039	.0113	
36	14400 III	.0049	.0112	
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
24	9600			
23	9200			
22	8800			
21	8400			
20 →	[redacted]			
19	7600			
18	7200			
17	6800			
16	6400			
15	6000			
14	5600			
13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	400			

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-7A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH:	1.5008	1.5009	1.5018	1.5005	1.5002	
AVERAGE THICKNESS:	.3766	.3797	.3769	.3763	.3765	.3750

AREA: .5653 SCALE 131X (2168)

BASELINE STRESS: 34 ksi CALC 100%

MAX. LOAD: 19,219 A.N.T. 770

CYCLES AT TERMINATION/~~FAILURE~~

2 Lives/1

STATIC LOAD A-16.99 K-H
B-16.95 K-H

Origin lies on Bolt Hole surface. Both Plates (A&B) were milled

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.0169	.0006
39	15600	0163	0006
38	15200	0157	0008
37	14800	0149	0007
36	14400	0142	0006
35	14000	0136	0008
34	13600	0128	0008
33	13200	0120	0008
32	12800	0112	0007
31	12400	0105	0007
30	12000	0098	0009
29	11600	0089	0007
28	11200	0082	0008
27	10800	0074	0006
26	10400	0068	0007
25	10000	0061	0007
24	9600	0054	0006
23	9200	0048	0006
22	8800	0042	0006
21	8400	0036	0006
20	8000	0030	0005
19	7600	0025	0003
18	7200	0022	0003
17	6800	0019	0002
16	6400	0017	0002
15	6000	0015	0001
14	5600	0014	0001
13	5200	0013	0001
12	4800	0012	0001
11	4400	0011	
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-8A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH:	1.5013	1.5016	1.5011	1.5010	1.5015	
AVERAGE THICKNESS:	.3804	.3796	.3802	.3802	.3810	.3811

AREA: .5711 SCALE 18675 (7511)

BASELINE STRESS: _____ CALC 96%

MAX. LOAD: 19418 A.N.T. 7.77

CYCLES AT ~~TERMINATION~~/FAILURE: *

2 Lives/_____

@ 1,458,278 H.P.'s - 15235.09 FLT-HRS *

STATIC LOAD A- K-H
B- K-H

Origin lies at started corner.

3-9-78 9.41

end 3-10-78 - 11:50.

(14hr)

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000		
39	[redacted]	.3393	.0116
38	15200	3277	0569
37	14800	2708	0353
36	14400	2355	0270
35	14000	2085	0221
34	13600	1864	0214
33	13200	1650	0186
32	12800	1464	0127
31	12600	1337	0125
30	12000	1212	0110
29	11600	1102	0107
28	11200	0995	0092
27	10800	0903	0071
26	10400	0832	0070
25	10000	0762	0065
24	9600	0697	0067
23	9200	0630	0058
22	8800	0572	0038
21	8400	0534	0035
20	8000	0499	0041
19	7600	0458	0042
18	7200	0416	0044
17	6800	0372	0039
16	6400	0333	0025
15	6000	0308	0033
14	5600	0275	
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(458)

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-9B

SPECTRUM: Fighter

TEST DATE: _____ *

TEST FRAME: B

AVERAGE WIDTH: 1.5011 | 1.5016 | 1.5023 | 1.5006 | 1.5000

AVERAGE THICKNESS: .3823 | .3915 | .3826 | .3812 | .3805 | .3755

AREA: .5738 (CAL 18670 (7968))

BASELINE STRESS: 34 KSI (CALC 962)

MAX. LOAD: 19510 A.P.T. 7.80

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,225,816 HR's = 12806.49 FLT-HRS *

STATIC LOAD A- K4

B- K11

origin on Bolt Hole surface at corner.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33 →	[redacted]	[redacted] .4207	.0005
32	12800	[redacted] .4202	.0970
31	12400	.3232	.0494
30	12000	.2738	.0386
29	11600	.2352	.0353
28	11200	.1999	.0327
27	10800	.1727	.0272
26	10400	.1500	.0228
25	10000	.1172	.0191
24	9600	.0981	.0159
23	9200	.0822	.0121
22	8800	.0701	.0097
21	8400	.0604	.0096
20	8000	.0508	.0081
19	7600	.0427	.0053
18	7200	.0374	.0055
17	6800	.0319	.0051
16	6400	.0268	.0043
15	6000	.0225	.0040
14	5600	.0185	.0031
13	5200	.0154	
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-10A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.5020 | 1.5025 | 1.5015 | 1.5016 | 1.5023

AVERAGE THICKNESS: .3834 | .3827 | .3808 | .3814 | .3863 | .3856

AREA: .5758 (CAL 19156 (8168))

BASELINE STRESS: 34 KSI (CALC [redacted] 78)

MAX. LOAD: 19577 A.P.T. 783

CYCLES AT [redacted]/FAILURE: *

3 Lives/____

@ 1,458,278 HR's = 15235.09 FLT-HRS *

STATIC LOAD A- K4

B- K11

origin lies on Bolt Hole surface.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000		
39 →	[redacted]	.4224	.0102
38	15200	.4122	.0813
37	14800	.3309	.0415
36	14400	.2894	.0330
35	14000	.2564	.0272
34	13600	.2292	.0273
33	13200	.2019	.0220
32	12800	.1799	.0184
31	12400	.1615	.0151
30	12000	.1464	.0150
29	11600	.1314	.0130
28	11200	.1184	.0115
27	10800	.1069	.0105
26	10400	.0964	.0093
25	10000	.0871	.0081
24	9600	.0790	.0065
23	9200	.0725	.0057
22	8800	.0668	.0057
21	8400	.0611	.0051
20	8000	.0560	.0045
19	7600	.0515	.0048
18	7200	.0467	.0049
17	6800	.0418	.0040
16	6400	.0378	.0046
15	6000	[redacted] .0332	.0034
14	5600	.0298	.0029
13	5200	.0274	.0039
12	4800	.0235	.0026
11	4400	.0199	.0038
10	4000	.0161	
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-11A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH:	1.4992	1.4998	1.5005	1.4988	1.4977	
AVERAGE THICKNESS:	.3817	.3794	.3787	.3792	.3852	.3862

AREA: .5723 SCAL 18675 (7977)

BASELINE STRESS: _____ CALS 96%

MAX. LOAD: 19458 A.KT. 7.78

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A-12.40K#
B-12.40K#

Origin lies on Bolthole surface near corner. Both Plate surfaces (A&B) were milled.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.2095	.0311
39	15600	1784	0271
38	15200	1513	0208
37	14800	1305	0190
36	14400	1115	0157
35	14000	0958	0127
34	13600	0821	0100
33	13200	0721	0089
32	12800	0632	0091
31	12400	0541	0064
30	12000	0477	0056
29	11600	0421	0044
28	11200	0377	0043
27	10800	0333	0044
26	10400	0298	0036
25	10000	0260	0026
24	9600	0234	0026
23	9200	0208	0021
22	8800	0187	0019
21	8400	0168	0017
20	8000	0151	0014
19	7600	0137	0015
18	7200	0123	0012
17	6800	0110	0011
16	6400	0099	0011
15	6000	0088	0011
14	5600	0077	0010
13	5200	0067	0009
12	4800	0058	0009
11	4400	0049	0009
10	4000	0043	0006
9	3600	0035	0008
8	3200	0032	0003
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XWIF-12A

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH:	1.5011	1.5006	1.5003	1.5012	1.5012	
AVERAGE THICKNESS:	.3768	.3786	.3755	.3783	.3764	.3752

AREA: .5656 SCAL 18670 (7960)

BASELINE STRESS: _____ CALS 97%

MAX. LOAD: 19231 A.KT. 7.69

CYCLES AT TERMINATION/FAILURE @ 1302379 L.F.'s

2 Lives/_____

@ 1,302,379 L.F.'s = 13606.36 FLT-HRS.*

STATIC LOAD A- K#
B- K#

origin lies at corner.

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	[redacted]	.3949	.0033
34	13600	3916	.0055
33	13200	2861	0482
32	12800	2379	0401
31	12400	1978	0308
30	12000	1670	0275
29	11600	1395	0225
28	11200	1170	0139
27	10800	1031	0143
26	10400	0888	0114
25	10000	0774	0086
24	9600	0688	0081
23	9200	0607	0069
22	8800	0538	0061
21	8400	0477	0061
20	8000	0416	0061
19	7600	0365	0052
18	7200	0322	0040
17	6800	0282	0040
16	6400	0242	0031
15	6000	0211	0031
14	5600	0180	
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		260
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: XW1F-13B

SPECTRUM: Fighter

TEST DATE: _____ *

TEST FRAME: C

AVERAGE WIDTH:	1.5002	1.5002	1.5003	1.5001	1.5001	
AVERAGE THICKNESS:	.3807	.3805	.3795	[redacted]	.3782	.3813

AREA: .5711 (SCALE 8136 (8168))

BASELINE STRESS: 34 ksi CALC 09%

MAX. LOAD: 19416 A.R.T. 777

CYCLES AT [redacted]/FAILURE: 1225812 L.P.'s

2 Lives/____

@ 1,225,812 L.P.'s = 12806.44 FLT-HRS *

STATIC LOAD A- K4

B- K11

origin lies at corner

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	[redacted]	.3844	.0049
32	12800	3795	.1026
31	12400	2769	0596
30	12000	2173	0414
29	11600	1759	0349
28	11200	1410	0288
27	10800	1122	0196
26	10400	0926	0164
25	10000	0762	0133
24	9600	0639	0101
23	9200	0538	[redacted] 0085
22	8800	[redacted] 0453	0075
21	8400	[redacted] 0388	0040
20	8000	0348	
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	[illegible]		

2.4 TASK IV
2.4.1 (AF-1410 Steel)
ST

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-1

SPECTRUM: Fighter AF-1410

TEST DATE: A

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.0006

AVERAGE THICKNESS: .2021 | .2021 | .2021

AREA: .2022 25Ω R CAL 18675

BASELINE STRESS: 148.4 ksi CAL SWING 62.3

MAX. LOAD: 30,000 # A POT 10.0 1 Life

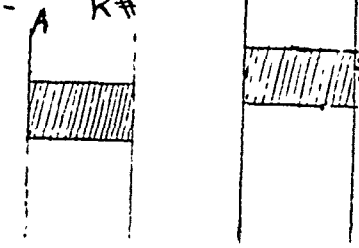
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 309,659 L.P.'s = 3235.11 FLT-HRS *

STATIC LOAD A- K#

Corner Crack Both sides B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN	
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600				
28	11200				
27	10800				
26	10400				
25	10000				
24	9600				
23	9200				
22	8800				
21	8400				
20	8000				
19	7600				
18	7200				
17	6800				
16	6400				
15	6000				
14	5600				
13	5200				
12	4800				
11	4400	a_1	a_2	Δa_1	Δa_2
10	4000				
9 * → [redacted]		.2231	.2245	.1870	.1427
8	3200	1061	0818	0418	0273
7	2800	0650	0545	0268	0209
6	2400	0382	0336	0159	0131
5	2000	0223	0205	0068	0087
4	1600	0155	0118	0060	0041
3	1200	0095	0077		
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-2

SPECTRUM: Fighter AF-1410

TEST DATE: B

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.0022

AVERAGE THICKNESS: .2009 | .2010 | .2008

AREA: .2013 R CAL 18670

BASELINE STRESS: 149.0 ksi CAL SWING 62.2

MAX. LOAD: 30,000 A POT 10.0 1 Life

CYCLES AT [redacted]/FAILURE: *

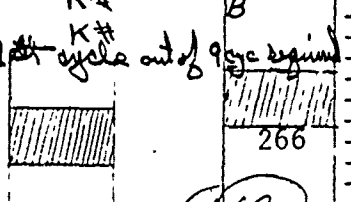
2 Lives/____

@ 345,205 L.P.'s = 3606.465 FLT-HRS

STATIC LOAD A- K#

Failed @ 92% load - 1 cycle out of 9 required Required load - 92% B- K#

Corner Crack Both Sides



266

262

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600				
28	11200				
27	10800				
26	10400				
25	10000				
24	9600				
23	9200				
22	8800				
21	8400				
20	8000				
19	7600				
18	7200				
17	6800				
16	6400				
15	6000				
14	5600				
13	5200	a_1	a_2	Δa_1	Δa_2
12	4800				
11	4400				
10 * → [redacted]		.2209	.2339	.1089	.1374
9	3600	1120	0965	0395	0385
8	3200	0725	0580	0270	0205
7	2800	0455	0375	0130	0115
6	2400	0325	0260	0090	0075
5	2000	0235	0185	0070	0055
4	1600	0165	0130	0060	0050
3	1200	0105	0080		
2	800				

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

STPF-3

SPECIMEN NUMBER: ST-3

SPECTRUM: Fighter

TEST DATE: 6/27/78

TEST FRAME: A

AVERAGE WIDTH: 1.0038

AVERAGE THICKNESS: .2236 | .2242 | .2231

AREA: .2244 R CAL 18675

BASELINE STRESS: 125 KSi CAL SWING 66.60

MAX. LOAD: 28,050 # A POT 9.85 1 Life

CYCLES AT [redacted]/FAILURE: *

@ 486,029 h.P.'s = 5077.698 FLT-HRS * 2 Lives/

STATIC LOAD A- KH
B- KH

origin lies on Bolt Hole surface

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.
40	16000			
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
24	9600			
23	9200			
22	8800			
21	8400			
20	8000			
19	7600			
18	7200			
17	6800			
16	6400			
15	6000	a_1	a_2	Δa_1
14	5600			
13	[redacted]	.2797	.0062	.1140
12	4800	1657		0719
11	4400	0938		0413
10	4000	0525		0218
9	3600	0307		0133
8	3200	0174		0074
7	2800	0100		0039
6	2400	0061		0025
5	2000	0036		
4	1600			
3	1200			
2	800			
1	400			

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-4

SPECTRUM: Fighter

TEST DATE: 6/27/78

TEST FRAME: B

AVERAGE WIDTH: 1.0200

AVERAGE THICKNESS: .2049 | .2051 | .2048

AREA: .2089 R CAL 18670

BASELINE STRESS: 125 KSi CAL SWING 71.5 *

MAX. LOAD: 26,112.5 # A POT 8.7 1 Life

CYCLES AT [redacted]/FAILURE: *

@ 868,884 h.P.'s = 9,077.505 FLT-HRS * 2 Lives/

STATIC LOAD A- KH
B- KH

origin a_1 lies on Bolt Hole surface

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.
40	16000			
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400	a_1	a_2	Δa_1
25	10000			
24	9600			
23	[redacted]	.3292	.0435	.1479
22	8800	1813		0670
21	8400	1143		0405
20	8000	0738		0251
19	7600	0487		0157
18	7200	0330		0097
17	6800	0233		0077
16	6400	0156		0056
15	6000	0100		0038
14	5600	0062		0026
13	5200	0036		0013
12	4800	0023		
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	400			

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-5

SPECTRUM: Fighter

TEST DATE: 6/27/78

TEST FRAME: C

AVERAGE WIDTH: 1.0224

AVERAGE THICKNESS: 2116 | 2128 | * → [redacted]

AREA: .2122 R CAL 19136

BASELINE STRESS: 125 Ksi CAL SWING 72.2

MAX. LOAD: 26,525# A POT 8.84 1 Life

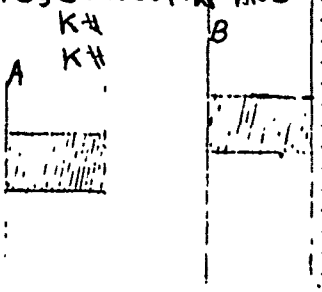
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,021,667 L.P.'s 10,673.68 FLT-HRS *

STATIC LOAD A- K#

B- K#



origin (a_1) lies on Bolt Hole surface. origin (a_2) starts from burr at corner

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
		a_1	a_2	Δa_1	Δa_2
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600				
28	11200				
27 →	[redacted]	.2803	.3128	.1100	.1513
26	10400	1703	0615	0603	0160
25	10000	1100	0455	0313	0127
24	9600	0778	0328	0209	0054
23	9200	0569	0274	0161	0053
22	8800	0408	0221	0114	0029
21	8400	0294	0192	0085	0028
20	8000	0209	0164	0073	
19	7600	0136		0051	
18	7200	0085		0038	
17	6800	0047		0020	
16	6400	0027		0011	
15	6000	0016			
14	5600				
13	5200				
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-6

SPECTRUM: Fighter

TEST DATE: 6/28/78

TEST FRAME: A

AVERAGE WIDTH: .9739

AVERAGE THICKNESS: 1981 | 1986 | 1976 | * → [redacted]

AREA: .1929 R CAL 18675

BASELINE STRESS: 125 Ksi CAL SWING 77.5

MAX. LOAD: 24,112.5# A POT 8.04 1 Life

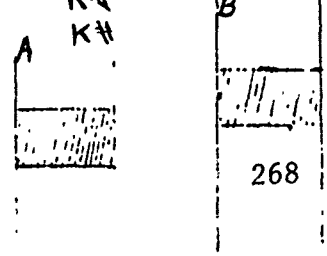
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 996,085 L.P.'s = 10,406.41 FLT-HRS *

STATIC LOAD A- K#

B- K#



origin (a_1) lies at corner. Origin (a_2) lies on Bolt Hole surface

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
		a_1	a_2	Δa_1	Δa_2
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600				
28	11200				
27 →	[redacted]	.2230	.1938	.0555	.0367
26	10400	1675	1571	0735	0709
25	10000	0940	0862	0284	0302
24	9600	0656	0560	0159	0195
23	9200	0497	0365	0112	0120
22	8800	0385	0245	0083	0079
21	8400	0302	0166	0058	0054
20	8000	0244	0112	0050	0045
19	7600	0194	0067	0039	0023
18	7200	0155	0044	0028	0015
17	6800	0127	0029	0027	0013
16	6400	0100	0016	0026	
15	6000	0074		0017	
14	5600	0057		0014	
13	5200	0043			
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-7

SPECTRUM: Fighter

TEST DATE: [redacted]

TEST FRAME: B

AVERAGE WIDTH: 1.0451

AVERAGE THICKNESS: .2185 | .2189 | .2181

AREA: .2194 R CAL 18622

BASELINE STRESS: 125 KSI CAL SWING 68.1

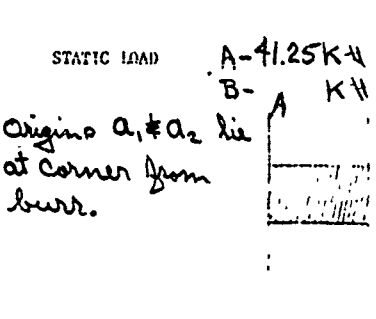
MAX. LOAD: 27,425.0# A POT 9.14 1 Life

CYCLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD A- 41.25K H

B- KH



Origins a_1 & a_2 lie at corner from burr.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a_1	CRACK LENGTH IN. a_2	INCREMENT IN.
40	16000	.0237	.0248	
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
24	9600			
23	9200			
22	8800			
21	8400			
20	8000			
19	7600			
18	7200			
17	6800			
16	6400			
15	6000			
14	5600			
13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	[redacted]			

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-8

SPECTRUM: Fighter

TEST DATE: 6/28/78

TEST FRAME: C

AVERAGE WIDTH: 1.0010

AVERAGE THICKNESS: .2004 | .2006 | .2002

AREA: .2006 R CAL 19136

BASELINE STRESS: 125 KSI CAL SWING 76.3

MAX. LOAD: 25,075 # A POT 8.36 1 Life

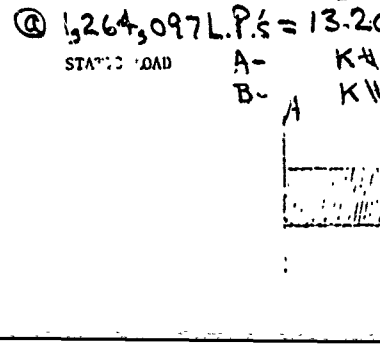
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,264,097 L.P.'s = 13,206.4 FLT-HRS *

STATIC LOAD A- KH

B- KH



Blk #	FLIGHT HRS.	CRACK LENGTH IN. a_1	CRACK LENGTH IN. a_2	INCREMENT IN. Δa_1	INCREMENT IN. Δa_2
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	[redacted] *	.2203	.2228	.0336	.0257
33	13200	.1867	.1971	.0835	.0898
32	12800	.1032	.1073	.0366	.0394
31	12400	.0666	.0729	.0204	.0185
30	12000	.0462	.0544	.0124	.0089
29	11600	.0338	.0455	.0086	.0072
28	11200	.0252	.0383	.0065	.0047
27	10800	.0187	.0336	.0049	.0034
26	10400	.0138	.0302	.0037	.0037
25	10000	.0101	.0265	.0029	.0026
24	9600	.0072	.0239	.0024	.0024
23	9200	.0048	.0215	.0018	.0016
22	8800	.0030	.0199		.0019
21	8400		.0180		
20	8000				
19	7600				
18	7200				
17	6800				
16	6400				
15	6000				
14	5600				
13	5200				
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	[redacted]				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-9

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: .0446 | 1.0446 | | | | *

AVERAGE THICKNESS: .2170 | .2178 | .2168 | | | |

AREA: .2266 R CAL 18675

BASELINE STRESS: 125 Ksi CAL SWING 65.9

MAX. LOAD: 28,325 A POT 9.44 1 Life

CYCLES AT [redacted]/FAILURE: *

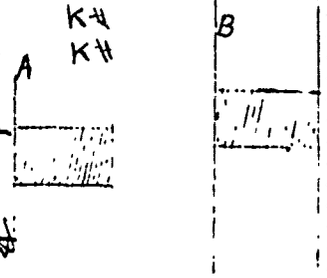
2 Lives/____

@ 1,110,336 L.P.'s = 11,600.03 FLT-HRS *

STATIC LOAD A- K=

B- K=

origin lies at corner Specimen Failed outside of Test area in grip radius tangent



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	[redacted]	.0714	.0044
[redacted]	11600	.0670	.0141
28	11200	.0529	.0104
27	10800	.0425	.0086
26	10400	.0339	.0065
25	10000	.0274	.0040
24	9600	.0234	.0023
23	9200	.0211	.0025
22	8800	.0186	.0027
21	8400	.0164	
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-10

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: ~~B~~ A

AVERAGE WIDTH: 1.0474

AVERAGE THICKNESS: .2201 | .2205 | .2197 | | | |

AREA: .2305 R CAL ~~18676~~ 18675

BASELINE STRESS: 125 Ksi CAL SWING ~~64.8~~ 62.48

MAX. LOAD: 28,812.5 A POT ~~9.96~~ 9.61 1 Life

CYCLES AT [redacted]/FAILURE: *

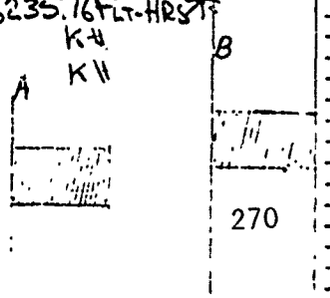
2 Lives/____

@ 1,266,848 L.P.'s = 13,235.16 FLT-HRS *

STATIC LOAD A- K=

B- K=

stopped at 593172 L.P.'s



Blk #	FLIGHT HRS.	CRACK LENGTH IN. a_1	a_2	INCREMENT IN. Δa_1	Δa_2
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	[redacted]	.2185	.2042	.0797	.0715
33	13200	.1388	.1327	.0496	.0606
32	12800	.0892	.0721	.0237	.0234
31	12400	.0655	.0487	.0143	.0112
30	12000	.0512	.0375	.0099	.0065
29	11600	.0413	.0310	.0083	.0051
28	11200	.0330	.0259	.0048	.0033
27	10800	.0282	.0226	.0050	.0030
26	10400	.0232	.0196	.0036	.0022
25	10000	.0196	.0174	.0024	.0019
24	9600	.0172	.0155	.0028	.0017
23	9200	.0144	.0138	.0023	.0017
22	8800	.0121	.0121	.0018	
21	8400	.0103		.0016	
20	8000	.0087		.0013	
19	7600	.0074			
18	7200				
17	6800				
16	6400				
15	6000				
14	5600				
13	5200				
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-11

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.0382

AVERAGE THICKNESS: 2230 | 2237 | 2224

AREA: .2315 R CAL 19136

BASELINE STRESS: 125 ksi CAL SWING 66.1

MAX. LOAD: 28937.5 A POT 9.65 1 Life

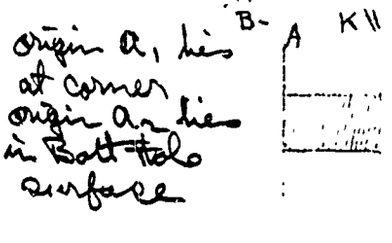
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,110,944 L.P.'s = 11,606.38 FLT-HRS *

STATIC LOAD A- K4 B

B- K11



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
40	16000				
39	15600				
38	15200	a_1	a_2	Δa_1	Δa_2
37	14800				
36	14400				
35	[redacted]	.2322	.2306	.2254	.1225
34	13600	2968	1081	0699	0454
33	13200	1419	0627	0373	0208
32	12800	1046	0419	0255	0110
31	12400	0791	0309	0202	0083
30	[redacted]	0589	0226	0146	0060
29	11600	0443	0166	0113	0045
28	11200	0330	0121	0065	0027
27	10800	0265	0094	0031	0020
26	10400	0234	0074	0028	0019
25	10000	0206	0055	0022	0008
24	9600	0184	0047	0020	
23	9200	0164		0015	
22	8800	0149			
21	8400				
20	8000				
19	7600				
18	7200				
17	6800				
16	6400				
15	6000				
14	5600				
13	5200				
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-12

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.0050

AVERAGE THICKNESS: 2199 | 2196 | 2202

AREA: .2209 R CAL 18675

BASELINE STRESS: 125 ksi CAL SWING 67.6

MAX. LOAD: 27612.5 # A POT 9.204 1 Life

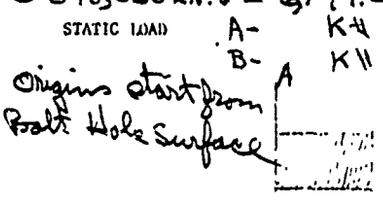
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 646,030 L.P.'s = 6,749.28 FLT-HRS *

STATIC LOAD A- K4 B

B- K11



Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600				
28	11200				
27	10800				
26	10400				
25	10000				
24	9600				
23	9200				
22	8800				
21	8400				
20	8000	a_1	a_2	Δa_1	Δa_2
19	7600				
18	7200				
17	[redacted]	.2605	.2875	.1144	.2371
16	6400	1461	0504	0473	0172
15	6000	0988	0333	0298	0131
14	5600	0690	0201	0212	0081
13	5200	0478	0120	0138	0042
12	4800	0340	0078	0104	0032
11	4400	0236	0046	0076	
10	4000	0158		0060	
9	3600	0098		0033	
8	3200	0065		0021	
7	2800	0044		0017	
6	2400	0027			
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-13

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: ~~B~~ A

AVERAGE WIDTH: 1.0453

AVERAGE THICKNESS: 2203 | 2198 | 2208

AREA: .2302

R CAL ~~18676~~ 18675

BASELINE STRESS: 125 ksi

CAL SWING ~~64.9~~ 64.6

MAX. LOAD: 28775 #

A POT ~~9.59~~ 9.59

1 Life

CYCLES AT [redacted]N/FAILURE: *

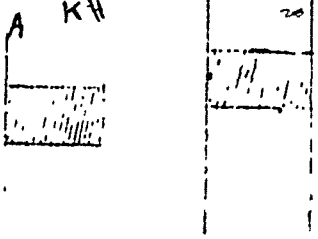
2 Lives/____

@ 907,252 L.P.s a 9,478.35 FLT-HRS *

STATIC LOAD A- K#

B- K#

origins lie at corners from Burrs.



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
		a_1	a_2	Δa_1	Δa_2
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600				
28	11200				
27	10800				
26	10400				
25	10000				
24*	[redacted]	.2825	.2554	.0899	.1567
23	9200	.1326	.0985	.0340	.0361
22	8800	.0886	.0619	.0230	.0146
21	8400	.0656	.0473	.0155	.0093
20	8000	.0501	.0380	.0111	.0072
19	7600	.0390	.0308	.0077	.0041
18	7200	.0313	.0267	.0062	.0031
17	6800	.0251	.0236	.0042	.0031
16	6400	.0209	.0205	.0036	.0027
15	6000	.0173	.0178	.0023	.0027
14	5600	.0150	.0151	.0021	.0017
13	5200	.0129	.0134	.0019	
12	4800	.0110		.0010	
11	4400	.0100			
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-14

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.0272

AVERAGE THICKNESS: 2182 | 2179 | 2185

AREA: .2241

R CAL ~~18132~~ 17925

BASELINE STRESS: 125 ksi

CAL SWING ~~68.3~~ 64.7

MAX. LOAD: 28012.5 #

A POT 9.34

1 Life

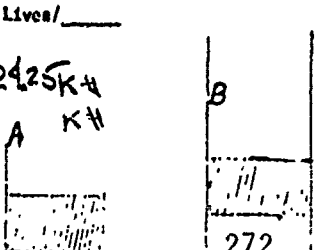
CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD A-2425K#

B- K#

origins a_1 & a_2 lie at corner starting from Burr.



Blk #	FLIGHT HRS.	a_1 CRACK LENGTH IN.	a_2 CRACK LENGTH IN.	Δa_1 INCREMENT IN.	Δa_2 INCREMENT IN.
40	16000	.1596	.1658	.0474	.0495
39	15600	.1122	.1163	.0351	.0359
38	15200	.0871	.0804	.0177	.0100
37	14800	.0694	.0704	.0127	.0136
36	14400	.0567	.0568	.0087	.0141
35	14000	.0480	.0427	.0071	.0065
34	13600	.0409	.0362	.0064	.0065
33	13200	.0345	.0297	.0049	.0050
32	12800	.0296	.0247	.0037	.0050
31	12400	.0259	.0197	.0033	.0035
30	12000	.0226	.0162	.0025	.0033
29	11600	.0201	.0139	.0020	.0023
28	11200	.0181	.0108	.0019	
27	10800	.0162			
26	10400				
25	10000				
24	9600				
23	9200				
22	8800				
21	8400				
20	8000				
19	7600				
18	7200				
17	6800				
16	6400				
15	6000				
14	5600				
13	5200				
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-15

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: [redacted] | 1.0469 |

AVERAGE THICKNESS: 2177 | 2170 | 2184 |

AREA: .2279 R CAL 18675

BASELINE STRESS: 125 KSi CAL SWING 65.6

MAX. LOAD: 28487.5 # A POT 9.50 1 Life

CYCLES AT [redacted]/FAILURE: *

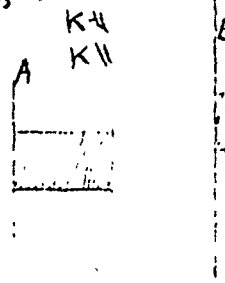
2 Lives/____

@ 1,075,406.8 c = 11,235.11 FLT-HRS *

STATIC LOAD A- K4

B- K11

origins lie at corners.



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800	a_1	a_2	Δa_1	Δa_2
31	12400				
30	12000				
[redacted]	[redacted]	.2327	.2506	.0550	.1483
28	11200	1777	1023	0595	0402
27	10800	1182	0621	0307	0184
26	10400	0875	0437	0217	0100
25	10000	0658	0337	0145	0067
24	9600	0513	0270	0111	0063
23	9200	0402	0207	0084	0049
22	8800	0318	0158	0050	0032
21	8400	0268	0126	0026	0032
20	8000	0242	0109	0023	
19	7600	0220			
18	7200				
17	6800				
16	6400				
15	6000				
14	5600				
13	5200				
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-17

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1863

AVERAGE THICKNESS: 2171 | 2173 | 2169 |

AREA: .2250 R CAL 18670 *

BASELINE STRESS: 125 KSi CAL SWING 66.4%

MAX. LOAD: 28,122.6 # A POT 9.38 1 Life

CYCLES AT [redacted]/FAILURE: *

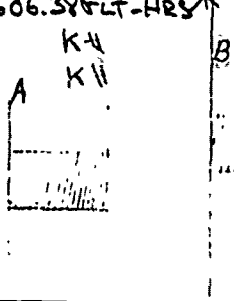
2 Lives/____

@ 919,507.1 P.S. = 9606.38 FLT-HRS *

STATIC LOAD A- K4

B- K11

origins a_1 & a_2 lie at corner from Burr



Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600				
28	11200	a_1	a_2	Δa_1	Δa_2
27	10800				
26	10400				
[redacted]	[redacted]	.3666	.0420	.0076	.0009
24	9600	2590	0411	1089	0195
23	9200	1541	0216	0445	0034
22	8800	1096	0132	0260	0038
21	8400	0836	0094	0172	0029
20	8000	0659	0065	0143	
19	7600	0516		0119	
18	7200	0397		0080	
17	6800	0317		0057	
16	6400	0260		0056	
15	6000	0204		0048	
14	5600	0156		0033	
13	5200	0123		0030	
12	4800	0093			
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-19

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.111

AVERAGE THICKNESS: .2202 | .2198 | .2206

AREA: .2292

R CAL 18675

BASELINE STRESS: 125 ksi

CAL SWING 65.2

MAX. LOAD: 28650#

A POT 9.55

1 Life

CYCLES AT [redacted]/FAILURE: *

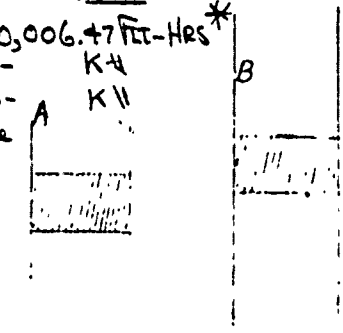
2 Lives/____

@ 957,803 h.P.s = 10,006.47 Flt-Hrs *

STATIC LOAD A- K+

B- K||

origins a_1 & a_2 lie at corners.



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a_1	CRACK LENGTH IN. a_2	INCREMENT IN. Δa_1	INCREMENT IN. Δa_2
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600	a_1	a_2	Δa_1	Δa_2
28	11200				
27	10800				
26	[redacted]	.2580	.2607	.0232	.1032
25	10000	.2348	.1575	.1042	.0781
24	9600	.1306	.0794	.0446	.0257
23	9200	.0860	.0537	.0262	.0149
22	8800	.0598	.0388	.0181	.0092
21	8400	.0417	.0296	.0132	.0075
20	8000	.0285	.0221	.0077	.0057
19	7600	.0208	.0164	.0048	.0047
18	7200	.0160	.0117	.0038	.0027
17	6800	.0122	.0090	.0027	
16	6400	.0095		.0018	
15	6000	.0067			
14	5600				
13	5200				
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-20 *

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.0998

AVERAGE THICKNESS: .2212 | .2217 | .2208

AREA: .2300

R CAL 18620

BASELINE STRESS: 125 ksi

CAL SWING 64.9

MAX. LOAD: 28750#

A POT 9.58

1 Life

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

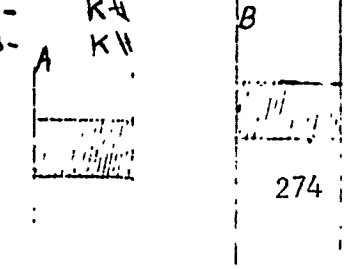
@ 1,404,289 h.P.s = 14,670.05 Flt-Hrs *

STATIC LOAD A- K+

B- K||

origin a_1 lies at corner.

origin a_2 lies on Bolt hole surface.



Blk #	FLIGHT HRS.	CRACK LENGTH IN. a_1	CRACK LENGTH IN. a_2	INCREMENT IN. Δa_1	INCREMENT IN. Δa_2
40	16000				
39	15600				
38	15200				
37	[redacted]	.3033	.2334	.1484	.1275
36	14400	.1549	.1059	.0501	.0394
35	14000	.1048	.0665	.0362	.0201
34	13600	.0786	.0464	.0183	.0137
33	13200	.0604	.0327	.0133	.0093
32	12800	.0471	.0234	.0103	.0068
31	12400	.0368	.0166	.0070	.0048
30	12000	.0298	.0118	.0062	.0023
29	11600	.0236	.0085	.0043	.0021
28	11200	.0193	.0064	.0030	.0015
27	10800	.0163	.0049	.0024	
26	10400	.0139		.0019	
25	10000	.0120			
24	9600				
23	9200				
22	8800				
21	8400				
20	8000				
19	7600				
18	7200				
17	6800				
16	6400				
15	6000				
14	5600				
13	5200				
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-21

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.0425

AVERAGE THICKNESS: .2133 | .2135 | .2131

AREA: .2223 R CAL 18675

BASELINE STRESS: 25 ksi CAL SWING 67.2%

MAX. LOAD: 27787.5# A POT 9.26 1 Life

CYCLES AT [redacted]/FAILURE: *

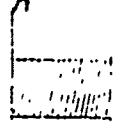
2 Lives/____

@ 676,460 LP's = 7067.19 FLT-HRS *

STATIC LOAD A- K↓

B- K↑

origin a_1 lies on Bolt Hole Surface origin a_2 lies at corner.



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600				
28	11200				
27	10800				
26	10400				
25	10000				
24	9600	a_1	a_2	Δa_1	Δa_2
23	9200				
22	8800				
21	8400				
20	8000				
19	7600				
18	[redacted]	.3277	.2403	.1241	.1893
17	6800	.2036	.0510	.0727	.0217
16	6400	.1309	.0293	.0464	.0108
15	6000	.0845	.0185	.0290	.0050
14	5600	.0555	.0135	.0179	.0041
13	5200	.0376	.0094	.0118	.0024
12	4800	.0258	.0070	.0092	.0018
11	4400	.0166	.0052	.0058	
10	4000	.0188		.0036	
9	3600	.0072		.0028	
8	3200	.0044		.0023	
7	2800	.0021			
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-22

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.0400

AVERAGE THICKNESS: .2122 | .2128 | .2126

AREA: .2206 R CAL 18670

BASELINE STRESS: 25 ksi CAL SWING 67.7%

MAX. LOAD: 27575.0# A POT 9.19 1 Life

CYCLES AT [redacted]/FAILURE: *

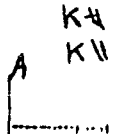
2 Lives/____

@ 1,110,944 LP's = 11,606.38 FLT-HRS *

STATIC LOAD A- K↓

B- K↑

origin a_1 & a_2 lie at corner



Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200	a_1	a_2	Δa_1	Δa_2
32	12800				
31	12400				
30	[redacted]	.2813	.0436	.0291	.0024
29	11600	.2522	.0412	.0873	.0157
28	11200	.1649	.0255	.0467	.0071
27	10800	.1182	.0184	.0311	.0043
26	10400	.0871	.0141	.0193	.0021
25	10000	.0678	.0120	.0143	.0019
24	9600	.0535	.0101	.0117	.0014
23	9200	.0418	.0087	.0088	.0014
22	8800	.0330	.0073	.0075	.0017
21	8400	.0255	.0061	.0055	
20	8000	.0200		.0041	
19	7600	.0159		.0033	
18	7200	.0126		.0029	
17	6800	.0097		.0026	
16	6400	.0071		.0023	
15	6000	.0048			
14	5600				
13	5200				
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-23

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: .0415

AVERAGE THICKNESS: .2272 | .2277 | .2268

AREA: .2366

R CAL 18675 *

BASELINE STRESS: 125 KSi

CAL SWING 63.2

MAX. LOAD: 29575 #

A POT 9.86

1 Life

CYCLES AT [redacted]/FAILURE: *

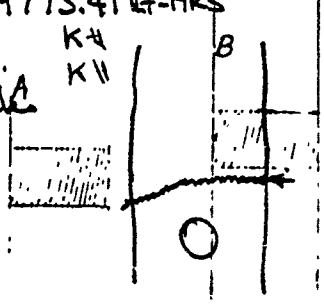
2 Lives/____

@ 935,495 L.P.'s = 9773.41 FLT-HRS

STATIC LOAD A- K#

B- K#

Origin lies at spec. edge due to tool marks & nicks



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	[redacted]		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-24

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: .0390

AVERAGE THICKNESS: .2110 | .2117 | .2104

AREA: .2192

R CAL 18670

BASELINE STRESS: 125 KSi

CAL SWING 68.12 *

MAX. LOAD: 27400 #

A POT 9.13

1 Life

CYCLES AT [redacted]/FAILURE: *

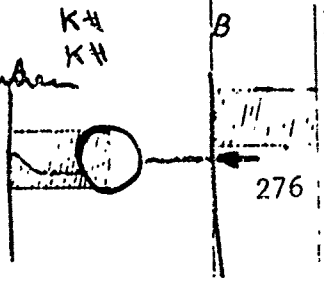
2 Lives/____

@ 809,346 L.P.'s = 8,455.49 FLT-HRS *

STATIC LOAD A- K#

B- K#

Origin lies on specimen edge across from hole (arrow)



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	[redacted]		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

ETL

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-25

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:

AVERAGE WIDTH: [illegible] | 1.0345 | | | | |

AVERAGE THICKNESS: .2097 | .2098 | .2096 | | | |

AREA: .2169 R CAL 8620

BASELINE STRESS: 125 Ksi CAL SWING 68.9

MAX. LOAD: 27112.5 A POT 9.04 1 Life

CYCLES AT [redacted]/FAILURE: *

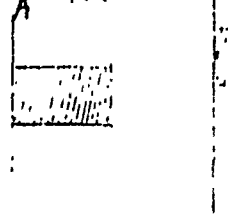
2 Lives/____

@ 813,846 L.P.'s = 8502.72 FLT-HRS *

STATIC LOAD A- K↓

B- K↑

FAILURE OCCURRED AT GRIP END IN 1" RADIUS/TEST SECTION TANGENT POINT.



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	[redacted]		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-26

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: [illegible] | 1.0312 | | | | |

AVERAGE THICKNESS: .2207 | .2208 | .2206 | | | |

AREA: .2276 R CAL 8675 *

BASELINE STRESS: 125 Ksi CAL SWING 65.6

MAX. LOAD: 28450.# A POT 9.48 1 Life

CYCLES AT [redacted]/FAILURE: *

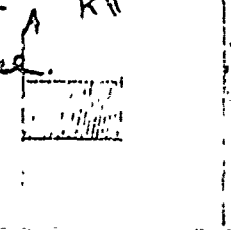
2 Lives/____

@ 922,258 L.P.'s = 9,635.12 FLT-HRS *

STATIC LOAD A- K↓

B- K↑

origins a_1 & a_2 lie on Bolt Hole surface.



Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
		a_1	a_2	Δa_1	Δa_2
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600				
28	11200	.2868	.2870	.1470	.1487
27	10800	.1898	.1183	.0626	.0631
26	10400	.0772	.0552	.0262	.0237
25	[redacted]	.0510	.0315	.0153	.0102
24	9600	.0357	.0213	.0105	.0056
23	9200	.0252	.0157	.0069	.0049
22	8800	.0183	.0108	.0043	.0035
21	8400	.0140	.0073	.0024	
20	8000	.0116			
19	7600				
18	7200				
17	6800				
16	6400				
15	6000				
14	5600				
13	5200				
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-27

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.038 | 1.0310 | | | | |

AVERAGE THICKNESS: .2154 | .2155 | .2152 | | | |

AREA: .2221 R CAL 18670

BASELINE STRESS: 125 Ksi CAL SWING 67.3 *

MAX. LOAD: 27762.5 # A POT 9.26 1 Life

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 842,939 L.P.'s = 8806.45 FLT-HRS *

STATIC LOAD A- K⊥

B- K∥

origin a_1 lies on Bolt Hole surface origin a_2 lies at corner.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600				
28	11200				
27	10800	a_1	a_2	Δa_1	
26	10400				
25	10000				
24	9600				
23	[redacted]	.2981	.0188	.0569	
22	8800	.2412		.1239	
21	8400	.1173		.0482	
20	8000	.0691		.0273	
19	7600	.0418		.0146	
18	7200	.0272		.0096	
17	6800	.0176		.0064	
16	6400	.0113		.0039	
15	6000	.0073		.0026	
14	5600	.0047		.0021	
13	5200	.0026			
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-28

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: ~~1.034~~ | 1.0304 | | | | |

AVERAGE THICKNESS: .2248 | .2250 | .2247 | | | |

AREA: .2316 R CAL 18675

BASELINE STRESS: 125 Ksi CAL SWING 64.5 *

MAX. LOAD: 28,950 # A POT 9.65 1 Life

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 875,337 L.P.'s = 9,144.92 FLT-HRS *

STATIC LOAD A- K⊥

B- K∥

origin a_1 lies on Bolt Hole surface. origin a_2 lies at corner.

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.	
40	16000				
39	15600				
38	15200				
37	14800				
36	14400				
35	14000				
34	13600				
33	13200				
32	12800				
31	12400				
30	12000				
29	11600				
28	11200	a_1	a_2	Δa_1	Δa_2
27	10800				
26	10400				
25	10000				
24	9600				
23	[redacted]	.3261	.3198	.2612	.2244
22	8800	.0649	.0954	.0314	.0350
21	8400	.0335	.0604	.0125	.0187
20	8000	.0210	.0417	.0069	.0101
19	7600	.0141	.0316	.0037	.0084
18	7200	.0104	.0232	.0023	.0041
17	6800	.0081	.0191	.0015	.0030
16	6400	.0066	.0161	.0012	.0023
15	6000	.0054	.0139	.0008	.0020
14	5600	.0046	.0119		
13	5200				
12	4800				
11	4400				
10	4000				
9	3600				
8	3200				
7	2800				
6	2400				
5	2000				
4	1600				
3	1200				
2	800				
1	400				

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST-29

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: ~~1.0~~ 1.033 |

AVERAGE THICKNESS: ~~.22~~36 | .2238 | .2235 | | | *

AREA: .2310 R CAL 18670

BASELINE STRESS: 125 ksi CAL SWING 64.7

MAX. LOAD: 28875 # A POT 9.63 1 Life

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,022,052 L.P.'s = 10,677.699 FLT-HRS *

STATIC LOAD A- K#

B- K#

origins a_1 & a_2 lie at corner

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.
40	16000			
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000	a_1	a_2	Δa_1
29	11600			
28	11200			
27	[redacted]	.3528	.0461	.1978
26	10400	.1550		.0584
25	10000	.0966		.0293
24	9600	.0673		.0226
23	9200	.0447		.0120
22	8800	.0327		.0093
21	8400	.0234		.0056
20	8000	.0178		.0043
19	7600	.0135		.0027
18	7200	.0108		
17	6800			
16	6400			
15	6000			
14	5600			
13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: ST. 30

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:

AVERAGE WIDTH: ~~1.0~~ 1.025 |

AVERAGE THICKNESS: .2210 | .2209 | .2212 | | | *

AREA: .2265 R CAL 18675

BASELINE STRESS: 125 ksi CAL SWING 66.2

MAX. LOAD: 28312.5 # A POT 9.44 1 Life

CYCLES AT [redacted]/FAILURE: *

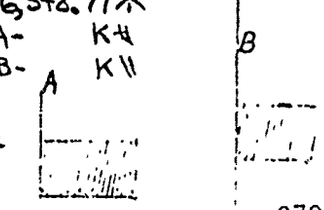
2 Lives/____

@ 607,688 L.P.'s = 6348.71 *

STATIC LOAD A- K#

B- K#

origins a_1 & a_2 lie on Bolt Hole Surface.



Blk #	FLIGHT HRS.	CRACK LENGTH IN.		INCREMENT IN.
40	16000			
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
24	9600			
23	9200			
22	8800			
21	8400			
20	8000	a_1	a_2	Δa_1
19	7600			
18	7200			
17	6800			
16	[redacted]	.3002	.0457	.1760
15	6000	.1242		.0518
14	5600	.0724		.0323
13	5200	.0401		.0171
12	4800	.0231		.0105
11	4400	.0126		.0052
10	4000	.0074		.0023
9	3600	.0051		.0018
8	3200	.0033		.0012
7	2800	.0021		
6	2400			
5	2000			
4	1600			
3	1200			
2	800			

2.4.2 Ti
(Titanium; 6Al-4V)

FATIGUE TEST DATA

TXPF-1

2 Lives

SPECIMEN NUMBER: TX-1

SPECTRUM: Fighter

TEST DATE: A

TEST FRAME:

AVERAGE WIDTH: 1.3768

AVERAGE THICKNESS: .2504 .2503 .2504 *

AREA: .3447 R CAL 18675

BASELINE STRESS: 82.5 Ksi CAL SWING 65.72

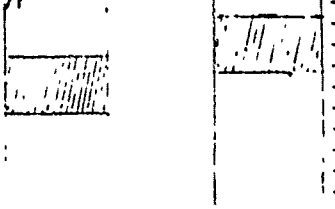
MAX. LOAD: 28,486.3 A POT 9.48 1 Life

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 957,198 L.P.'s ~ 10,000.15 FLT. HRS *

STATIC LOAD A- K#
B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	[redacted]	.3923	.0168
25	10000	.3755	.2484
24	9600	1271	0479
23	9200	0792	0315
22	8800	0477	0161
21	8400	0316	0093
20	8000	0223	0061
19	7600	0162	0036
18	7200	0126	0027
17	6800	0104	0017
16	6400	0087	0014
15	6000	0073	0013
14	5600	0060	
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

TXPF-2

2 Lives

SPECIMEN NUMBER: TX-2

SPECTRUM: Fighter

TEST DATE: C

TEST FRAME:

AVERAGE WIDTH: 1.3760

AVERAGE THICKNESS: .2502 .2501 .2502

AREA: .3442 R CAL 19136

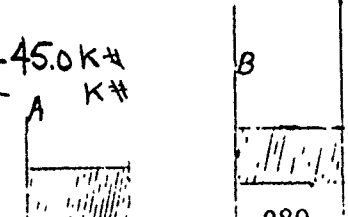
BASELINE STRESS: 82.5 Ksi CAL SWING 67.42

MAX. LOAD: 28,396.5 A POT 9.17 1 Life

CYCLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD [redacted] A-45.0 K# B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0021	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		(276)
2	800		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

TYPE -3 2 Lives

SPECIMEN NUMBER: [redacted] TX-3

SPECTRUM: Fighter

TEST DATE: A

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.3766 [redacted]

AVERAGE THICKNESS: .2508 .2504 .2511

AREA: [redacted] .3453 R CAL 18675

BASELINE STRESS: 82.5 Ksi CAL SWING 65.6

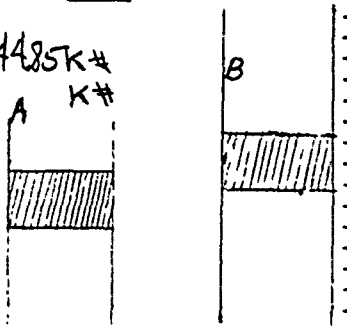
MAX. LOAD: 28,483.2 # A POT 9.49 1 Life

CYCLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD A-4485K#

B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	.0035	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

TYPE-4 2 Lives

SPECIMEN NUMBER: TX4

SPECTRUM: Fighter

TEST DATE: 5-31-78

TEST FRAME: C

AVERAGE WIDTH: 1.3757

AVERAGE THICKNESS: .2505 .2505 .2506

AREA: .3446 R CAL 19136

BASELINE STRESS: 82.5 Ksi CAL SWING 67.32

MAX. LOAD: 28,429.5 # A POT 9.48 1 Life

CYCLES AT [redacted]/FAILURE: *

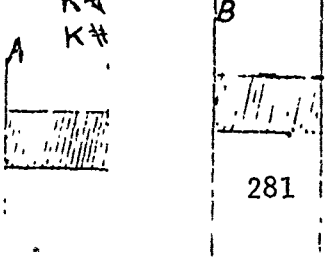
2 Lives/____

@ 1,060,316 L.P.'s = 11,077.46 FLT-HRS *

STATIC LOAD A- K#

@ 67.52 Load B- K#

CORNER CRACK



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	[redacted]	.3450	.1496
27	10800	.1954	.0707
26	10400	.1247	.0283
25	10000	.0964	.0219
24	9600	.0745	.0125
23	9200	.0620	.0092
22	8800	.0528	.0074
21	8400	.0454	.0061
20	8000	.0393	.0056
19	7600	.0337	.0049
18	7200	.0288	
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

TXPF

SPECIMEN NUMBER: [redacted] TX-5

SPECTRUM: Fighter

TEST DATE: [redacted]

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.3762 [redacted]

AVERAGE THICKNESS: .2474 | .2478 | .2470

AREA: [redacted] .3405 R CAL 18670

BASELINE STRESS: 82.5 KSI CAL SWING 66.5

MAX. LOAD: 28,089.0 # A POT 9.36

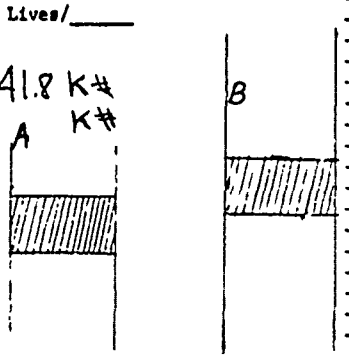
1 Life

CYCLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD A-41.8 K#

B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	.0035	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives *

TXPF

SPECIMEN NUMBER: [redacted] TX-6

SPECTRUM: Fighter

TEST DATE: ____

TEST FRAME: 1 2 C 4 5 6

AVERAGE WIDTH: 1.3769

AVERAGE THICKNESS: .2510 | .2505 | .2515

AREA: [redacted] .3456 R CAL 19136

BASELINE STRESS: 82.5 KSI CAL SWING 67.1

MAX. LOAD: 28512.2 # A POT 9.5

1 Life

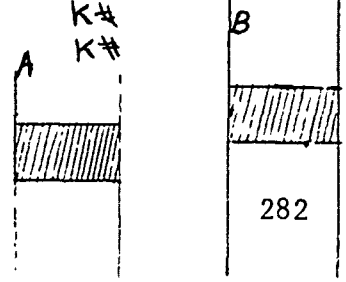
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,496,565 LIFTS - 15,635.09 FLT-HRS *

STATIC LOAD A- K#

B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40 *	[redacted]	.4326	.2520
39	15600	1806	0690
38	15200	1116	0339
37	14800	0777	0248
36	14400	0529	0143
35	14000	0386	0085
34	13600	0301	0073
33	13200	0228	0053
32	12800	0175	0049
31	12400	0126	0029
30	12000	0097	0019
29	11600	0078	0019
28	11200	0059	
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

TXPF

SPECIMEN NUMBER: TX-7

2 Lives

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.3760

AVERAGE THICKNESS: .2499 | .2500 | .2498 | | | |

AREA: .3437 R CAL 18670

BASELINE STRESS: 82.5 KSI CAL SWING 66%

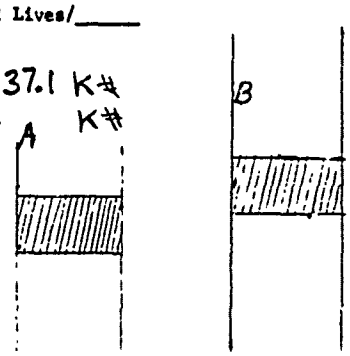
MAX. LOAD: 28,369 A POT 1 Life

CYCLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD A-37.1 K#

B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	.0578	.0094
39	15600	0484	0068
38	15200	0420	0055
37	14800	0365	0043
36	14400	0322	0029
35	14000	0293	
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

TXPF

SPECIMEN NUMBER: TX-8

2 Lives

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.3746

AVERAGE THICKNESS: .2501 | .2512 | .2503 | | | |

AREA: .3447 R CAL 19136

BASELINE STRESS: 82 KSI CAL SWING 67%

MAX. LOAD: 28436 A POT 1 Life

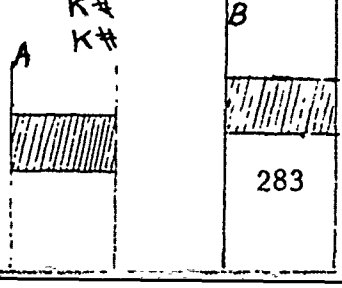
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,290,124 L.P.S = 13,470.33 FLT HRS *

STATIC LOAD A- K#

B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34 *	[redacted]	.4134	.2807
33	13200	1327	0666
32	12800	0661	0191
31	12400	0470	0124
30	12000	0346	0061
29	11600	0285	0050
28	11200	0235	0041
27	10800	0194	0040
26	10400	0154	0033
25	10000	0121	0017
24	9600	0104	
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

TXPF

2 Lives

SPECIMEN NUMBER: TX-9 Ti-6-4(MA)

SPECTRUM: Fighter

TEST DATE: [redacted]

TEST FRAME:	1	2	3	4	5	6
AVERAGE WIDTH:	1.3754					
AVERAGE THICKNESS:	.2493	.2483	.2502			

AREA: .3428 R CAL [redacted] 19136

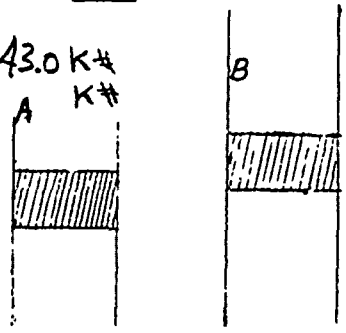
BASELINE STRESS: 82.5 KSI CAL SWING 67.7

MAX. LOAD: 28,281 # A POT 9.43 1 Life

CYCLES AT TERMINATION/[redacted]:

2 Lives/____

STATIC LOAD A-43.0 K#
B- A K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	.0037	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

TXPF

2 Lives

SPECIMEN NUMBER: TX 10 *

SPECTRUM: Fighter

TEST DATE: ____

TEST FRAME: A

AVERAGE WIDTH:	1.3771					
AVERAGE THICKNESS:	.2498	.2503	.2492			

AREA: .3439 R CAL 18675

BASELINE STRESS: 82.5 KSI CAL SWING 66%

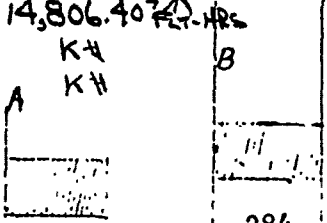
MAX. LOAD: 28,374 A POT 9.46 1 Life

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,417,245 LIFE = 14,806.40 FLT-HRS *

STATIC LOAD A- K#
B- A K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	[redacted]	.4773	.1457
37	14800	3316	.2303
36	14400	1013	0394
35	14000	0619	0131
34	13600	0488	0118
33	13200	0370	0096
32	12800	0274	0049
31	12400	0225	0037
30	12000	0188	0035
29	11600	0153	
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	[illegible]		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TX 11

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH: 1.3760

AVERAGE THICKNESS: .2487 | .2490 | .2484

AREA: .3422 R CAL 18670

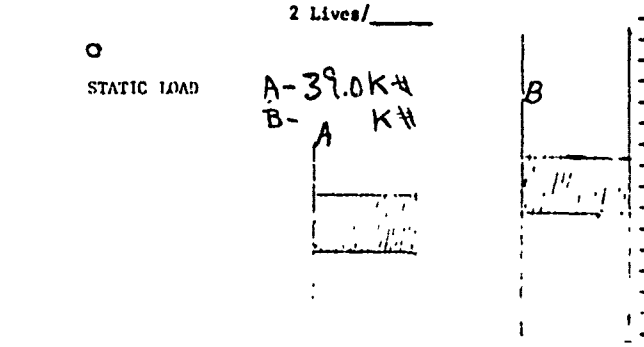
BASELINE STRESS: 82.5 ksi CAL SWING 66%

MAX. LOAD: 28,232 A POT 9.41 1 Life

CYCLES AT TERMINATION: [redacted]

2 Lives/____

STATIC LOAD A- 39.0 K#
B- A K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0169	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TX-12

SPECTRUM: Fighter

TEST DATE: A

TEST FRAME:

AVERAGE WIDTH: 1.3767

AVERAGE THICKNESS: .2494 | .2491 | .2498 *

AREA: .3433 R CAL 18675

BASELINE STRESS: 82.5 ksi CAL SWING 65.9

MAX. LOAD: 28,322.3# A POT 9.44 1 Life

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,037,124 L.P.'s = 10835.16 FLT-HRS *

STATIC LOAD A- K#
B- A K#

285

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	[redacted]	.2903	.1584
27	10800	.1319	.0787
26	10400	.0532	.0221
25	10000	.0311	.0090
24	9600	.0221	.0051
23	9200	.0170	.0036
22	8800	.0134	.0018
21	8400	.0116	
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

285

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TX-13

SPECTRUM: Fighter

TEST DATE: B

TEST FRAME:

AVERAGE WIDTH: 1.3763

AVERAGE THICKNESS: .2516 | .2511 | .2521

AREA: .3462 R CAL 18670

BASELINE STRESS: 82.5 Ksi CAL SWING 65.4

MAX. LOAD: 28561.5 # A POT 9.52 1 Life

CYCLES AT [redacted]/FAILURE: *

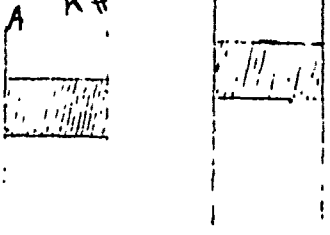
2 Lives/____

@ 1,149,241 L.P.'s = 12,006.48 FLT-HRS *

STATIC LOAD A- K#

B- K#

@ 86.5% load until 92 %



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31 →	[redacted]	.2821	.0941
30	12000	.1880	.0892
29	11600	.0988	.0310
28	11200	.0678	.0103
27	10800	.0575	.0090
26	10400	.0485	.0047
25	10000	.0438	.0048
24	9600	.0390	
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TX-14

SPECTRUM: Fighter

TEST DATE: B

TEST FRAME:

AVERAGE WIDTH: 1.3767

AVERAGE THICKNESS: .2503 | .2505 | .2500

AREA: .3445 R CAL 18670

BASELINE STRESS: 82.5 Ksi CAL SWING 65.7%

MAX. LOAD: 28,421.3 A POT 9.47 1 Life

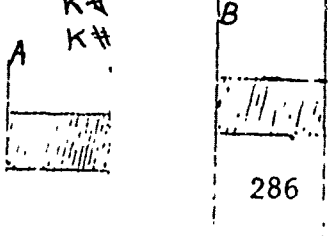
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,225,832 L.P.'s = 12806.65 FLT-HRS *

STATIC LOAD A- K#

B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33 →	[redacted]	.3450	.1932
32	12800	.1518	.0950
31	12400	.0568	.0213
30	12000	.0355	.0140
29	11600	.0215	.0088
28	11200	.0127	.0048
27	10800	.0079	.0037
26	10400	.0042	.0022
25	10000	.0020	
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TX-15

SPECTRUM: Fighter

TEST DATE: [illegible]

TEST FRAME:

AVERAGE WIDTH: 1.3744

AVERAGE THICKNESS: .2498 | .2490 | .2506

AREA: .3433 R CAL 19136

BASELINE STRESS: 82.5 Ksi CAL SWING 67.6

MAX. LOAD: 28,322.3 # A POT 9.44 1 Life

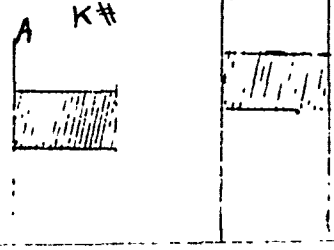
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,302,396 LP's = 13606.54 FLT-HRS *

STATIC LOAD A- K#

B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35 →	[redacted]	.1961	.0263
34	13600	1698	0801
33	13200	0897	0323
32	12800	0574	0177
31	12400	0397	0083
30	12000	0314	0044
29	11600	0270	0035
28	11200	0235	
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: Ty-2

SPECTRUM: Fighter

TEST DATE: [illegible]

TEST FRAME: B

AVERAGE WIDTH: 1.3788

AVERAGE THICKNESS: .2501 | .2499 | .2503

AREA: .3448 R CAL 18670

BASELINE STRESS: 82.5 Ksi CAL SWING 65.68

MAX. LOAD: 28,446.0 # A POT 9.48 1 Life

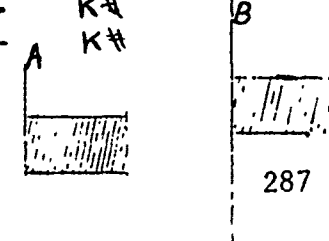
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 574,929 LP's = 6006.46 FLT-HRS *

STATIC LOAD A- K#

During 92% Load B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16 →	[redacted]	.3579	.1208
15	6000	2371	1359
14	5600	0912	0473
13	5200	0441	0162
12	4800	0289	0105
11	4400	0184	0052
10	4000	0132	0030
9	3600	0102	
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives

TY-3

SPECIMEN NUMBER: _____

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	1	2	3	4	5	6
RAGE WIDTH:	.3755					
RAGE THICKNESS:	.2506	.2508	.2504			

A: .3447 R CAL 19136

ELINE STRESS: 75 KSi CAL SWING 75.7

LOAD: 25853 Apex cal 2 Life

LES AT TERMINATION/[redacted]:

2 Lives/1,531,494 L.P.C.

TATIC LOAD A-43.4 K#

B- K#

No cracks!

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. .001	INCREMENT IN.
40	16000	.0000	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives *

SPECIMEN NUMBER: TY4

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME:	1	2	3	4	5	6
AVERAGE WIDTH:	.3755					
AVERAGE THICKNESS:	.2506	.2507	.2502			

AREA: .3446 R CAL 19136

BASELINE STRESS: 85 KSi CAL SWING 86.1

MAX. LOAD: 29282 A POT 93.0 1 Life

CYCLES AT [redacted]/FAILURE: *

2 Lives/1,531,494 L.P.C.

@ 1,481,520 L.P.C. = 15,467.46 Flt-Hrs *

STATIC LOAD A- K#

B- K#

failed @ 60% load out of 68%

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000		
39	[redacted]	.3158	.2198
38	15200	.1420	.0460
37	14800	.0960	.0349
36	14400	.0547	.0174
35	14000	.0273	.0100
34	13600	.0173	.0045
33	13200	.0128	
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TY5

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.3771

AVERAGE THICKNESS: .2499 | .2496 | .2503

AREA: .34421 R CAL .13136

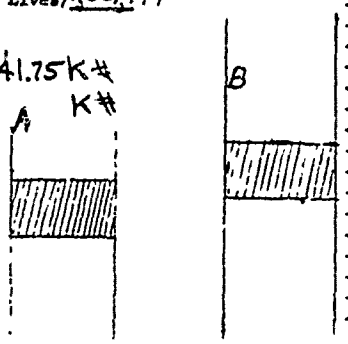
BASELINE STRESS: 80 KSI CAL SWING 69%

MAX. LOAD: 27536 A POT 97% 1 Life

CYCLES AT TERMINATION/[redacted]:

2 Lives/1,531,494

STATIC LOAD A-41.75K#
B- A K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	.0091	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TY-6

SPECTRUM: Fighter

TEST DATE: B

TEST FRAME:

AVERAGE WIDTH: 1.3773

AVERAGE THICKNESS: .2499 | .2498 | .2501

AREA: .3441 R CAL .18676

BASELINE STRESS: 82.5 KSI CAL SWING 65.8

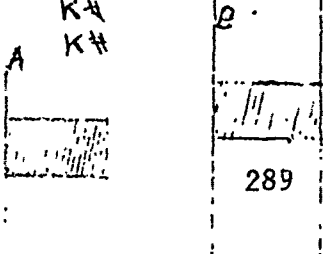
MAX. LOAD: 28,388.3 # A POT 94% 1 Life

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,151,992.8's = 12,035.22 FT-HRS *

STATIC LOAD A- K#
B- A K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31 →	[redacted]	.3495	.1836
30	12000	.1809	.0769
29	11600	.1040	.0413
28	11200	.0627	.0248
27	10800	.0379	.0156
26	10400	.0223	.0061
25	10000	.0162	.0049
24	9600	.0113	
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		(2.85")
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TY-7

SPECTRUM: Fighter

TEST DATE: A

TEST FRAME:

AVERAGE WIDTH: 1.3760

AVERAGE THICKNESS: .2508 | .2509 | .2507 | * [redacted]

AREA: .3451 R CAL 18675

BASELINE STRESS: 82.5 Ksi CAL SWING 65.6

MAX. LOAD: 28470.75 # A POT 9.49 1 Life

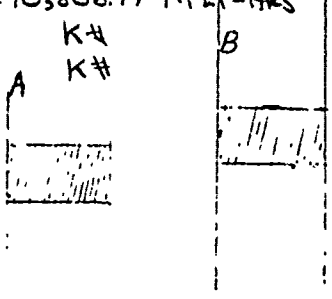
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,034,406 LIFE = 10,806.77 * FLT-HRS

STATIC LOAD A- K#

B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	[redacted]	.3540	.1952
27	10800	1598	0775
26	10400	0823	0307
25	10000	0516	0182
24	9600	0334	0099
23	9200	0235	
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives * [redacted]

SPECIMEN NUMBER: TY 8

SPECTRUM: Fighter

TEST DATE: ____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.37

AVERAGE THICKNESS: .2506 | .2500 | .2512

AREA: .3452 R CAL 18675

BASELINE STRESS: ____ CAL SWING 66%

MAX. LOAD: 28475 A POT ____ 1 Life

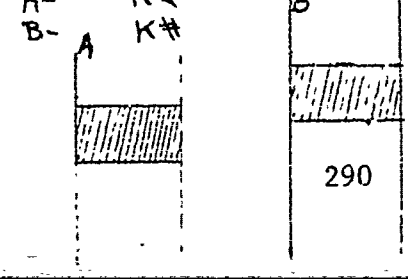
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,493,824 LIFE = 15,606.45 FLT-HRS *

STATIC LOAD A- K#

B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	[redacted]	.2917	.0733
39	15600	2184	1355
38	15200	0829	0389
37	14800	0440	0138
36	14400	0302	0099
35	14000	0203	0069
34	13600	0134	0038
33	13200	0096	
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TY-9

SPECTRUM: Fighter

TEST DATE: C

TEST FRAME:

AVERAGE WIDTH: 1.3724

AVERAGE THICKNESS: .2492 | .2486 | .2498

AREA: .3420 R CAL 19136

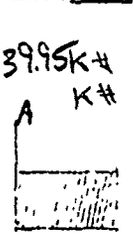
BASELINE STRESS: 82.5 ksi CAL SWING 67.8

MAX. LOAD: 28,215.0 # A POT 9.41 1 Life

CYCLES AT TERMINATION: [redacted]

2 Lives/____

STATIC LOAD A-39.95K#
B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0173	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TY-10

SPECTRUM: Fighter

TEST DATE: B

TEST FRAME:

AVERAGE WIDTH: 1.3785 *

AVERAGE THICKNESS: .2487 | .2488 | .2486

AREA: .3428 R CAL 18670

BASELINE STRESS: 82.5 ksi CAL SWING 61

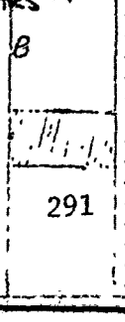
MAX. LOAD: 28,281.0 * A POT 9.43 1 Life

CYCLES AT [redacted]N/FAILURE: *

2 Lives/____

@ 1,105,319 L.P.'s = 11,547.62 FLT-HRS *

STATIC LOAD A- K#
B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
[redacted]	[redacted]	.5466	.2975
28	11200	2491	1349
27	10800	1142	0594
26	10400	0548	0193
25	10000	0355	0129
24	9600	0226	0075
23	9200	0151	0057
22	8800	0094	0024
21	8400	0070	0028
20	8000	0042	
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: Ty-11

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.3775

AVERAGE THICKNESS: 2503 | 2503 | 2503

AREA: .3448 R CAL 18675

BASELINE STRESS: 82.5 Ksi CAL SWING 65.7

MAX. LOAD: 28445.03 A POT 9.48

1 Life

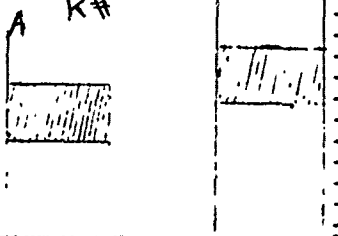
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,043,637 LIFE'S = 10,903.20 FLT-HRS *

STATIC LOAD A- K#

During 83% Load B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	[redacted]	.3514	.3704
27	10800	.0810	.0413
26	10400	.0397	.0133
25	10000	.0264	.0075
24	9600	.0189	.0092
23	9200	.0147	.0021
22	8800	.0126	.0025
21	8400	.0101	.0017
20	8000	.0084	
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TY-12

SPECTRUM: Fighter

TEST DATE: Latest 25 May 1978

TEST FRAME:

AVERAGE WIDTH: 1.3761

AVERAGE THICKNESS: 2510 | 2515 | 2505

AREA: .3454 R CAL 19136

BASELINE STRESS: 82.5 Ksi CAL SWING 67.2

MAX. LOAD: 28,495.5 # A POT 9.5

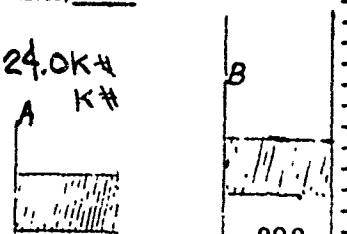
1 Life

CYCLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD A-24.0K#

B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.2428	.1138
39	15600	.1290	.0430
38	15200	.0860	.0334
37	14800	.0534	.0155
36	14400	.0379	.0076
35	14000	.0303	.0073
34	13600	.0231	
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TY-13

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.3755

AVERAGE THICKNESS: .2509 | .2498 | .2580 *

AREA: .3444 R CAL 18675

BASELINE STRESS: 82.5 KSI CAL SWING 65.7%

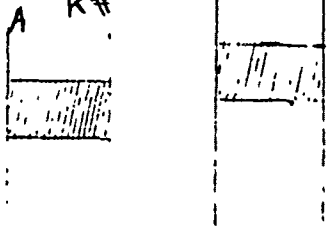
MAX. LOAD: 28413.0 # A POT 9.47 1 Life

CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,034,393 L.P.'s = 10,806.63 FLT. HRS *

STATIC LOAD A- K#
B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	[redacted]	.2063	.0258
27	10800	.1805	.0951
26	10400	.0854	.0377
25	10000	.0577	.0223
24	9600	.0354	.0119
23	9200	.0235	.0057
22	8800	.0178	
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TY-14

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH: 1.3773

AVERAGE THICKNESS: .2507 | .2498 | .2516

AREA: .3452 R CAL 18670

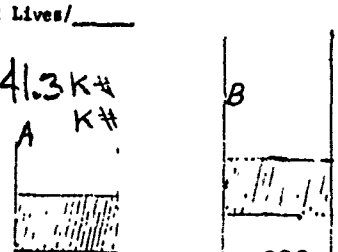
BASELINE STRESS: 82.5 KSI CAL SWING 65.6%

MAX. LOAD: 28,479.0 # A POT 9.49 1 Life

CYCLES AT TERMINATION/[redacted].

2 Lives/____

STATIC LOAD A-41.3 K#
B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0109	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

2 Lives *

SPECIMEN NUMBER: Ty-15

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.3764

AVERAGE THICKNESS: 2489 2490 2488

AREA: .3425 R CAL 19136

BASELINE STRESS: 82.5 KSI CAL SWING 67.7%

MAX. LOAD: 28256.3 * A POT 9.42 1 Life

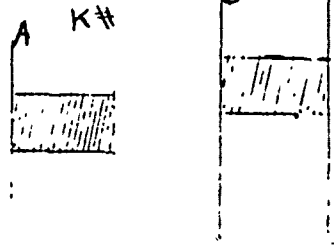
CYCLES AT [redacted]/FAILURE: *

2 Lives/____

@ 1,464,840 L.P. = 15,303.65 FLT-HRS *

STATIC LOAD A- K#

B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
[redacted]	[redacted]	.3630	.2157
38	15200	1473	0648
37	14800	0825	0359
36	14400	0466	0147
35	14000	0319	0088
34	13600	0231	0069
33	13200	0162	0047
32	12800	0115	0031
31	12400	0084	
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

2.5 TASK V
2.5.1 CW
(Cold Worked Holes) FATIGUE TEST DATA

SPECIMEN NUMBER: CW-1

SPECTRUM: Fighter

TEST DATE:

TEST FRAME: A

AVERAGE WIDTH: 1.5014

AVERAGE THICKNESS: .3677 | .3693 | .3694

AREA: .5520

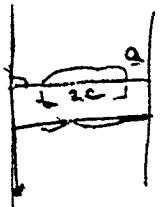
BASELINE STRESS: 38 KSi

MAX. LOAD: 20976

CYCLES AT TERMINATION/FAILURE.

2 Lives/

STATIC LOAD A-29.25 KH
B- KH



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a 2c CRACK LENGTH IN.	INCREMEN
40	16000	.0162 / .2600	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW11

SPECTRUM: Fighter

TEST DATE:

TEST FRAME: B

AVERAGE WIDTH: 1.504

AVERAGE THICKNESS: .3772 | .3769 | .3775

AREA: .5667

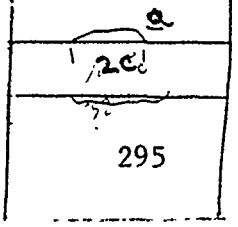
BASELINE STRESS:

MAX. LOAD: 19268

CYCLES AT TERMINATION/FAILURE:

6 Lives/

STATIC LOAD A-32.4 KH
B- KH



Blk #	FLIGHT HRS.	a 2c CRACK LENGTH IN.	INCREMEN
40	16000	0162 / .1290	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-12

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH: 1.5026

AVERAGE THICKNESS: .3742 | .3742

AREA: .5623 — SCAL 18670 (7968)

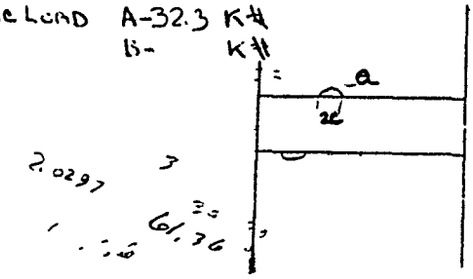
BASELINE STRESS: 34 Ksi — CALS 98%

MAX. LOAD: 19117 — A.POT. 765

CYCLES AT TERMINATION/FAILURE:

2 Lives/___

STATIC LOAD A-32.3 K#
B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a / 2c CRACK LENGTH IN.	INCREMENT
40	16000	.0145 / .0371	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-2

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.5045

AVERAGE THICKNESS: .3719 | .3721 | .3716

AREA: .5594 — SCAL 18675

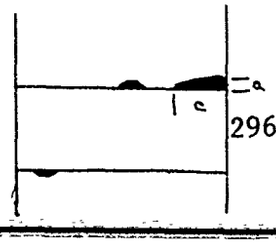
BASELINE STRESS: 34 Ksi — CALS 98%

MAX. LOAD: 19021 — A.POT. 761

CYCLES AT TERMINATION/FAILURE:

2 Lives/___

STATIC LOAD A-31.3 K#
B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a / c CRACK LENGTH IN.	INCREMENT
40	16000	.0231 / .0983	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-3

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH:	1.5033					
AVERAGE THICKNESS:	.3704	.3688	.3719			

AREA: .5567 ECAL 18670

BASELINE STRESS: ~~34~~ 34ksi CALS 98%

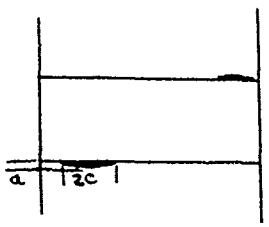
MAX. LOAD: 18929 A.POT. 7.57

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A-31.9 KN

B- KN



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a / 2c CRACK LENGTH IN.	INCREMEN
40	16000	.0092 / .0880	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW4

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: D

AVERAGE WIDTH:	1.5041					
AVERAGE THICKNESS:	.3743	.3743	.3742			

AREA: .5629 ECAL 22623 (9678)

BASELINE STRESS: 34ksi CALS 51% (60)

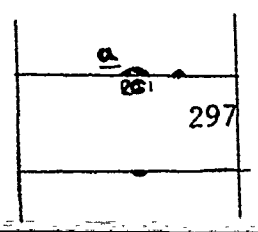
MAX. LOAD: 19139 A.POT. 7.66

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A- KN

B- KN



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a / 2c CRACK LENGTH IN.	INCREMEN
40	16000	.0063 / .0195	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-5

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.4988

AVERAGE THICKNESS: .3761 | 3766 | 3756

AREA: .5637 SCAL 18675 (7977)

BASELINE STRESS: 34K CALS 97%

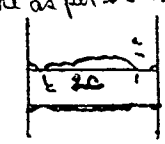
MAX. LOAD: 19166 A.PCT. 767

CYCLES AT TERMINATION/FAILURE:

~~46~~ ~~44~~ Lives/____

STATIC LOAD A- 29.6 K#
B- K#

Undersize Bolt Hole. Bolt was driven into Bolt Hole as per Dr Noroma's request.



FRACTOGRAPHIC DATA

a 2C

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	~~.0200~~	
39	15600		
38	15200	.0329 / .3172	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-6

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: e

AVERAGE WIDTH: 1.4991

AVERAGE THICKNESS: .3732 | 3736 | 3727

AREA: .5594 SCAL 18020

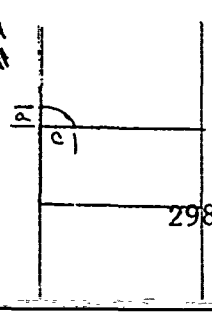
BASELINE STRESS: 34 ksi CALS 95%

MAX. LOAD: 19019 A.PCT. 761

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD A-~~32.4~~ K#
B- K#



a / c

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMEN
40	16000	.021 / .0507	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
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25	10000		
24	9600		
23	9200		
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18	7200		
17	6800		
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15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-7

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH: 1.4992

AVERAGE THICKNESS: .3765 .3765 .3764

AREA: .5644

BASELINE STRESS: 34

MAX. LOAD: 19188

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

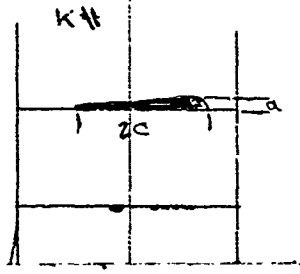
ECAL 18670

CALS 97%

A.PCT. 708

STATIC LOAD A- ___ K#

B- ___ K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a / 2c CRACK LENGTH IN.	INCREMENT
40	16000	.0145 / .2282	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
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16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW8

SPECTRUM: Fighter

TEST DATE: STARTED 2/13 3:33 o'clock

TEST FRAME: A

AVERAGE WIDTH: 1.5037

AVERAGE THICKNESS: .3769 .3771 .3767

AREA: .5667

BASELINE STRESS: _____

MAX. LOAD: 19269

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

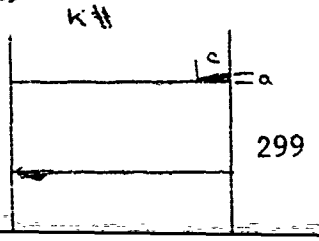
ECAL 18675

CALS 97%

A.PCT. 770

STATIC LOAD A-32.1 K#

B- ___ K#



Blk #	FLIGHT HRS.	a / c CRACK LENGTH IN.	INCREMENT
40	16000	.0148 / .0582	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
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23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

SPECIMEN NUMBER: Cw-9

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: _____

AVERAGE WIDTH: 1.5023

AVERAGE THICKNESS: .3774 | .3781 | .3767

AREA: .5669 SCAL 18670

BASELINE STRESS: _____ CALS 97%

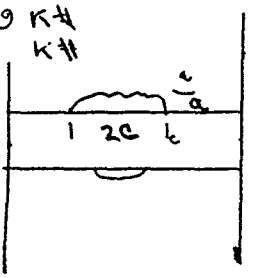
MAX. LOAD: 19277 A.PCT. 77%

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A- 30.9 KN

B- KN



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a	CRACK LENGTH IN. 2c	INCREMEN
40	16000	.0272	.1995	
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
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21	8400			
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18	7200			
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13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	400			

FATIGUE TEST DATA

SPECIMEN NUMBER: Cw 10

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.4994

AVERAGE THICKNESS: .3733 | .3733 | .3732

AREA: .5597 SCAL 18675 (1117)

BASELINE STRESS: _____ CALS 98%

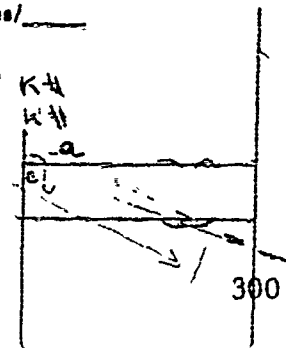
MAX. LOAD: 19028 A.PCT. 76%

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A- 31.8 KN

B- KN



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a	CRACK LENGTH IN. c	INCREMEN
40	16000	.0175	.0872	
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
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32	12800			
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30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
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14	5600			
13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	400			

296

FATIGUE TEST DATA

SPECIMEN NUMBER: CW 13

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.5055

AVERAGE THICKNESS: .3752 | .3754 | .3760

AREA: .5648 ECAL 18675

BASELINE STRESS: ~~10.205~~ 34K CALS 97%

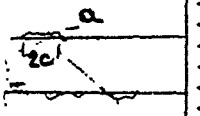
MAX. LOAD: 19205 A.POT. 768

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD A-31.3 KH

B- KH.



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a / c CRACK LENGTH IN.	INCREMENT
40	16000	.0467/.1012	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-14

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.5004

AVERAGE THICKNESS: .3763 | .3795 | .3791

AREA: .5646 ECAL 19136 (8160)

BASELINE STRESS: _____ CALS 100%

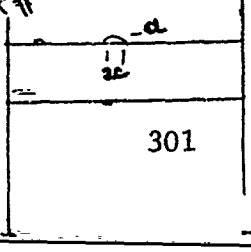
MAX. LOAD: 19196 A.POT. 7.68

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD A-32.0 KH

B- KH



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a / 2c CRACK LENGTH IN.	INCREMENT
40	16000	.0138 / .0286	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW 15

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH:	1.5004					
AVERAGE THICKNESS:	.3759	.3771	.3748			
AREA:	.5641					

RCAL 18675 (7977)

BASELINE STRESS: 34K — CALS 97%

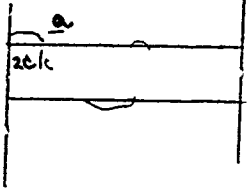
MAX. LOAD: 19179 — A.POT. 767

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A- 31.9 KN

B- KN



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a CRACK LENGTH IN. 2c	INCREMENT
40	16000	.0215 / .0789	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW 16

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH:	1.5005					
AVERAGE THICKNESS:	.3763	.3756	.3770			
AREA:	.5646					

RCAL 18670 (7968)

BASELINE STRESS: 34K6i — CALS 97%

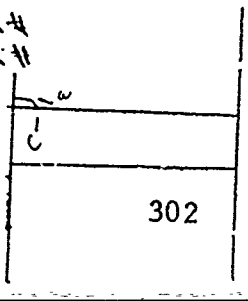
MAX. LOAD: 19198 — A.POT. 768

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A- 32.4 KN

B- KN



Blk #	FLIGHT HRS.	a CRACK LENGTH IN. 2c	INCREMENT
40	16000	.0153 / .0615	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: Cw. 17

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 6

AVERAGE WIDTH: 1.5014

AVERAGE THICKNESS: .3760 | .3755 | .3765

AREA: .5645 — SCAL 19136 (8168)

BASELINE STRESS: 34 Ksi — CALS 99%

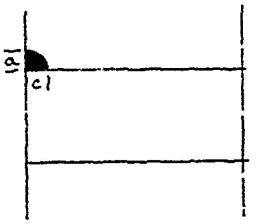
MAX. LOAD: 19194 — A.PIT. 768

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD A- 32.0 Kli

B- Kli



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a	CRACK LENGTH IN. c	INCREMENT
40	16000	.0278	.0454	
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
24	9600			
23	9200			
22	8800			
21	8400			
20	8000			
19	7600			
18	7200			
17	6800			
16	6400			
15	6000			
14	5600			
13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	400			

FATIGUE TEST DATA

SPECIMEN NUMBER: Cw.18

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.5022

AVERAGE THICKNESS: .3759 | .3772 | .3746

AREA: .5647 — SCAL 18075 (7723)

BASELINE STRESS: 34 Ksi — CALS 97%

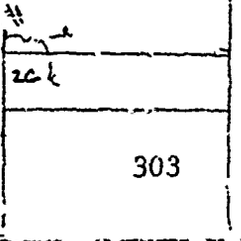
MAX. LOAD: 19200 — A.PIT. 768

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD A- 32.8 Kli

B- Kli



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a	CRACK LENGTH IN. 2c	INCREMENT
40	16000	.0157	.0440	
39	15800			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
24	9600			
23	9200			
22	8800			
21	8400			
20	8000			
19	7600			
18	7200			
17	6800			
16	6400			
15	6000			
14	5600			
13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	400			

349

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: CW-19 P1 of 3

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

RAGE WIDTH: 1.5031

RAGE THICKNESS: .3719

A: .5590 R-CAL. _____

ELINE STRESS: 34 ksi CAL-S _____

LOAD: 19006 # Apot _____

1 Life

LES AT TERMINATION/[redacted]:

6 Lives/_____

STATIC LOAD A-288 K#

B- K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0054	.0006
39	15600	.0047	.0005
38	15200	.0043	.0005
37	14800	.0038	.0003
36	14400	.0035	.0004
35	14000	.0031	.0003
34	13600	.0028	.0002
33	13200	.0026	.0002
32	12800	.0024	.0003
31	12400	.0021	.0002
30	12000	.0019	.0002
29	11600	.0017	.0003
28	11200	.0014	.0002
27	10800	.0012	
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

4 Lives

SPECIMEN NUMBER: CW-19 P2 of 3

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AGE WIDTH: _____

AGE THICKNESS: _____

A: _____ R-CAL. _____

ELINE STRESS: _____ CAL-S _____

LOAD: _____ Apot _____

3 Life

ES AT TERMINATION/[redacted]:

6 Lives/_____

TATIC LOAD A- K#

B- K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	.0348	.0006
39	15600	.0342	.0005
38	15200	.0337	.0005
37	14800	.0332	.0004
36	14400	.0328	.0004
35	14000	.0324	.0006
34	13600	.0318	.0005
33	13200	.0313	.0005
32	12800	.0308	.0005
31	12400	.0303	.0005
30	12000	.0298	.0006
29	11600	.0292	.0006
28	11200	.0286	.0006
27	10800	.0280	.0007
26	10400	.0273	.0007
25	10000	.0266	.0005
24	9600	.0261	.0007
23	9200	.0254	.0006
22	8800	.0248	.0006
21	8400	.0242	.0008
20	8000	.0234	.0008
19	7600	.0226	.0005
18	7200	.0221	.0009
17	6800	.0212	.0009
16	6400	.0203	.0008
15	6000	.0195	.0011
14	5600	.0184	.0007
13	5200	.0177	.0009
12	4800	.0168	.0008
11	4400	.0159	.0012
10	4000	.0147	.0013
9	3600	.0134	.0010
8	3200	.0124	.0011
7	2800	.0113	.0013
6	2400	.0101	.0010
5	2000	.0091	.0010
4	1600	.0081	.0007
3	1200	.0074	.0006
2	800	.0068	.0008
1	400	.0060	.0006

FATIGUE TEST DATA

Lives

SPECIMEN NUMBER: CW-19 p3 of 3

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AGE WIDTH: _____

AGE THICKNESS: _____

R-CAL. _____

CAL-S _____

APOT _____

LINE STRESS: _____

LOAD: _____

5 Life

ES AT TERMINATION/F[illegible]:

Lives/_____

TATIC LOAD A- K#

B- K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000 x 5	.0475	.0003
39	15600	0472	0004
38	15200	0468	0003
37	14800	0465	0003
36	14400	0462	0003
35	14000	0459	0003
34	13600	0456	0003
33	13200	0453	0003
32	12800	0450	0002
31	12400	0448	0003
30	12000	0445	0002
29	11600	0443	0004
28	11200	0439	0002
27	10800	0437	0003
26	10400	0434	0003
25	10000	0431	0002
24	9600	0429	0003
23	9200	0426	0002
22	8800	0424	0003
21	8400	0421	0002
20	8000	0419	0003
19	7600	0416	0004
18	7200	0412	0002
17	6800	0410	0004
16	6400	0406	0005
15	6000	0401	0002
14	5600	0399	0004
13	5200	0395	0002
12	4800	0393	0003
11	4400	0390	0003
10	4000	0387	0004
9	3600	0383	0003
8	3200	0380	0003
7	2800	0377	0004
6	2400	0373	0004
5	2000	0369	0004
4	1600	0365	0004
3	1200	0361	0005
2	800	0356	0005
1	400	0351	0003

81

FATIGUE TEST DATA

SPECIMEN NUMBER: CW 20

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH: 1.5022 | | | | | |

AVERAGE THICKNESS: .3745 | .3733 .3709 | .3757 | | | |

AREA: .5624

BASELINE STRESS: _____

MAX. LOAD: 19128

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A-31.6 K#

B- K#

ECAL 18670 (7960)

CALS 98%

A.POT. 765

Blk #	FLIGHT HRS.	a / 2c CRACK LENGTH IN.	INCREMEN
40	16000	0160 / .0384	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21.	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

a

Lead c

305

201

FATIGUE TEST DATA

SPECIMEN NUMBER: CW21

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.5022

AVERAGE THICKNESS: .3755 | .3760 | .3750

AREA: .5641 SCAL 19136 (9/68)

BASELINE STRESS: _____ CALS 100%

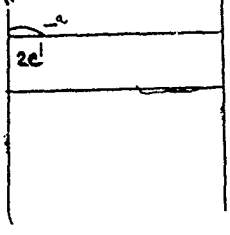
MAX. LOAD: 19179 A.PCT. 7.70

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A- 32.5 KH

B- KH



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a 2c CRACK LENGTH IN.	INCREMEN
40	16000	.0209 / .0732	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-22

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.5012

AVERAGE THICKNESS: .3767 | .3720 | .3764

AREA: .5655 SCAL 19136 (8/68)

BASELINE STRESS: _____ CALS 100%

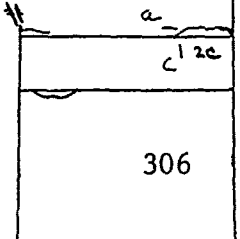
MAX. LOAD: 19227 A.PCT. 7.69

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A-32.0 KH

B- KH



Blk #	FLIGHT HRS.	a 2c CRACK LENGTH IN.	INCREMEN
40	16000	.0194 / .0834	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-23

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.4958

AVERAGE THICKNESS: .3753 | .3753 | .3753

AREA: .5576

BASELINE STRESS: _____

MAX. LOAD: 18959

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

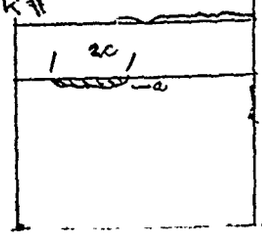
STATIC LOAD A-30.5 KH

B- KH

CALC 18675

CALC 99%

A.POT. 7.58



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a / 2c	INCREMEN
40	16000	.0452 / .1282	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-24

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: D

AVERAGE WIDTH: 1.5010

AVERAGE THICKNESS: .3753 | .3752 | .3754

AREA: .5633

BASELINE STRESS: _____

MAX. LOAD: 19153

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

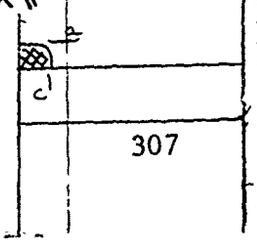
STATIC LOAD A-32.8 KH

B- KH

CALC 22673 (2x10)

CALC 51% (50.9)

A.POT. 7.66



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a / c	INCREMEN
40	16000	.0404 / .0321	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

303

FATIGUE TEST DATA

SPECIMEN NUMBER: CW25

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: _____

AVERAGE WIDTH: 1.5023

AVERAGE THICKNESS: .3759 .3772 .3745

AREA: .5646 RCAL 18605 (7944)

BASELINE STRESS: 34KSI CALS 97%

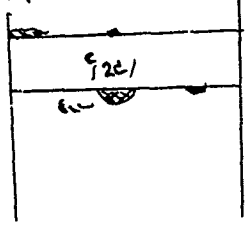
MAX. LOAD: 19198 A.POT. 7668

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A-32.0 KIP

B- KIP



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a 2c CRACK LENGTH IN.	INCREMENT
40	16000	.0143 / .0505	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW 26

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH: 1.5023

AVERAGE THICKNESS: .3748 .3735 .3760

AREA: .5630 RCAL 18670 (7946)

BASELINE STRESS: _____ CALS 98%

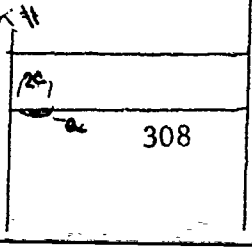
MAX. LOAD: 19142 A.POT. 7660

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A-33.0 KIP

B- KIP



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a 2c CRACK LENGTH IN.	INCREMENT
40	16000	.0091 / .0358	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-27

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH:	1.5036					
AVERAGE THICKNESS:	.3769	.3771	.3766			

AREA: .5666 SCAL 1916 (1868)

BASELINE STRESS: _____ CALS 99%

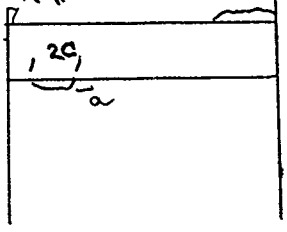
MAX. LOAD: 19265 A.POT. 7.71

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A- 32.2 KH

B- KH



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a	CRACK LENGTH IN. 2C	INCREMENT
40	16000	.0466	1.0963	
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
24	9600			
23	9200			
22	8800			
21	8400			
20	8000			
19	7600			
18	7200			
17	6800			
16	6400			
15	6000			
14	5600			
13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	400			

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-28

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH:	1.5028					
AVERAGE THICKNESS:	.3744	.3769	.3718			

AREA: .5626 SCAL 18020

BASELINE STRESS: _____ CALS 94%

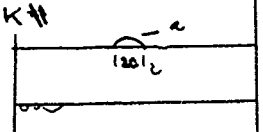
MAX. LOAD: 19127 A.POT. 7.65

CYCLES AT TERMINATION/FAILURE:

2 Lives/_____

STATIC LOAD A- 32.4 KH

B- KH



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a	CRACK LENGTH IN. 2C	INCREMENT
40	16000	.0493	1.0213	
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
24	9600			
23	9200			
22	8800			
21	8400			
20	8000			
19	7600			
18	7200			
17	6800			
16	6400			
15	6000			
14	5600			
13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	400			

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GENERAL DYNAMICS
Fort Worth Division
TABULATION SHEET

FATIGUE TEST DATA

SPECIMEN NUMBER: CW-29

SPECTRUM: Fighter

TEST DATE:

TEST FRAME: A B C D E F
1 2 3 4 5 6

AVERAGE WIDTH: 1.5007

AVERAGE THICKNESS: .3739 .3235 .3742

AREA: .5609

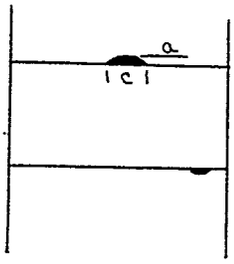
R-Cal 17925 (7965)
Cal.S 94%

BASELINE STRESS: Apit 7.63

MAX. LOAD: 19075

CYCLES AT TERMINATION/FAILURE: 3Lives/___

STATIC LOAD A-32.1 KH
B- KH



FRACTOGRAPHIC DATA

FLIGHT HRS	CRACK LENGTH INCH. a	CRACK LENGTH INCH. 2c	INCREMENT INCH.
~~Three Lives~~ 3840	.0212	.0768	
3760			
3660			
3560			
3460			
3360			
3260			
3160			
3060			
2960			
2860			
2760			
2660			
~~Two Lives~~ 2560			
2480			
2380			
2280			
2180			
2080			
1980			
1880			
1780			
1680			
1580			
1480			
1380			
~~One Life~~ 1280			
1200			
1100			
1000			
900			
800			
700			
600			
500			
400			
300			
200			

FATIGUE TEST DATA

SPECIMEN NUMBER: CW 30

SPECTRUM: Fighter

TEST DATE:

TEST FRAME:

AVERAGE WIDTH: 1.5006

AVERAGE THICKNESS: .3755 .3764 .3745

AREA: .5634

R-CAL 19136 (8160)
CAL.S 43%

BASELINE STRESS: 34K

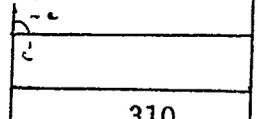
MAX. LOAD: 19156

A.PIT. 7.66

CYCLES AT TERMINATION/FAILURE:

2 Lives/___

STATIC LOAD A-32.0 KH
B- KH



Blk #	FLIGHT HRS.	CRACK LENGTH IN. a	CRACK LENGTH IN. c	INCREMENT
40	16000	.0139	.0712	
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
24	9600			
23	9200			
22	8800			
21	8400			
20	8000			
19	7600			
18	7200			
17	6800			
16	6400			
15	6000			
14	5600			
13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	400			

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2.5.2 TL
(Taper Lked
Holes)

FRACTOGRAPHIC DATA

FATIGUE TEST DATA 4 lives = 2 X

SPECIMEN NUMBER: TL-1

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH: 1.5017

AVERAGE THICKNESS: .3766 | .3765 | .3766

AREA: .5655 ECAL 18670(7968)

BASELINE STRESS: 38 KSi CALC 87%

MAX. LOAD: 21488 A.K.T. 0.60

CYCLES AT TERMINATION/FAILURE:

4 Lives/3,062,988 LIFE

STATIC LOAD A-32.6 K-U

B- K-U

No fatigue Origin

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	.0000	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA 4 lives = 2 X

SPECIMEN NUMBER: TL-2

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.5018

AVERAGE THICKNESS: .3764 | .3762 | .3765

AREA: .5652 ECAL 19136

BASELINE STRESS: 38 CALC 89%

MAX. LOAD: 21478 A.K.T. 0.60

CYCLES AT TERMINATION/FAILURE:

4 Lives/3,062,988 LIFE

STATIC LOAD A-32.4 K-U

B- K-U

No fatigue origin

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	.0000	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

SPECIMEN NUMBER: TL-3

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.5022

AVERAGE THICKNESS: .3767 | .3767 | .3766

AREA: .5658 ERW EQAL 18675 15K

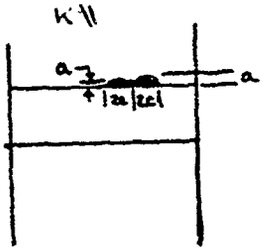
BASELINE STRESS: ~~[redacted]~~ 45Ksi CALC ~~87.7~~ 80.

MAX. LOAD: ~~31,501~~ 25461 A.K.T. ~~868~~

CYCLES AT TERMINATION/[redacted]: 4 6 Lives/[redacted] = 3828,735 LIVES

2 Lives/____

STATIC LOAD A-31.9 Kli
B- Kli



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a CRACK LENGTH IN.	2a INCREMENT
40	16000	.00999 / .00735	.03578 / .04475
39	15600	[redacted]	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	[illegible]		

FATIGUE TEST DATA

SPECIMEN NUMBER: TL-4

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B D/9-18

AVERAGE WIDTH: 1.5031

AVERAGE THICKNESS: .3763 | .3750 | .3755

AREA: .5640 EQAL 18670

BASELINE STRESS: ~~28.5~~ 45Ksi CALC ~~87~~ 74?

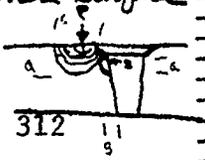
MAX. LOAD: ~~21455~~ 25,380 A.K.T. 857

CYCLES AT TERMINATION/[redacted]

6 X Lives 4,594,482 LP's

STATIC LOAD A-28.8 Kli
B- Kli

Primary origin lies on specimen surface away from counterbore. Secondary origin was from taper lock hole and was affected by the primary origin



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	a / B CRACK LENGTH IN.	INCREMENT
40	16000	.106 / .0400	
39	15600	c / d	
38	15200	.1936 / .1500	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	[illegible]		

FATIGUE TEST DATA

SPECIMEN NUMBER: TL-5

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C D/A-19

AVERAGE WIDTH: 1.5032

AVERAGE THICKNESS: .3771 .3774 .3768

AREA: .5669 SCAL 191%

BASELINE STRESS: ~~36.4~~ 45 Ksi CAL 75% ~~89%~~

MAX. LOAD: ~~21,541~~ 25,511 A.K.T. 862

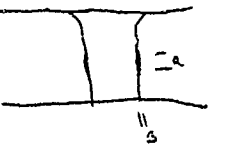
CYCLES AT [redacted] FAILURE: *

6 Lives / 4,594,182 L.P.'s

@ 3,752,769 L.P.'s

STATIC LOAD A-32.1 K-H

Failure occurred in radius area at grip end. (Terminating)



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a / B	INCREMENT
40	16000	.0830 / .0112	
39	15600		
38	15200	.0940 / .0113	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

SPECIMEN NUMBER: TL-6

SPECTRUM: Fighter

TEST DATE: A D/A-17

TEST FRAME: _____

AVERAGE WIDTH: 1.5034

AVERAGE THICKNESS: .3765 .3767 .3763

AREA: .5660 SCAL 180%

BASELINE STRESS: 45 Ksi CAL 73%

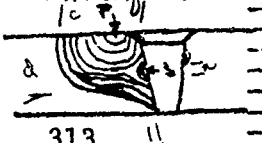
MAX. LOAD: 25,471 A.K.T. 860

CYCLES AT TERMINATION/[redacted]

6 Lives / 4,594,182 L.P.'s

STATIC LOAD A-25.8 K-H

Primary origin lies on specimen surface away from countersunk. Secondary origin was from Taper-Lok hole and was affected by the primary origin.



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a / B	INCREMENT
40	16000	.1951 / .0721	
39	15600		
38	15200	.3215 / .2540	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

309

FATIGUE TEST DATA

SPECIMEN NUMBER: TL-7

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A

AVERAGE WIDTH: 1.5019

AVERAGE THICKNESS: .3762 | .3767 | .3756

AREA: .5649 — ECAL 18675

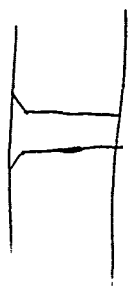
BASELINE STRESS: 45KSI — CALC 73%

MAX. LOAD: 25422 — A.POT. 077

CYCLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD A-32.1 KIP
B- KIP



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	Too SMALL	
39	15600	To MEASURE	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

SPECIMEN NUMBER: TL-8

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B

AVERAGE WIDTH: 1.5026

AVERAGE THICKNESS: .3763 | .3768 | .3758

AREA: .5654 — ECAL 18670

BASELINE STRESS: 45KSI — CALC 73%

MAX. LOAD: 25444 — A.POT. 048

CYCLES AT TERMINATION/[redacted]

2 Lives/____

STATIC LOAD A-32.55 KIP
B- KIP

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	CRACK TO SMALL	
39	15600	TO MEASURE	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		

FATIGUE TEST DATA

SPECIMEN NUMBER: TL-9

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: C

AVERAGE WIDTH: 1.5029

AVERAGE THICKNESS: .3774 .3774 .3774

AREA: .5672 RCAL 10136

BASELINE STRESS: 45Ksi CALS 75%

MAX. LOAD: 25523 A.PCT. 851

CYCLES AT TERMINATION [redacted]

2 Lives/____

STATIC LOAD A-32.7 K#
B- K#

FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT
40	16000	CRACK TOO SMALL	
39	15600	TO MEASURE	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 10

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

RAGE WIDTH: 1.5031

RAGE THICKNESS: .3763 .3763 .3763

A: .5656 RCAL 10675

ELINE STRESS: 45Ksi CALSetting 73%

. LOAD: 25453 Apct 848 1 Life

LES AT TERMINATION/[redacted]:

2 Lives/____

TATIC LOAD A-32.6 K#
B- K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600	NO CRACK	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 11

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 B 2 3 4 5 6

RAGE WIDTH: 1.503

RAGE THICKNESS: .3769 | .3770 | .3768

A: .5666 RCAI 18670

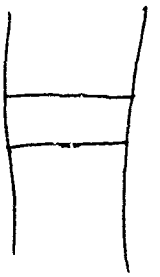
ELINE STRESS: 45KSI CAI using 73%

. LOAD: 25,495 Apri D30 1 Life

LES AT TERMINATION/[redacted]

2 Lives/_____

TATIC LOAD A-32.5K#
B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000		
39	15600	CRACK TOO SMALL	
38	15200	TO MEASURE	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 12

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 C 4 5 6

RAGE WIDTH: 1.502

RAGE THICKNESS: .3780 | .3774 | .3785

A: .5680 RCAI 19130

ELINE STRESS: 45 CAI using 75%

. LOAD: 25,556 Apri 25 1 Life

LES AT TERMINATION [redacted]

2 Lives/_____

TATIC LOAD A-32.7 K#
B- K#

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN.
40	16000	NO CRACK	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		3/2
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FRACTOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL-13

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.5024

AVERAGE THICKNESS: .3721 .3721

AREA: .5604

R CAL 18675

BASELINE STRESS: 45 ksi

CAL SWING 73%

MAX. LOAD: 25405

A POT 950

1 Life

CYCLES AT [redacted]/FAILURE:

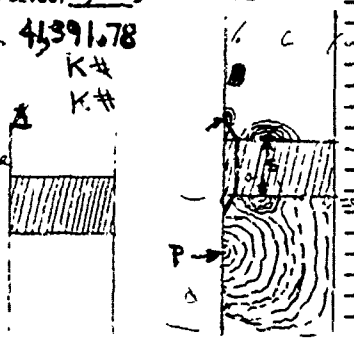
5 Lives/ [redacted] PAT-HRS 6 Lives/ 4,594,482 L.P.'s

@ 3,961,954 L.P.'s = 4,391.78

STATIC LOAD A- K#

B- K#

Primary origin lies on opposite surface away from centerline hole.



Blk #	FLIGHT HRS.	CRACK LENGTH IN. a / B	INCREMENT IN
40	16000	.1496 / .0590	
39	15600		
38	15200	.4338 / .3647	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 14

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.5029

AVERAGE THICKNESS: .3766 .3760 .3771

AREA: .5655

R CAL 18670

BASELINE STRESS: 45 ksi

CAL SWING 73%

MAX. LOAD: 25466

A POT 949

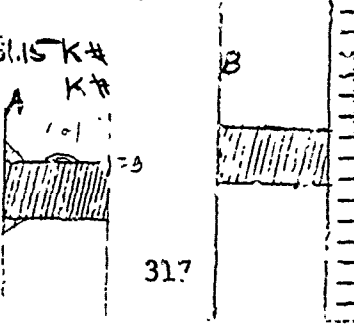
1 Life

CYCLES AT TERMINATION/[redacted]:

6 Lives/ 4,594,482 L.P.'s

STATIC LOAD A-31.15 K#

B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN. a / B	INCREMENT IN
40	16000	.1435 / .0335	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL-15

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 C 2 3 4 5 6

AVERAGE WIDTH: .5524

AVERAGE THICKNESS: .3742 | .3743 | .3741

AREA: .5622 R CAL .1316

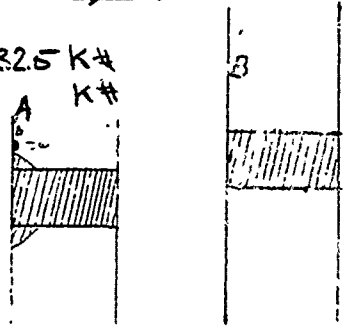
BASELINE STRESS: 45 ksi CAL SWING 76%

MAX. LOAD: 25300 A POT .891 1 Life

CYCLES AT TERMINATION/FAILURE:

6 Lives: 1,574,482 L.P.S

STATIC LOAD A-32.5 K#
B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. a / B	INCREMENT IN
40	16000	.0348 / .0324	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 16

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 A 2 3 4 5 6

AVERAGE WIDTH: .5519

AVERAGE THICKNESS: .3768 | .3767 | .3769

AREA: .5659 R CAL .1867

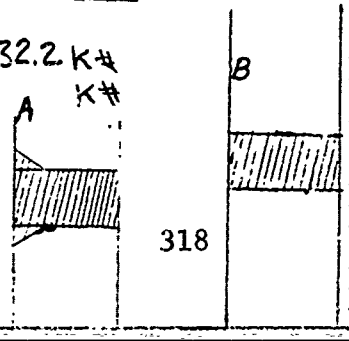
BASELINE STRESS: 45 ksi CAL SWING 73%

MAX. LOAD: 25466 A POT .891 1 Life

CYCLES AT TERMINATION/FAILURE:

2 Lives/____

STATIC LOAD A-32.2 K#
B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	CRACKS TOO	
39	15600	SMALL TO	
38	15200	MEASURE	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 17

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.5026

AVERAGE THICKNESS: .3771 .3773 .3769

AREA: .5660 R CAL 18670

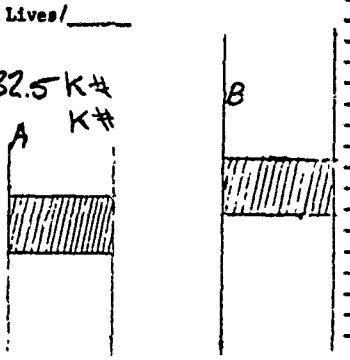
BASELINE STRESS: 45 CAL SWING 73%

MAX. LOAD: 25495 A POT .0% 1 Life

CYCLES AT TERMINATION [redacted]

2 Lives/____

STATIC LOAD A-32.5 K#
B- A K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	NO CRACK	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 18

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.5030

AVERAGE THICKNESS: .3763 .3756 .3770

AREA: .5656 R CAL 19134

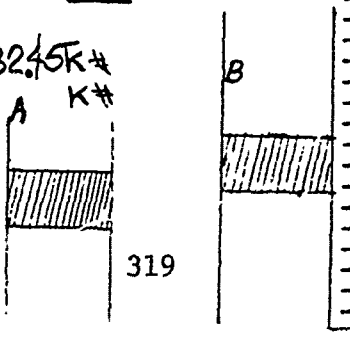
BASELINE STRESS: 45 KS CAL SWING 75%

MAX. LOAD: 25451 A POT .3% 1 Life

CYCLES AT TERMINATION [redacted]

2 Lives/____

STATIC LOAD A-32.5 K#
B- A K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	NO CRACK	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(315)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 19

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A 1 2 3 4 5 6

AVERAGE WIDTH: .5029

AVERAGE THICKNESS: .3765 | .3761 | .3768

AREA: .5658 R CAL 18675

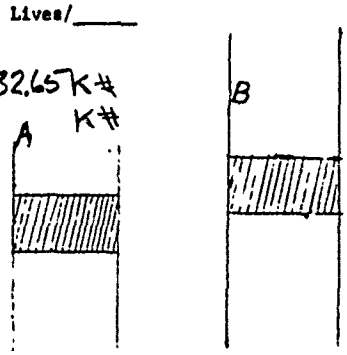
BASELINE STRESS: 45 KSI CAL SWING 72%

MAX. LOAD: 25460 A POT .24 1 Life

CYCLES AT TERMINATION [redacted]:

2 Lives/_____

STATIC LOAD A-32.65 K#
B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	NO CRACK	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 20

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1B 2 3 4 5 6

AVERAGE WIDTH: .5021

AVERAGE THICKNESS: .3770 | .3769 | .3771

AREA: .5663 R CAL 18670

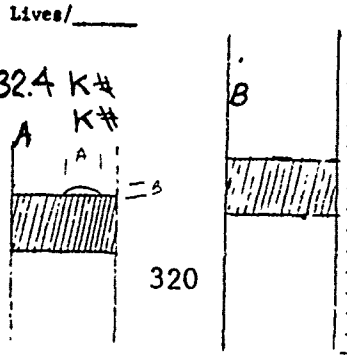
BASELINE STRESS: 45 KSI CAL SWING ~3%

MAX. LOAD: 25487 A POT _____ 1 Life

CYCLES AT TERMINATION [redacted]

2 Lives/_____

STATIC LOAD A-32.4 K#
B- K#



Blk #	FLIGHT HRS.	A CRACK LENGTH IN.	B CRACK LENGTH IN.	INCREMENT IN
40	16000	.0738	.0123	
39	15600			
38	15200			
37	14800			
36	14400			
35	14000			
34	13600			
33	13200			
32	12800			
31	12400			
30	12000			
29	11600			
28	11200			
27	10800			
26	10400			
25	10000			
24	9600			
23	9200			
22	8800			
21	8400			
20	8000			
19	7600			
18	7200			
17	6800			
16	6400			
15	6000			
14	5600			
13	5200			
12	4800			
11	4400			
10	4000			
9	3600			
8	3200			
7	2800			
6	2400			
5	2000			
4	1600			
3	1200			
2	800			
1	400			

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 21

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: (C) 2 3 4 5 6

AVERAGE WIDTH: 1.5027

AVERAGE THICKNESS: .3765 | .3772 | .3759

AREA: .5658 R CAL 19136

BASELINE STRESS: 45 KSI CAL SWING 75%

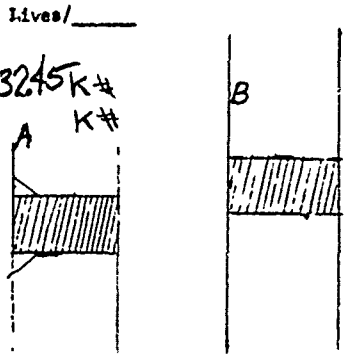
MAX. LOAD: 25460 A POT _____ 1 Life

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-3245 K#

B- A K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	CRACK TO SMALL	
39	15600	TO MEASURE	
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 22

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 A 2 3 4 5 6

AVERAGE WIDTH: 1.5029

AVERAGE THICKNESS: .3777 | .3781 | .3772

AREA: .5676 R CAL 18675

BASELINE STRESS: 45 KSI CAL SWING 73%

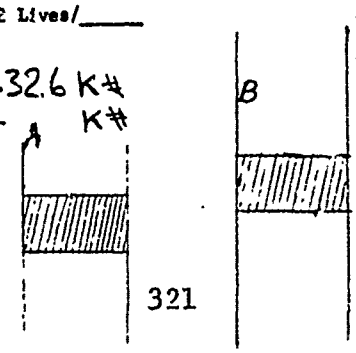
MAX. LOAD: 25541 A POT 3.51 1 Life

CYCLES AT TERMINATION/[redacted]:

2 Lives/_____

STATIC LOAD A-32.6 K#

B- A K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	NO CRACK	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

(317)

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL23

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6 (B)

AVERAGE WIDTH: 1.5031

AVERAGE THICKNESS: .3757 .3763 .3761

AREA: .5647 R CAL 18670

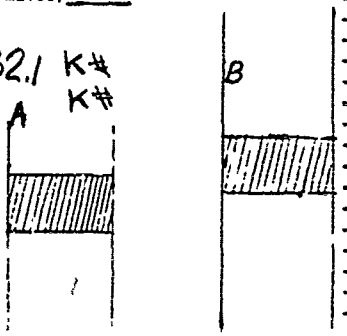
BASELINE STRESS: 45 KSI CAL SWING 73%

MAX. LOAD: 25412 A POT .847 1 Life

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-32.1 K#
B- A K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT I.
40	16000	NO CRACK	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL24

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 (3) 4 5 6

AVERAGE WIDTH: 1.5022

AVERAGE THICKNESS: .3760 .3767 .3768

AREA: .5660 R CAL 19116

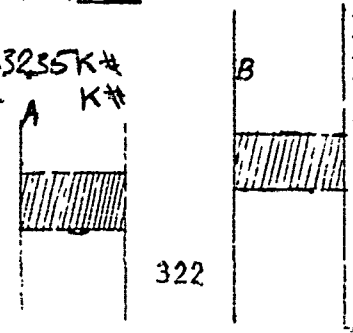
BASELINE STRESS: 45 KSI CAL SWING 75%

MAX. LOAD: 25468 A POT .850 1 Life

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-32.55K#
B- A K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	CRACK TOO	
39	15600	SMALL TO	
38	15200	MEASURE	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 25

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: A 1 2 3 4 5 6

AVERAGE WIDTH: 1.5019

AVERAGE THICKNESS: .3765 | .3774 | .3756

AREA: .5655 R CAL 18675

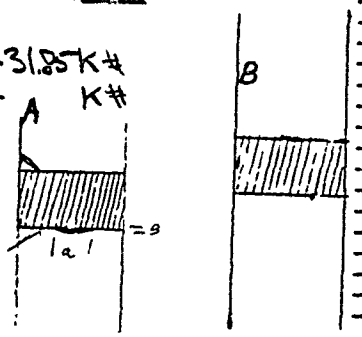
BASELINE STRESS: 45 KSI CAL SWING 73%

MAX. LOAD: 25446 A POT .848 1 Life

CYCLES AT TERMINATION: [redacted]

2 Lives/_____

STATIC LOAD A-31.85 K#
B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. A / B	INCREMENT IN
40	16000	.0751 / .0963	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 26

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: B 1 2 3 4 5 6

AVERAGE WIDTH: 1.5027

AVERAGE THICKNESS: .3763 | .3754 | .3752

AREA: .5640 R CAL 18670

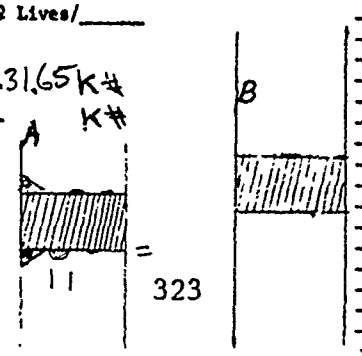
BASELINE STRESS: 45 KSI CAL SWING 74%

MAX. LOAD: 25378 A POT 850 1 Life

CYCLES AT TERMINATION: [redacted]

2 Lives/_____

STATIC LOAD A-31.65 K#
B- K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. A / B	INCREMENT IN
40	16000	.0820 / .0291	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

F ETOGRAPHIC DATA

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 27

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.5021

AVERAGE THICKNESS: .3756 | .3757 | .3755

AREA: .5642 R CAL [illegible]

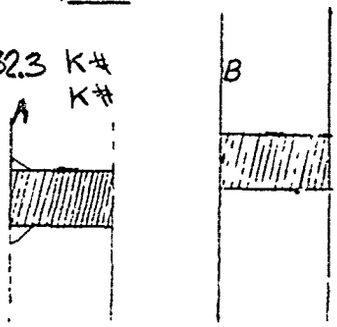
BASELINE STRESS: _____ CAL SWING 75%

MAX. LOAD: 25388 A POT 846 1 Life

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-32.3 K#
B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	Crack Too	
39	15600	small to	
38	15200	measure	
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL 28

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WI IH: 1.5021

AVERAGE THICKNESS: .3767 | .3760 | .3774

AREA: .5658 R CAL .18675

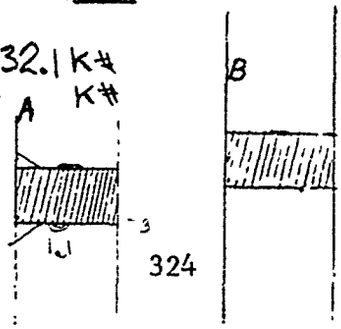
BASELINE STRESS: _____ CAL SWING 73%

MAX. LOAD: 25463 A POT 849 1 Life

CYCLES AT TERMINATION/[redacted]

2 Lives/_____

STATIC LOAD A-32.1 K#
B- K#



Blk #	FLIGHT HRS.	CRACK LENGTH IN. (A / B)	INCREMENT IN
40	16000	.0676 / .0121	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL29

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.5024

AVERAGE THICKNESS: .3769 | .3769 | .3769

AREA: .5663 R CAL 18670

BASELINE STRESS: _____ CAL SWING 72%

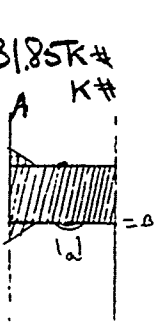
MAX. LOAD: 25481 A POT 850 1 Life

CYCLES AT TERMINATION [redacted]

2 Lives/_____

STATIC LOAD A-31.85K#

B- A K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN. A / B	INCREMENT IN
40	16000	.1255 / .0169	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

FATIGUE TEST DATA

2 Lives

SPECIMEN NUMBER: TL30

SPECTRUM: Fighter

TEST DATE: _____

TEST FRAME: 1 2 3 4 5 6

AVERAGE WIDTH: 1.5026

AVERAGE THICKNESS: .3765 | .3759 | .3770

AREA: .5667 R CAL 19136

BASELINE STRESS: _____ CAL SWING 75%

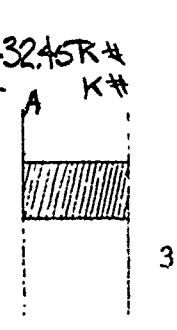
MAX. LOAD: 25454 A POT 848 1 Life

CYCLES AT TERMINATION [redacted]

2 Lives/_____

STATIC LOAD A-32.45K#

B- A K#



FRACTOGRAPHIC DATA

Blk #	FLIGHT HRS.	CRACK LENGTH IN.	INCREMENT IN
40	16000	NO Crack	
39	15600		
38	15200		
37	14800		
36	14400		
35	14000		
34	13600		
33	13200		
32	12800		
31	12400		
30	12000		
29	11600		
28	11200		
27	10800		
26	10400		
25	10000		
24	9600		
23	9200		
22	8800		
21	8400		
20	8000		
19	7600		
18	7200		
17	6800		
16	6400		
15	6000		
14	5600		
13	5200		
12	4800		
11	4400		
10	4000		
9	3600		
8	3200		
7	2800		
6	2400		
5	2000		
4	1600		
3	1200		
2	800		
1	400		

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III EQUIVALENT INITIAL FLAW AND CRACK DEPTH LISTINGS

3.1 TASK I
3.1.1 WPF

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0256410	0.0001322	WPF-42	0.000
0.0512821	0.0002047	WPF-15	0.000
0.0769231	0.0002140	WPF-43	0.000
0.1025641	0.0002654	WPF-41	0.000
0.1282051	0.0003724	WPF-27	488.857
0.1538462	0.0003904	WPF-28	932.151
0.1794872	0.0004184	WPF-36	510.410
0.2051282	0.0004188	WPF-26	576.401
0.2307692	0.0004244	WPF-30	929.207
0.2564103	0.0004569	WPF-37	581.591
0.2820513	0.0004598	WPF-20	331.564
0.3076923	0.0004671	WPF-33	177.412
0.3333333	0.0004889	WPF-40	442.525
0.3589744	0.0004893	WPF-39	1015.833
0.3846154	0.0005179	WPF-38	1173.295
0.4102564	0.0005209	WPF-24	463.075
0.4358974	0.0005376	WPF-31	1079.266
0.4615385	0.0005424	WPF-29	467.002
0.4871795	0.0005992	WPF-17	0.000
0.5128205	0.0006048	WPF-12	318.553
0.5384616	0.0006317	WPF-10	749.224
0.5641026	0.0006353	WPF-34	609.006
0.5897436	0.0006380	WPF-22	597.188
0.6153846	0.0006419	WPF-35	452.757
0.6410257	0.0006431	WPF-19	586.414
0.6666667	0.0006650	WPF-13	648.358
0.6923077	0.0006759	WPF-25	570.701
0.7179487	0.0007126	WPF-32	803.949
0.7435898	0.0007323	WPF-14	921.296
0.7692308	0.0007626	WPF-23	991.288
0.7948718	0.0007985	WPF-18	1037.710
0.8205128	0.0008674	WPF-8	750.999
0.8461539	0.0009282	WPF-6	372.480
0.8717949	0.0010240	WPF-9	1084.163
0.8974359	0.0011012	WPF-16	1327.437
0.9230769	0.0011342	WPF-21	959.920
0.9487180	0.0012987	WPF-7	1322.753
0.9743590	0.0023162	WPF-11	1909.125

CUM PROB	CRACK DEPTH	SPECIMEN
0.0256410	0.0002372	WPF-42
0.0512821	0.0003861	WPF-15
0.0769231	0.0004046	WPF-43
0.1025641	0.0005089	WPF-41
0.1282051	0.0007420	WPF-27
0.1538462	0.0007841	WPF-28
0.1794872	0.0008511	WPF-36
0.2051282	0.0008521	WPF-26
0.2307692	0.0008656	WPF-30
0.2564103	0.0009466	WPF-37
0.2820513	0.0009538	WPF-20
0.3076923	0.0009725	WPF-33
0.3333333	0.0010286	WPF-40
0.3589744	0.0010297	WPF-39
0.3846154	0.0011053	WPF-38
0.4102564	0.0011132	WPF-24
0.4358974	0.0011585	WPF-31
0.4615385	0.0011717	WPF-29
0.4871795	0.0013308	WPF-17
0.5128205	0.0013469	WPF-12
0.5384616	0.0014251	WPF-10
0.5641026	0.0014359	WPF-34
0.5897436	0.0014435	WPF-22
0.6153846	0.0014551	WPF-35
0.6410257	0.0014585	WPF-19
0.6666667	0.0015238	WPF-13
0.6923077	0.0016690	WPF-32
0.7179487	0.0017000	WPF-25
0.7435898	0.0017302	WPF-14
0.7692308	0.0018350	WPF-23
0.7948718	0.0021300	WPF-7
0.8205128	0.0022720	WPF-8
0.8461539	0.0024578	WPF-6
0.8717949	0.0025000	WPF-18
0.8974359	0.0029000	WPF-16
0.9230769	0.0030000	WPF-9
0.9487180	0.0039000	WPF-21
0.9743590	0.0098000	WPF-11

CUM PROB	CRACK DEPTH	SPECIMEN
0.0256410	0.0004512	WPF-42
0.0512821	0.0007739	WPF-15
0.0769231	0.0008179	WPF-43
0.1025641	0.0010812	WPF-41
0.1282051	0.0016000	WPF-27
0.1538462	0.0022000	WPF-20
0.1794872	0.0022000	WPF-28
0.2051282	0.0022000	WPF-36
0.2307692	0.0023000	WPF-26
0.2564103	0.0025000	WPF-33
0.2820513	0.0029000	WPF-24
0.3076923	0.0029000	WPF-30
0.3333333	0.0029000	WPF-37
0.3589744	0.0030000	WPF-40
0.3846154	0.0038000	WPF-29
0.4102564	0.0038000	WPF-39
0.4358974	0.0038518	WPF-17
0.4615385	0.0039136	WPF-12
0.4871795	0.0041000	WPF-38
0.5128205	0.0043000	WPF-31
0.5384616	0.0049000	WPF-35
0.5641026	0.0050000	WPF-19
0.5897436	0.0051000	WPF-10
0.6153846	0.0051000	WPF-34
0.6410257	0.0052000	WPF-22
0.6666667	0.0055000	WPF-25
0.6923077	0.0057000	WPF-13
0.7179487	0.0069000	WPF-32
0.7435898	0.0072000	WPF-14
0.7692308	0.0081000	WPF-18
0.7948718	0.0085000	WPF-23
0.8205128	0.0097000	WPF-6
0.8461539	0.0101000	WPF-8
0.8717949	0.0140000	WPF-9
0.8974359	0.0154000	WPF-21
0.9230769	0.0163500	WPF-7
0.9487180	0.0177000	WPF-16
0.9743590	0.0416000	WPF-11

CUM PROB	CRACK DEPTH	SPECIMEN
0.0256410	0.0009322	WPF-42
0.0512821	0.0018620	WPF-15
0.0769231	0.0020044	WPF-43
0.1025641	0.0029159	WPF-41
0.1282051	0.0059000	WPF-28
0.1538462	0.0060000	WPF-27
0.1794872	0.0068000	WPF-30
0.2051282	0.0075000	WPF-26
0.2307692	0.0078000	WPF-36
0.2564103	0.0085000	WPF-39
0.2820513	0.0087000	WPF-37
0.3076923	0.0089000	WPF-33
0.3333333	0.0094000	WPF-38
0.3589744	0.0099000	WPF-20
0.3846154	0.0100000	WPF-31
0.4102564	0.0102000	WPF-40
0.4358974	0.0127000	WPF-24
0.4615385	0.0129000	WPF-29
0.4871795	0.0147558	WPF-17
0.5128205	0.0160000	WPF-12
0.5384616	0.0173000	WPF-22
0.5641026	0.0175000	WPF-35
0.5897436	0.0176000	WPF-34
0.6153846	0.0177000	WPF-19
0.6410257	0.0180000	WPF-13
0.6666667	0.0182000	WPF-10
0.6923077	0.0191000	WPF-25
0.7179487	0.0200000	WPF-32
0.7435898	0.0222000	WPF-23
0.7692308	0.0224000	WPF-14
0.7948718	0.0230000	WPF-18
0.8205128	0.0296000	WPF-8
0.8461539	0.0336000	WPF-6
0.8717949	0.0345000	WPF-9
0.8974359	0.0371000	WPF-16
0.9230769	0.0379000	WPF-21
0.9487180	0.0816400	WPF-7
0.9743590	0.1271000	WPF-11

CUM PROB	CRACK DEPTH	SPECIMEN
0.0256410	0.0024000	WPF-42
0.0512821	0.0060000	WPF-15
0.0769231	0.0066000	WPF-43
0.1025641	0.0106000	WPF-41
0.1282051	0.0129000	WPF-28
0.1538462	0.0160000	WPF-27
0.1794872	0.0170000	WPF-30
0.2051282	0.0194000	WPF-26
0.2307692	0.0195000	WPF-36
0.2564103	0.0200000	WPF-38
0.2820513	0.0210000	WPF-39
0.3076923	0.0220000	WPF-31
0.3333333	0.0222000	WPF-37
0.3589744	0.0289000	WPF-40
0.3846154	0.0290000	WPF-20
0.4102564	0.0313000	WPF-33
0.4358974	0.0337000	WPF-24
0.4615385	0.0339000	WPF-29
0.4871795	0.0410000	WPF-10
0.5128205	0.0410000	WPF-34
0.5384616	0.0422000	WPF-22
0.5641026	0.0435000	WPF-19
0.5897436	0.0444000	WPF-14
0.6153846	0.0452000	WPF-13
0.6410257	0.0463000	WPF-25
0.6666667	0.0472000	WPF-35
0.6923077	0.0476000	WPF-23
0.7179487	0.0478000	WPF-32
0.7435898	0.0485000	WPF-12
0.7692308	0.0485000	WPF-18
0.7948718	0.0577540	WPF-17
0.8205128	0.0688000	WPF-16
0.8461539	0.0702000	WPF-9
0.8717949	0.0724000	WPF-8
0.8974359	0.0845000	WPF-21
0.9230769	0.0954000	WPF-6
0.9487180	0.0959182	WPF-11
0.9743590	0.1138031	WPF-7

3.1.2 WIF

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0714286	0.0005304	WIF-11	705.008
0.1428571	0.0007837	WIF-9	428.117
0.2142857	0.0008677	WIF-6	879.658
0.2857143	0.0011123	WIF-2	854.322
0.3571429	0.0011370	WIF-7	666.641
0.4285714	0.0011682	WIF-3	1308.052
0.5000000	0.0011758	WIF-10	849.538
0.5714286	0.0012308	WIF-4	1051.858
0.6428571	0.0013589	WIF-1	200.626
0.7142857	0.0014443	WIF-12	600.026
0.7857143	0.0014594	WIF-13	732.893
0.8571429	0.0015931	WIF-8	704.084
0.9285714	0.0023227	WIF-5	848.973

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0011389	WIF-11
0.1428571	0.0016000	WIF-3
0.2142857	0.0018511	WIF-9
0.2857143	0.0024000	WIF-6
0.3571429	0.0024000	WIF-12
0.4285714	0.0026700	WIF-10
0.5000000	0.0031000	WIF-4
0.5714286	0.0033000	WIF-7
0.6428571	0.0036000	WIF-2
0.7142857	0.0038937	WIF-1
0.7857143	0.0047000	WIF-13
0.8571429	0.0048900	WIF-8
0.9285714	0.0108000	WIF-5

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0037000	WIF-11
0.1428571	0.0072200	WIF-9
0.2142857	0.0098000	WIF-6
0.2857143	0.0137000	WIF-2
0.3571429	0.0137000	WIF-7
0.4285714	0.0151000	WIF-10
0.5000000	0.0165000	WIF-1
0.5714286	0.0171000	WIF-3
0.6428571	0.0183000	WIF-4
0.7142857	0.0195000	WIF-12
0.7857143	0.0209000	WIF-13
0.8571429	0.0219700	WIF-8
0.9285714	0.0268000	WIF-5

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0134000	WIF-11
0.1428571	0.0242900	WIF-9
0.2142857	0.0272000	WIF-6
0.2857143	0.0339000	WIF-2
0.3571429	0.0372000	WIF-7
0.4285714	0.0441000	WIF-3
0.5000000	0.0469000	WIF-4
0.5714286	0.0506200	WIF-10
0.6428571	0.0509000	WIF-1
0.7142857	0.0578000	WIF-12
0.7857143	0.0579000	WIF-13
0.8571429	0.0636000	WIF-8
0.9285714	0.0659200	WIF-5

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0320000	WIF-11
0.1428571	0.0625800	WIF-9
0.2142857	0.0648000	WIF-6
0.2857143	0.0856000	WIF-2
0.3571429	0.1051000	WIF-7
0.4285714	0.1100000	WIF-3
0.5000000	0.1210000	WIF-4
0.5714286	0.1310000	WIF-1
0.6428571	0.1447800	WIF-10
0.7142857	0.1621000	WIF-12
0.7857143	0.1698000	WIF-13
0.8571429	0.2020000	WIF-5
0.9285714	0.2137300	WIF-8

3.1.3 WPB

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0263158	0.0000000	WPB-10	0.000
0.0526316	0.0000000	WPB-33	0.000
0.0789474	0.0000173	WPB-28	0.000
0.1052632	0.0000318	WPB-9	0.000
0.1315790	0.0000336	WPB-24	0.000
0.1578947	0.0000574	WPB-20	121.461
0.1842105	0.0000723	WPB-37	157.487
0.2105263	0.0000867	WPB-12	286.178
0.2368421	0.0000984	WPB-36	173.369
0.2631579	0.0001023	WPB-30	109.638
0.2894737	0.0001203	WPB-29	128.310
0.3157895	0.0001215	WPB-31	338.173
0.3421053	0.0001236	WPB-32	156.709
0.3684210	0.0001260	WPB-22	99.333
0.3947369	0.0001261	WPB-4	33.209
0.4210526	0.0001340	WPB-15	163.968
0.4473684	0.0001447	WPB-26	126.469
0.4736842	0.0001647	WPB-6	92.035
0.5000000	0.0001792	WPB-14	243.792
0.5263158	0.0001900	WPB-2	82.381
0.5526316	0.0002037	WPB-8	78.220
0.5789474	0.0002038	WPB-3	80.586
0.6052632	0.0002140	WPB-18	220.363
0.6315789	0.0002215	WPB-34	261.221
0.6578947	0.0002394	WPB-11	96.039
0.6842105	0.0002472	WPB-25	66.482
0.7105263	0.0002621	WPB-27	123.511
0.7368421	0.0002878	WPB-21	81.845
0.7631579	0.0002908	WPB-23	37.535
0.7894737	0.0003264	WPB-1	167.011
0.8157895	0.0003600	WPB-19	67.753
0.8421053	0.0003760	WPB-7	31.309
0.8684211	0.0004557	WPB-13	205.775
0.8947368	0.0004853	WPB-16	50.796
0.9210526	0.0004859	WPB-5	63.203
0.9473684	0.0005639	WPB-17	93.596
0.9736842	0.0005776	WPB-35	143.743

CUM PROB	CRACK DEPTH	SPECIME
0.0263158	0.0000745	WPB-12
0.0526316	0.0000768	WPB-36
0.0789474	0.0000828	WPB-30
0.1052632	0.0000946	WPB-29
0.1315790	0.0000963	WPB-4
0.1578947	0.0000970	WPB-32
0.1842105	0.0000995	WPB-22
0.2105263	0.0001228	WPB-15
0.2368421	0.0001274	WPB-26
0.2631579	0.0001364	WPB-31
0.2894737	0.0001380	WPB-6
0.3157895	0.0001654	WPB-2
0.3421053	0.0001739	WPB-3
0.3684210	0.0001795	WPB-8
0.3947369	0.0001822	WPB-14
0.4210526	0.0001823	WPB-37
0.4473684	0.0002414	WPB-11
0.4736842	0.0002464	WPB-10
0.5000000	0.0002480	WPB-34
0.5263158	0.0002651	WPB-20
0.5526316	0.0002678	WPB-27
0.5789474	0.0003374	WPB-25
0.6052632	0.0003910	WPB-33
0.6315789	0.0003958	WPB-21
0.6578947	0.0003974	WPB-1
0.6842105	0.0004047	WPB-19
0.7105263	0.0004598	WPB-7
0.7368421	0.0004670	WPB-24
0.7631579	0.0004848	WPB-9
0.7894737	0.0005427	WPB-5
0.8157895	0.0006250	WPB-13
0.8421053	0.0006475	WPB-28
0.8684211	0.0007550	WPB-16
0.8947368	0.0008206	WPB-35
0.9210526	0.0008561	WPB-17
0.9473684	0.0040284	WPB-18
0.9736842	0.0040284	WPB-33

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0001058	WPB-20
0.0526316	0.0001511	WPB-37
0.0789474	0.0001764	WPB-12
0.1052632	0.0001820	WPB-36
0.1315790	0.0001962	WPB-30
0.1578947	0.0002248	WPB-29
0.1842105	0.0002289	WPB-4
0.2105263	0.0002308	WPB-32
0.2368421	0.0002368	WPB-22
0.2631579	0.0002992	WPB-15
0.2894737	0.0003124	WPB-26
0.3157895	0.0003445	WPB-6
0.3421053	0.0004377	WPB-2
0.3684210	0.0004670	WPB-24
0.3947369	0.0004695	WPB-3
0.4210526	0.0004848	WPB-9
0.4473684	0.0004912	WPB-8
0.4736842	0.0006475	WPB-28
0.5000000	0.0007673	WPB-11
0.5263158	0.0009026	WPB-27
0.5526316	0.0010000	WPB-31
0.5789474	0.0010304	WPB-23
0.6052632	0.0011115	WPB-21
0.6315789	0.0017000	WPB-14
0.6578947	0.0020000	WPB-18
0.6842105	0.0020007	WPB-25
0.7105263	0.0026437	WPB-5
0.7368421	0.0027000	WPB 34
0.7631579	0.0037000	WPB-7
0.7894737	0.0039000	WPB-19
0.8157895	0.0040284	WPB-10
0.8421053	0.0040264	WPB-33
0.8684211	0.0043000	WPB-1
0.8947368	0.0053000	WPB-13
0.9210526	0.0055000	WPB-16
0.9473684	0.0070000	WPB-17
0.9736842	0.0099000	WPB-35

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0001280	WPB-28
0.0526316	0.0001548	WPB-9
0.0789474	0.0001589	WPB-24
0.1052632	0.0002530	WPB-20
0.1315790	0.0003871	WPB-37
0.1578947	0.0004789	WPB-12
0.1842105	0.0005010	WPB-36
0.2105263	0.0005592	WPB-30
0.2368421	0.0006874	WPB-29
0.2631579	0.0007055	WPB-4
0.2894737	0.0007158	WPB-32
0.3157895	0.0007450	WPB-22
0.3421053	0.0010742	WPB-15
0.3684210	0.0011492	WPB-26
0.3947369	0.0013089	WPB-31
0.4210526	0.0013386	WPB-6
0.4473684	0.0019293	WPB-2
0.4736842	0.0021413	WPB-3
0.5000000	0.0022880	WPB-8
0.5263158	0.0023601	WPB-14
0.5526316	0.0040284	WPB-10
0.5789474	0.0040284	WPB-33
0.6052632	0.0042665	WPB-11
0.6315789	0.0044521	WPB-18
0.6578947	0.0045122	WPB-34
0.6842105	0.0050730	WPB-27
0.7105263	0.0060580	WPB-25
0.7368421	0.0062309	WPB-23
0.7631579	0.0068456	WPB-21
0.7894737	0.0105264	WPB-1
0.8157895	0.0113351	WPB-19
0.8421053	0.0139547	WPB-7
0.8684211	0.0179405	WPB-5
0.8947368	0.0216503	WPB-13
0.9210526	0.0278321	WPB-16
0.9473684	0.0307422	WPB-35
0.9736842	0.0322805	WPB-17

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0001184	WPB-10
0.0526316	0.0001184	WPB-33
0.0789474	0.0003142	WPB-28
0.1052632	0.0003998	WPB-9
0.1315790	0.0004141	WPB-24
0.1578947	0.0008255	WPB-20
0.1842105	0.0029000	WPB-37
0.2105263	0.0033193	WPB-4
0.2368421	0.0041000	WPB-12
0.2631579	0.0055000	WPB-30
0.2894737	0.0064000	WPB-31
0.3157895	0.0064000	WPB-36
0.3421053	0.0084000	WPB-29
0.3684210	0.0092000	WPB-15
0.3947369	0.0092000	WPB-22
0.4210526	0.0098000	WPB-32
0.4473684	0.0100000	WPB-26
0.4736842	0.0128000	WPB-14
0.5000000	0.0143000	WPB-18
0.5263158	0.0148000	WPB-34
0.5526316	0.0148000	WPB-6
0.5789474	0.0180000	WPB-2
0.6052632	0.0190000	WPB-8
0.6315789	0.0197000	WPB-3
0.6578947	0.0219000	WPB-11
0.6842105	0.0225000	WPB-25
0.7105263	0.0227000	WPB-27
0.7368421	0.0270000	WPB-1
0.7631579	0.0284000	WPB-21
0.7894737	0.0302000	WPB-23
0.8157895	0.0365000	WPB-19
0.8421053	0.0369000	WPB-13
0.8684211	0.0470000	WPB-7
0.8947368	0.0510000	WPB-16
0.9210526	0.0550000	WPB-35
0.9473684	0.0550000	WPB-5
0.9736842	0.0600000	WPB-17

CUM PROB	CRACK DEPTH	SPECIMEN
0.263158	0.0002867	WPB-10
0.0526316	0.0002867	WPB-33
0.0789474	0.0011595	WPB-28
0.1052632	0.0016825	WPB-9
0.1315790	0.0017745	WPB-24
0.1578947	0.0046984	WPB-20
0.1842105	0.0105126	WPB-37
0.2105263	0.0148803	WPB-12
0.2368421	0.0159402	WPB-36
0.2631579	0.0187307	WPB-30
0.2894736	0.0247555	WPB-29
0.3157895	0.0256358	WPB-4
0.3421053	0.0260572	WPB-32
0.3684210	0.0273842	WPB-22
0.3947369	0.0412269	WPB-15
0.4210526	0.0441050	WPB-26
0.4773684	0.0499493	WPB-31
0.4736842	0.0509490	WPB-6
0.5000000	0.0690463	WPB-2
0.5263158	0.0745741	WPB-3
0.5526316	0.0781552	WPB-8
0.5789474	0.0798474	WPB-14
0.6052632	0.1134588	WPB-11
0.6315789	0.1159172	WPB-18
0.6578947	0.1166944	WPB-34
0.6842105	0.1256778	WPB-27
0.7105263	0.1336960	WPB-25
0.7368421	0.1352032	WPB-23
0.7631579	0.1404815	WPB-21
0.7894737	0.1637822	WPB-1
0.8157895	0.1676146	WPB-19
0.8421053	0.1780467	WPB-7
0.8684211	0.1899732	WPB-5.
0.8947368	0.1989379	WPB-13
0.9210526	0.2096353	WPB-16
0.9473684	0.2140103	WPB-35
0.9736842	0.2161821	WPB-17

CUM. PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0010000	WPB-10
0.0526316	0.0010000	WPB-33
0.0789474	0.0072000	WPB-28
0.1052632	0.0111000	WPB-9
0.1315790	0.0117000	WPB-24
0.1578947	0.0141000	WPB-20
0.1842105	0.0180000	WPB-37
0.2105263	0.0196000	WPB-12
0.2368421	0.0269000	WPB-31
0.2631579	0.0340000	WPB-36
0.2894737	0.0437000	WPB-30
0.3157895	0.0510000	WPB-15
0.3421053	0.0530000	WPB-32
0.3684210	0.0547000	WPB-29
0.3947369	0.0673000	WPB-22
0.4210526	0.0743000	WPB-14
0.4473684	0.0770000	WPB-26
0.4736842	0.0840000	WPB-4
0.5000000	0.0936000	WPB-34
0.5263158	0.0980000	WPB-6
0.5526316	0.1026000	WPB-18
0.5789474	0.1103000	WPB-[illegible]
0.6052632	0.1172000	WPB-[illegible]
0.6315789	0.1464000	WPB-[illegible]
0.6578947	0.1610000	WPB-11
0.6842105	0.[illegible]	WPB-[illegible]
0.7105263	0.[illegible]	WPB-[illegible]
0.7368421	0.[illegible]	WPB-[illegible]
0.7631579	0.2510615	WPB-19
0.7894737	0.2597000	WPB-21
0.8157895	0.2621239	WPB-7
0.8421053	0.2781082	WPB-5
0.8684211	0.2914000	WPB-13
0.8947368	0.3175415	WPB-16
0.9210526	0.3294111	WPB-35
0.9473684	0.3347000	WPB-25
0.9736842	0.4250000	WPB-17

3.1.4 WIB

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0769231	0.0000534	WIB-10	153.501
0.1538462	0.0001171	WIB-3	150.575
0.2307692	0.0001490	WIB-12	162.187
0.3076923	0.0001801	WIB-11	394.392
0.3846154	0.0001868	WIB-5	278.339
0.4615385	0.0001962	WIB-9	304.648
0.5384616	0.0002194	WIB-8	209.675
0.6153846	0.0002226	WIB-7	260.900
0.6923077	0.0002907	WIB-2	307.785
0.7692308	0.0003934	WIB-6	164.275
0.8461539	0.0005145	WIB-4	153.833
0.9230769	0.0012608	WIB-1	148.510

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0001235	WIB-10
0.1538462	0.0003004	WIB-3
0.2307692	0.0003954	WIB-12
0.3076923	0.0005203	WIB-5
0.3846154	0.0005707	B-11
0.4615385	0.0005810	WIB-9
0.5384616	0.0006623	WIB-8
0.6153846	0.0007606	WIB-7
0.6923077	0.0011905	WIB-2
0.7682308	0.0017782	WIB-6
0.8461539	0.0027579	WIB-4
0.9230769	0.0102684	WIB-1

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0003010	WIB-10
0.1538462	0.0010808	WIB-3
0.2307692	0.0015545	WIB-12
0.3076923	0.0038000	WIB-9
0.3846154	0.0044000	WIB-5
0.4615385	0.0046000	WIB-11
0.5384616	0.0055000	WIB-8
0.6153846	0.0060000	WIB-7
0.6923077	0.0100000	WIB-2
0.7692308	0.0137000	WIB-6
0.8461539	0.0182000	WIB-4
0.9230769	0.0450000	WIB-1

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0010845	WIB-10
0.1538462	0.0066128	WIB-3
0.2307692	0.0108995	WIB-12
0.3076923	0.0162683	WIB-5
0.3846154	0.0192793	WIB-11
0.4615385	0.0197672	WIB-9
0.5384616	0.0235962	WIB-8
0.6153846	0.0280860	WIB-7
0.6923077	0.0456464	WIB-2
0.7692308	0.0648250	WIB-6
0.8461539	0.0884915	WIB-4
0.9230769	0.1624912	WIB-1

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0085000	WIB-10
0.1538462	0.0260000	WIB-5
0.2307692	0.0298000	WIB-9
0.3076923	0.0300000	WIB-3
0.3846154	0.0306000	WIB-11
0.4615385	0.0394000	WIB-12
0.5384616	0.0497000	WIB-8
0.6153846	0.0540000	WIB-7
0.6923077	0.0640000	WIB-2
0.7692308	0.1285000	WIB-6
0.8461539	0.1870000	WIB-4
0.9230769	0.3300000	WIB-1

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0416309	WIB-10
0.1538462	0.1385414	WIB-3
0.2307692	0.1683922	WIB-12
0.3076923	0.1870942	WIB-5
0.3846154	0.1932831	WIB-11
0.4615385	0.1944171	WIB-9
0.5384616	0.2023693	WIB-8
0.6153846	0.2100501	WIB-7
0.6923077	0.2324049	WIB-2
0.7692308	0.2530652	WIB-6
0.8461539	0.2812181	WIB-4
0.9230769	0.4563057	WIB-1

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0995000	WIB-10
0.1538462	0.2276948	WIB-3
0.2307692	0.2491197	WIB-12
0.3076923	0.2738788	WIB-5
0.3846154	0.2834201	WIB-11
0.4615385	0.2850435	WIB-9
0.5384616	0.3005209	WIB-8
0.6153846	0.3185192	WIB-7
0.6923077	0.3939939	WIB-2
0.7692308	0.4889562	WIB-6
0.8461539	0.6278436	WIB-4
0.9230769	1.0987365	WIB-1

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0263158	0.0001806	QPF-7	0.000
0.0526316	0.0002585	QPF-11	0.000
0.0789474	0.0002733	QPF-24	0.000
0.1052632	0.0003658	QPF-29	0.000
0.1315790	0.0003729	QPF-33	0.000
0.1578947	0.0003983	QPF-19	0.000
0.1842105	0.0004429	QPF-22	0.000
0.2105263	0.0004606	QPF-23	0.000
0.2368421	0.0004846	QPF-9	734.199
0.2631579	0.0004856	QPF-16	0.000
0.2894737	0.0004996	QPF-10	729.594
0.3157895	0.0005217	QPF-12	737.209
0.3421053	0.0005394	QPF-28	1000.915
0.3684210	0.0005854	QPF-13	622.244
0.3947369	0.0005913	QPF-1	628.935
0.4210526	0.0006025	QPF-15	1274.765
0.4473684	0.0006322	QPF-32	684.387
0.4736842	0.0006764	QPF-6	1007.635
0.5000000	0.0006921	QPF-21	376.131
0.5263158	0.0008406	QPF-18	703.289
0.5526316	0.0008909	QPF-2	795.359
0.5789474	0.0008957	QPF-34	900.985
0.6052632	0.0009693	QPF-4	1064.163
0.6315789	0.0009697	QPF-26	916.807
0.6578947	0.0009949	QPF-36	956.505
0.6842105	0.0010330	QPF-37	770.057
0.7105263	0.0011001	QPF-8	1406.264
0.7368421	0.0011083	QPF-20	1126.555
0.7631579	0.0011165	QPF-17	1156.420
0.7894737	0.0012168	QPF-25	1649.532
0.8157895	0.0012452	QPF-5	449.336
0.8421053	0.0012621	QPF-31	1013.116
0.8684211	0.0012885	QPF-30	433.199
0.8947368	0.0014652	QPF-14	1011.265
0.9210526	0.0016862	QPF-35	317.767
0.9473684	0.0019716	QPF-3	569.232
0.9736842	0.0030847	QPF-38	412.359

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0003000	QPF-10
0.0526316	0.0003379	QPF-7
0.0789474	0.0004945	QPF-11
0.1052632	0.0005000	QPF-15
0.1315790	0.0005252	QPF-24
0.1578947	0.0007270	QPF-29
0.1842105	0.0007433	QPF-33
0.2105263	0.0008027	QPF-19
0.2368421	0.0009112	QPF-22
0.2631579	0.0009553	QPF-23
0.2894737	0.0010000	QPF-13
0.3157895	0.0010175	QPF-9
0.3421053	0.0010199	QPF-16
0.3684210	0.0011154	QPF-12
0.3947369	0.0011635	QPF-28
0.4210526	0.0014000	QPF-1
0.4473684	0.0014200	QPF-4
0.4736842	0.0014266	QPF-32
0.5000000	0.0015054	QPF-21
0.5263158	0.0016000	QPF-36
0.5526316	0.0017900	QPF-18
0.5789474	0.0018000	QPF-6
0.6052632	0.0020500	QPF-26
0.6315789	0.0020700	QPF-25
0.6578947	0.0020800	QPF-34
0.6842105	0.0022[illegible]	QPF-8
0.7105263	0.0027000	QPF-2
0.7368421	0.0028[illegible]	QPF-17
0.7631579	0.0030000	QPF-37
0.7894737	0.0032200	QPF-20
0.8157895	0.0034155	QPF-5
0.8421053	0.0035931	QPF-30
0.8684211	0.0037200	QPF-31
0.8947369	0.0051900	QPF-35
0.9210526	0.0052000	QPF-14
0.9473684	0.0062000	QPF-3
0.9736842	0.0130400	QPF-38

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0006639	QPF-7
0.0526316	0.0010433	QPF-11
0.0789474	0.0011248	QPF-24
0.1052632	0.0017136	QPF-29
0.1315790	0.0017649	QPF-33
0.1578947	0.0019549	QPF-19
0.1842105	0.0023168	QPF-22
0.2105263	0.0024703	QPF-23
0.2368421	0.0025000	QPF-9
0.2631579	0.0026958	QPF-16
0.2894737	0.0027000	QPF-28
0.3157895	0.0030000	QPF-12
0.3421053	0.0032000	QPF-10
0.3684210	0.0043000	QPF-1
0.3947369	0.0045000	QPF-13
0.4210526	0.0050000	QPF-15
0.4473684	0.0052100	QPF-32
0.4736842	0.0053700	QPF-21
0.5000000	0.0063000	QPF-6
0.5263158	0.0088300	QPF-18
0.5526316	0.0100000	QPF-2
0.5789474	0.0104200	QPF-34
0.6052632	0.0113000	QPF-26
0.6315789	0.0121200	QPF-37
0.6578947	0.0123100	QPF-4
0.6842105	0.0134600	QPF-36
0.7105263	0.0152500	QPF-8
0.7368421	0.0155000	QPF-20
0.7631579	0.0157000	QPF-5
0.7894737	0.0160000	QPF-17
0.8157895	0.0166000	QPF-30
0.8421053	0.0180800	QPF-31
0.8684211	0.0200200	QPF-25
0.8947368	0.0212000	QPF-14
0.9210526	0.0235500	QPF-35
0.9473684	0.0306000	QPF-3
0.9736842	0.0409700	QPF-38

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0015205	QPF-7
0.0526316	0.0027791	QPF-11
0.0789474	0.0030749	QPF-24
0.1052632	0.0053807	QPF-29
0.1315790	0.0055924	QPF-33
0.1578947	0.0063862	QPF-19
0.1842105	0.0079347	QPF-22
0.2105263	0.0086029	QPF-23
0.2368421	0.0095927	QPF-16
0.2631579	0.0108000	QPF-9
0.2894737	0.0117000	QPF-10
0.3157895	0.0141000	QPF-12
0.3421053	0.0151000	QPF-1
0.3684210	0.0156100	QPF-28
0.3947369	0.0156100	QPF-32
0.4210526	0.0162200	QPF-6
0.4473684	0.0164000	QPF-13
0.4736842	0.0202000	QPF-15
0.5000000	0.0213900	QPF-21
0.5263158	0.0264400	QPF-18
0.5526316	0.0270000	QPF-2
0.5789474	0.0306000	QPF-34
0.6052632	0.0320900	QPF-37
0.6315789	0.0345500	QPF-26
0.6578947	0.0346700	QPF-36
0.6842105	0.0362900	QPF-20
0.7105263	0.0378400	QPF-4
0.7368421	0.0422800	QPF-31
0.7631579	0.0430000	QPF-5
0.7894737	0.0435600	QPF-30
0.8157895	0.0485000	QPF-17
0.8421053	0.0524000	QPF-14
0.8684211	0.0545500	QPF-25
0.8947368	0.0591100	QPF-35
0.9210526	0.0629600	QPF-8
0.9473684	0.1027500	QPF-38
0.9736842	0.1208000	QPF-3

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0046000	QPF-7
0.0526316	0.0100000	QPF-11
0.0789474	0.0113000	QPF-24
0.1052632	0.0217000	QPF-29
0.1315790	0.0226000	QPF-33
0.1578947	0.0260000	QPF-19
0.1842105	0.0326000	QPF-22
0.2105263	0.0335000	QPF-10
0.2368421	0.0347000	QPF-1
0.2631579	0.0353000	QPF-23
0.2894737	0.0373500	QPF-6
0.3157895	0.0398000	QPF-16
0.3421053	0.0403000	QPF-32
0.3684210	0.0413000	QPF-12
0.3947369	0.0425000	QPF-13
0.4210526	0.0427000	QPF-9
0.4473684	0.0454000	QPF-28
0.4736842	0.0481000	QPF-15
0.5000000	0.0576900	QPF-21
0.5263159	0.0640000	QPF-2
0.5526316	0.0683600	QPF-18
0.5789474	0.0735900	QPF-34
0.6052632	0.0747500	QPF-36
0.6315789	0.0759800	QPF-37
0.6578947	0.0782700	QPF-20
0.6842105	0.0910500	QPF-4
0.7105263	0.0925300	QPF-31
0.7368421	0.0959954	QPF-3
0.7631579	0.0982000	QPF-5
0.7894737	0.1016900	QPF-26
0.8157895	0.1116548	QPF-8
0.8421053	0.1262800	QPF-30
0.8684211	0.1509000	QPF-14
0.8947368	0.1515000	QPF-25
0.9210526	0.1552000	QPF-17
0.9473684	0.1695700	QPF-35
0.9736842	0.2955100	QPF-38

3.1.6 QIF

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0714286	0.0002021	QIF-10	0.000
0.1428571	0.0003272	QIF-9	0.000
0.2142857	0.0003585	QIF-8	0.000
0.2857143	0.0004057	QIF-5	417.368
0.3571429	0.0004727	QIF-6	903.978
0.4285714	0.0005149	QIF-2	611.526
0.5000000	0.0007171	QIF-3	761.945
0.5714286	0.0007340	QIF-12	676.186
0.6428571	0.0007757	QIF-11	1068.323
0.7142857	0.0008004	QIF-7	422.757
0.7857143	0.0010113	QIF-13	957.199
0.8571429	0.0010472	QIF-4	1068.808
0.9285714	0.0015239	QIF-1	977.764

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0003809	QIF-10
0.1428571	0.0006402	QIF-9
0.2142857	0.0007102	QIF-8
0.2857143	0.0008205	QIF-5
0.3571429	0.0009500	QIF-2
0.4285714	0.0009665	QIF-6
0.5000000	0.0017000	QIF-3
0.5714286	0.0017108	QIF-12
0.6428571	0.0019004	QIF-7
0.7142857	0.0022800	QIF-4
0.7857143	0.0023100	QIF-13
0.8571429	0.0023500	QIF-11
0.9285714	0.0064200	QIF-1

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0007618	QIF-10
0.1428571	0.0014499	QIF-9
0.2142857	0.0016615	QIF-8
0.2857143	0.0021900	QIF-6
0.3571429	0.0022700	QIF-5
0.4285714	0.0036100	QIF-2
0.5000000	0.0067100	QIF-3
0.5714286	0.0068500	QIF-7
0.6428571	0.0068800	QIF-12
0.7142857	0.0081700	QIF-11
0.7857143	0.0128800	QIF-13
0.8571429	0.0135000	QIF-4
0.9285714	0.0209000	QIF-1

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0018235	QIF-10
0.1428571	0.0043173	QIF-9
0.2142857	0.0051674	QIF-8
0.2857143	0.0071800	QIF-5
0.3571429	0.0116800	QIF-2
0.4285714	0.0116800	QIF-6
0.5000000	0.0209700	QIF-11
0.5714286	0.0210300	QIF-3
0.6428571	0.0223500	QIF-12
0.7142857	0.0290300	QIF-7
0.7857143	0.0366300	QIF-4
0.8571429	0.0373000	QIF-13
0.9285714	0.0452500	QIF-1

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0056000	QIF-10
0.1428571	0.0169000	QIF-9
0.2142857	0.0206000	QIF-8
0.2857143	0.0222000	QIF-5
0.3571429	0.0281700	QIF-2
0.4285714	0.0403000	QIF-6
0.5000000	0.0451000	QIF-11
0.5714286	0.0473000	QIF-3
0.6428571	0.0531000	QIF-12
0.7142857	0.0749600	QIF-7
0.7857143	0.0902400	QIF-13
0.8571429	0.0969500	QIF-1
0.9285714	0.1029100	QIF-4

3.1.7 QPB

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0263158	0.0000605	QPB-2	234.693
0.0526316	0.0000736	QPB-21	168.451
0.0789474	0.0000925	QPB-34	126.945
0.1052632	0.0000977	QPB-16	180.774
0.1315790	0.0001038	QPB-1	289.791
0.1578947	0.0001040	QPB-22	232.411
0.1842105	0.0001101	QPB-33	159.106
0.2105263	0.0001271	QPB-9	402.182
0.2368421	0.0001373	QPB-5	236.968
0.2631579	0.0001476	QPB-3	338.489
0.2894737	0.0001697	QPB-12	300.594
0.3157895	0.0001718	QPB-26	382.900
0.3421053	0.0001734	QPB-18	56.498
0.3684210	0.0001753	QPB-25	70.108
0.3947369	0.0001787	QPB-4	199.988
0.4210526	0.0001884	QPB-14	246.687
0.4473684	0.0001917	QPB-8	133.976
0.4736842	0.0001938	QPB-29	80.455
0.5000000	0.0002082	QPB-23	255.928
0.5263158	0.0002140	QPB-28	37.851
0.5526316	0.0002193	QPB-15	175.056
0.5789474	0.0002194	QPB-27	114.235
0.6052632	0.0002308	QPB-39	42.441
0.6315789	0.0002654	QPB-38	140.202
0.6578947	0.0002726	QPB-30	136.152
0.6842105	0.0002738	QPB-36	107.628
0.7105263	0.0002920	QPB-13	45.800
0.7368421	0.0002939	QPB-19	66.190
0.7631579	0.0003025	QPB-11	60.037
0.7894737	0.0003126	QPB-6	105.059
0.8157895	0.0003312	QPB-10	225.807
0.8421053	0.0003453	QPB-24	114.948
0.8684211	0.0004587	QPB-7	78.666
0.8947368	0.0006473	QPB-17	15.325
0.9210526	0.0007483	QPB-20	179.169
0.9473684	0.0009100	QPB-37	55.934
0.9736842	0.0010939	QPB-32	102.307

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0000860	QPB-1
0.0526316	0.0000872	QPB-16
0.0789474	0.0000872	QPB-34
0.1052632	0.0001016	QPB-33
0.1315790	0.0001064	QPB-22
0.1578947	0.0001227	QPB-9
0.1842105	0.0001431	QPB-5
0.2105263	0.0001562	QPB-3
0.2368421	0.0001632	QPB-12
0.2631579	0.0001692	QPB-25
0.2894737	0.0001719	QPB-26
0.3157895	0.0001762	QPB-8
0.3421053	0.0001787	QPB-18
0.3684210	0.0001787	QPB-4
0.3947369	0.0001814	QPB-21
0.4210526	0.0001843	QPB-14
0.4473684	0.0001931	QPB-29
0.4736842	0.0002188	QPB-27
0.5000000	0.0002238	QPB-15
0.5263158	0.0002249	QPB-28
0.5526316	0.0002308	QPB-23
0.5789474	0.0002359	QPB-35
0.6052632	0.0002444	QPB-2
0.6315789	0.0002906	QPB-13
0.6578947	0.0003025	QPB-36
0.6842105	0.0003122	QPB-19
0.7105263	0.0003136	QPB-11
0.7368421	0.0003139	QPB-31
0.7631579	0.0003208	QPB-6
0.7894737	0.0003329	QPB-38
0.8157895	0.0003570	QPB-10
0.8421053	0.0003858	QPB-24
0.8684211	0.0005711	QPB-7
0.8947368	0.0009202	QPB-17
0.9210526	0.0011704	QPB-37
0.9473684	0.0014475	QPB-20
0.9736842	0.0026332	QPB-32

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0001140	QPB-2
0.0526316	0.0001518	QPB-21
0.0789474	0.0002040	QPB-1
0.1052632	0.0002067	QPB-16
0.1315790	0.0002067	QPB-34
0.1578947	0.0002421	QPB-33
0.1842105	0.0002989	QPB-9
0.2105263	0.0004515	QPB-25
0.2368421	0.0004781	QPB-8
0.2631579	0.0004879	QPB-18
0.2894737	0.0005461	QPB-29
0.3157895	0.0006200	QPB-22
0.3421053	0.0006595	QPB-27
0.3684210	0.0006828	QPB-15
0.3947369	0.0006877	QPB-28
0.4210526	0.0007401	QPB-[illegible]
0.4473684	0.0010261	QPB-13
0.4736842	0.0011000	QPB-[illegible]
0.5000000	0.0011480	QPB-[illegible]
0.5263158	0.0011575	QPB-11
0.5526316	0.0011990	QPB-[illegible]
0.5789474	0.0015200	QPB-3
0.6052632	0.0017000	QPB-4
0.6315789	0.0018000	QPB-12
0.6578947	0.0021000	QPB-30
0.6842105	0.0022000	QPB-14
0.7105263	0.0022000	QPB-23
0.7368421	0.0025000	QPB-36
0.7631579	0.0025000	QPB-35
0.7894737	0.0030000	QPB-26
0.8157895	0.0039000	QPB-24
0.8421053	0.0044000	QPB-10
0.8684211	0.0055000	QPB-7
0.8947368	0.0072870	QPB-37
0.9210526	0.0080000	QPB-17
0.9473684	0.0140000	QPB-20
0.9736842	0.0173000	QPB-32

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0002747	QPB-2
0.0526316	0.0003896	QPB-21
0.0789474	0.0005927	QPB-1
0.1052632	0.0006047	QPB-16
0.1315790	0.0006047	QPB-34
0.1578947	0.0007711	QPB-33
0.1842105	0.0008330	QPB-22
0.2105263	0.0010727	QPB-9
0.2368421	0.0014386	QPB-5
0.2631579	0.0017152	QPB-3
0.2894737	0.0018752	QPB-12
0.3157895	0.0020204	QPB-25
0.3421053	0.0020589	QPB-26
0.3684210	0.0021991	QPB-8
0.3947369	0.0022659	QPB-18
0.4210526	0.0022660	QPB-4
0.4473684	0.0024193	QPB-14
0.4736842	0.0026674	QPB-20
0.5000000	0.0034763	QPB-31
0.5263158	0.0036459	QPB-15
0.5526316	0.0036819	QPB-23
0.5789474	0.0038859	QPB-27
0.6052632	0.0040553	QPB-28
0.6315789	0.0062008	QPB-10
0.6578947	0.0067036	QPB-36
0.6842105	0.0071135	QPB-11
0.7105263	0.0071896	QPB-13
0.7368421	0.0071907	QPB-35
0.7631579	0.0074846	QPB-6
0.7894737	0.0075998	QPB-38
0.8157895	0.0095801	QPB-10
0.8421053	0.0104510	QPB-24
0.8684211	0.0132981	QPB-7
0.8947368	0.0350042	QPB-17
0.9210526	0.0449006	QPB-37
0.9473684	0.0546313	QPB-29
0.9736842	0.0859009	QPB-32

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0009394	QPB-2
0.0526316	0.0029000	QPB-21
0.0789474	0.0032000	QPB-34
0.1052632	0.0045000	QPB-16
0.1315790	0.0053000	QPB-22
0.1578947	0.0064000	QPB-33
0.1842105	0.0072000	QPB-9
0.2105263	0.0075000	QPB-1
0.2368421	0.0089000	QPB-5
0.2631579	0.0090000	QPB-26
0.2894737	0.0091000	QPB-3
0.3157895	0.0122000	QPB-14
0.3421053	0.0125000	QPB-4
0.3684210	0.0125000	QPB-18
0.3947369	0.0129000	QPB-12
0.4210526	0.0138000	QPB-25
0.4473684	0.0143000	QPB-27
0.4736842	0.0162000	QPB-8
0.5000000	0.0162000	QPB-15
0.5263158	0.0166000	QPB-29
0.5526316	0.0189000	QPB-28
0.5789474	0.0200000	QPB-20
0.6052632	0.0210000	QPB-30
0.6315789	0.0229000	QPB-31
0.6578947	0.0249000	QPB-36
0.6842105	0.0260000	QPB-17
0.7105263	0.0273000	QPB-10
0.7368421	0.0293000	QPB-11
0.7631579	0.0294000	QPB-19
0.7894737	0.0301000	QPB-6
0.8157895	0.0329000	QPB-24
0.8421053	0.0330000	QPB-13
0.8684211	0.0470000	QPB-7
0.8947369	0.0918000	QPB-17
0.9210526	0.0971000	QPB-37
0.9473684	0.1100000	QPB-20
0.9736842	0.1702000	QPB-32

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0059495	QPB-2
0.0526316	0.0106286	QPB-21
0.0789474	0.0203229	QPB-1
0.1052632	0.0208943	QPB-16
0.1315790	0.0208948	QPB-34
0.1578947	0.0285527	WPB-33
0.1842105	0.0312838	QPB-22
0.2105263	0.0411680	QPB-9
0.2368421	0.0543390	QPB-5
0.2631579	0.0629884	QPB-3
0.2894737	0.0675631	QPB-12
0.3157895	0.0714744	QPB-25
0.3421053	0.0732469	QPB-26
0.3684210	0.0760071	QPB-8
0.3947369	0.0776282	QPB-18
0.4210526	0.0776299	QPB-4
0.4473684	0.0812058	QPB-14
0.4736842	0.0866223	QPB-29
0.5000000	0.1016536	QPB-27
0.5263158	0.1043916	QPB-15
0.5526316	0.1049597	QPB-28
0.5789474	0.1080647	QPB-23
0.6052632	0.1006798	QPB-39
0.6315789	0.1349124	QPB-13
0.6578947	0.1393089	QPB-36
0.6842105	0.1426685	QPB-19
0.7105263	0.1432219	QPB-11
0.7368421	0.1432289	QPB-30
0.7631579	0.1455233	QPB-6
0.7894736	0.1490455	QPB-38
0.8157895	0.1588401	QPB-10
0.8421053	0.1634132	QPB-24
0.8684211	0.1933264	QPB-7
0.8947368	0.2198048	QPB-17
0.9210526	0.2135775	QPB-37
0.9473684	0.2421257	QPB-20
0.9736842	0.2778250	QPB-32

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0111000	QPB-2
0.0526316	0.0177000	QPB-21
0.0789474	0.0262000	QPB-1
0.1052632	0.0282000	QPB-22
0.1315790	0.0290000	QPB-16
0.1573947	0.0297000	QPB-9
0.1842105	0.0325000	QPB-34
0.2105263	0.0381000	QPB-33
0.2368421	0.0402000	QPB-3
0.2631579	0.0449000	QPB-5
0.2894737	0.0505000	QPB-12
0.3157895	0.0623000	QPB-26
0.3421053	0.0788000	QPB-14
0.3684210	0.0818000	QPB-4
0.3947369	0.0850000	QPB-23
0.4210526	0.0936000	QPB-8
0.4473684	0.1100000	QPB-[illegible]
0.4736842	0.1204000	QPB-25
0.5000000	0.1250000	QPB-[illegible]
0.5263158	0.1360000	QPB-[illegible]
0.5526316	0.1430000	QPB-10
0.5789474	0.1451000	QPB-[illegible]
0.6052632	0.1470000	QPB-[illegible]
0.6315789	0.1643000	QPB-15
0.6578947	0.1659000	QPB-39
0.6842105	0.[illegible]	QPB-[illegible]
0.7105263	0.1990000	QPB-[illegible]
0.7368421	0.[illegible]	QPB-[illegible]
0.7631579	0.2369000	QPB-11
0.7894737	0.2410000	QPB-19
0.8157895	0.2530000	QPB-24
0.8421053	0.2835147	QPB-7
0.8684211	0.2837000	QPB-13
0.8947368	0.3471703	QPB-17
0.9210526	0.3905895	QPB-37
0.9473684	0.4367223	QPB-20
0.9736842	0.6114294	QPB-32

3.1.8 QIB

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0769231	0.0000684	QIB-2	225.475
0.1538462	0.0001120	QIB-7	73.555
0.2307692	0.0001246	QIB-10	0.000
0.3076923	0.0001314	QIB-8	66.932
0.3846154	0.0001352	QIB-12	0.000
0.4615385	0.0001595	QIB-9	50.443
0.5384616	0.0002028	QIB-5	197.908
0.6153846	0.0002661	QIB-6	191.608
0.6923077	0.0002812	QIB-1	62.624
0.7692308	0.0004791	QIB-3	42.286
0.8461539	0.0006671	QIB-11	90.435
0.9230769	0.0008087	QIB-4	194.944

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0001015	QIB-7
0.1538462	0.0001228	QIB-10
0.2307692	0.0001321	QIB-8
0.3076923	0.0001329	QIB-12
0.3846154	0.0001481	QIB-9
0.4615385	0.0001971	QIB-2
0.5384616	0.0002301	QIB-5
0.6153846	0.0003588	QIB-1
0.6923077	0.0003861	QIB-6
0.7692308	0.0006661	QIB-3
0.8461539	0.0011832	QIB-11
0.9230769	0.0016638	QIB-4

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0001399	QIB-2
0.1538462	0.0002419	QIB-7
0.2307692	0.0002992	QIB-10
0.3076923	0.0003265	QIB-8
0.3846154	0.0003268	QIB-12
0.4615385	0.0003770	QIB-9
0.5384616	0.0019000	QIB-5
0.6153846	0.0024000	QIB-1
0.6923077	0.0024000	QIB-6
0.7692308	0.0047000	QIB-3
0.8461539	0.0088000	QIB-11
0.9230769	0.0131000	QIB-4

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0003507	QIB-2
0.1538462	0.0007699	QIB-7
0.2307692	0.0010745	QIB-10
0.3076923	0.0012316	QIB-8
0.3846154	0.0012453	QIB-12
0.4615385	0.0015386	QIB-9
0.5384616	0.0038631	QIB-5
0.6153846	0.0092010	QIB-1
0.6923077	0.0104623	QIB-6
0.7692308	0.0237712	QIB-3
0.8461539	0.0453781	QIB-11
0.9230769	0.0614556	QIB-4

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0028000	QIB-2
0.1538462	0.0058000	QIB-7
0.2307692	0.0058100	QIB-8
0.3076923	0.0065700	QIB-10
0.3846154	0.0078200	QIB-12
0.4615385	0.0100000	QIB-9
0.5384616	0.0113000	QIB-5
0.6153846	0.0154000	QIB-6
0.6923077	0.0300000	QIB-1
0.7692308	0.0749000	QIB-3
0.8461539	0.1268000	QIB-11
0.9230769	0.1801000	QIB-4

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0088308	QIB-2
0.1538462	0.0285002	QIB-7
0.2307692	0.0412385	QIB-10
0.3076923	0.0471538	QIB-8
0.3846154	0.0476497	QIB-12
0.4615385	0.0575811	QIB-9
0.5384616	0.1077237	QIB-5
0.6153846	0.1566901	QIB-1
0.6923077	0.1634675	QIB-6
0.7692308	0.2026949	QIB-3
0.8461539	0.2320948	QIB-11
0.9230769	0.2494196	QIB-4

CUM PROB	CRACK DEPTH	SPECIMEN
0.0769231	0.0125000	QIB-2
0.1538462	0.0615000	QIB-7
0.2307692	0.1180000	QIB-8
0.3076923	0.1300000	QIB-9
0.3846154	0.1381334	QIB-10
0.4615385	0.1480002	QIB-12
0.5384616	0.1519000	QIB-5
0.6153846	0.2413443	QIB-1
0.6923077	0.2471841	QIB-6
0.7692308	0.3012397	QIB-3
0.8461539	0.3927432	QIB-11
0.9230769	0.4712798	QIB-4

3.1.9 ZWPF

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0322581	0.0000994	ZWPF-19	0.000
0.0645161	0.0001004	ZWPF-12	0.000
0.0967742	0.0001020	ZWPF-26	0.000
0.1290323	0.0001040	ZWPF-13	0.000
0.1612903	0.0001113	ZWPF-16	0.000
0.1935484	0.0001140	ZWPF-17	0.000
0.2258064	0.0001224	ZWPF-11	0.000
0.2580645	0.0001277	ZWPF-15	0.000
0.2903226	0.0001868	ZWPF-9	0.000
0.3225806	0.0002388	ZWPF-22	0.000
0.3548387	0.0002500	ZWPF-25	0.000
0.3870968	0.0002643	ZWPF-21	0.000
0.4193548	0.0002779	ZWPF-4	0.000
0.4516129	0.0003119	ZWPF-7	0.000
0.4838710	0.0003177	ZWPF-20	0.000
0.5161290	0.0003203	ZWPF-23	0.000
0.5483871	0.0003381	ZWPF-3	0.000
0.5806451	0.0003405	ZWPF-18	0.000
0.6129032	0.0003503	ZWPF-24	0.000
0.6451613	0.0003527	ZWPF-28	0.000
0.6774194	0.0003576	ZWPF-14	0.000
0.7096774	0.0003578	ZWPF-8	0.000
0.7419355	0.0004194	ZWPF-27	0.000
0.7741935	0.0004341	ZWPF-2	0.000
0.8064516	0.0004447	ZWPF-1	0.000
0.8387097	0.0004651	ZWPF-29	0.000
0.8709677	0.0004698	ZWPF-5	0.000
0.9032258	0.0005346	ZWPF-6	0.000
0.9354839	0.0005695	ZWPF-30	0.000
0.9677419	0.0007974	ZWPF-10	0.000

CUM PROB	CRACK DEPTH	SPECIMEN
0.0322581	0.0001385	ZWPF-19
0.0645161	0.0001478	ZWPF-12
0.0967742	0.0001562	ZWPF-26
0.1290323	0.0001638	ZWPF-13
0.1612903	0.0001866	ZWPF-16
0.1935484	0.0001940	ZWPF-17
0.2258064	0.0002149	ZWPF-11
0.2580645	0.0002272	ZWPF-15
0.2903226	0.0003503	ZWPF-9
0.3225806	0.0004545	ZWPF-22
0.3548387	0.0004772	ZWPF-25
0.3870968	0.0005065	ZWPF-21
0.4193548	0.0005347	ZWPF-4
0.4516129	0.0006069	ZWPF-7
0.4838710	0.0006195	ZWPF-20
0.5161290	0.0006251	ZWPF-23
0.5483871	0.0006643	ZWPF-3
0.5806451	0.0006698	ZWPF-18
0.6129032	0.0006916	ZWPF-24
0.6451613	0.0006971	ZWPF-28
0.6774194	0.0007083	ZWPF-14
0.7096774	0.0007087	ZWPF-8
0.7419355	0.0008535	ZWPF-27
0.7741935	0.0008894	ZWPF-2
0.8064516	0.0009157	ZWPF-1
0.8387097	0.0009673	ZWPF-29
0.8709677	0.0009792	ZWPF-5
0.9032258	0.0011505	ZWPF-6
0.9354839	0.0012466	ZWPF-30
0.9677419	0.0019378	ZWPF-10

CUM PROB	CRACK DEPTH	SPECIMEN
0.0322581	0.0002510	ZWPF-19
0.0645161	0.0002709	ZWPF-12
0.0967742	0.0002883	ZWPF-26
0.1290323	0.0003039	ZWPF-13
0.1612903	0.0003499	ZWPF-16
0.1935484	0.0003647	ZWPF-17
0.2258064	0.0004064	ZWPF-11
0.2580645	0.0004312	ZWPF-15
0.2903226	0.0006916	ZWPF-9
0.3225806	0.0009405	ZWPF-22
0.3548387	0.0009984	ZWPF-25
0.3870968	0.0010750	ZWPF-21
0.4193548	0.0011506	ZWPF-4
0.4516129	0.0013529	ZWPF-7
0.4838710	0.0013892	ZWPF-20
0.5161290	0.0014058	ZWPF-23
0.5483871	0.0015218	ZWPF-3
0.5806451	0.0015383	ZWPF-18
0.6129032	0.0016046	ZWPF-24
0.6451613	0.0016211	ZWPF-28
0.6774194	0.0016556	ZWPF-14
0.7096774	0.0016568	ZWPF-8
0.7419355	0.0021221	ZWPF-27
0.7741935	0.0022427	ZWPF-2
0.8064516	0.0023321	ZWPF-1
0.8387097	0.0025103	ZWPF-29
0.8709677	0.0025520	ZWPF-5
0.9032258	0.0031695	ZWPF-6
0.9354839	0.0035295	ZWPF-30
0.9677419	0.0063140	ZWPF-10

CUM PROB	CRACK DEPTH	SPECIMEN
0.0322581	0.0004793	ZWPF-19
0.0645161	0.0005202	ZWPF-12
0.0967742	0.0005566	ZWPF-26
0.1290323	0.0005898	ZWPF-13
0.1612903	0.0006909	ZWPF-16
0.1935484	0.0007245	ZWPF-17
0.2258064	0.0008221	ZWPF-11
0.2580645	0.0008823	ZWPF-15
0.2903226	0.0016045	ZWPF-9
0.3225806	0.0024173	ZWPF-22
0.3548387	0.0026195	ZWPF-25
0.3870968	0.0028931	ZWPF-21
0.4193548	0.0031699	ZWPF-4
0.4516129	0.0039372	ZWPF-7
0.4838710	0.0040788	ZWPF-20
0.5161290	0.0041435	ZWPF-23
0.5483871	0.0046028	ZWPF-3
0.5806451	0.0046691	ZWPF-18
0.6129032	0.0049360	ZWPF-24
0.6451613	0.0050031	ZWPF-28
0.6774194	0.0051436	ZWPF-14
0.7096774	0.0051484	ZWPF-8
0.7419355	0.0070965	ZWPF-27
0.7741935	0.0076145	ZWPF-2
0.8064516	0.0080012	ZWPF-1
0.8387097	0.0087775	ZWPF-29
0.8709677	0.0089604	ZWPF-5
0.9032258	0.0116970	ZWPF-6
0.9354839	0.0133691	ZWPF-30
0.9677419	0.0256672	ZWPF-10

CUM PROB	CRACK DEPTH	SPECIMEN
0.0322581	0.0010000	ZWPF-19
0.0645161	0.0011100	ZWPF-12
0.0967742	0.0012000	ZWPF-26
0.1290323	0.0013000	ZWPF-13
0.1612903	0.0016000	ZWPF-16
0.1935484	0.0017000	ZWPF-17
0.2258064	0.0020000	ZWPF-11
0.2580645	0.0022000	ZWPF-15
0.2903226	0.0049500	ZWPF-9
0.3225806	0.0084000	ZWPF-22
0.3548387	0.0093000	ZWPF-25
0.3870968	0.0105000	ZWPF-21
0.4193548	0.0117200	ZWPF-4
0.4516129	0.0150400	ZWPF-7
0.4838710	0.0157000	ZWPF-20
0.5161290	0.0160000	ZWPF-23
0.5483871	0.0181000	ZWPF-3
0.5806451	0.0184000	ZWPF-18
0.6129032	0.0196000	ZWPF-24
0.6451613	0.0199000	ZWPF-28
0.6774194	0.0207000	ZWPF-14
0.7096774	0.0207200	ZWPF-8
0.7419355	0.0292000	ZWPF-27
0.7741935	0.0313000	ZWPF-2
0.8064516	0.0328700	ZWPF-1
0.8387097	0.0350000	ZWPF-29
0.8709677	0.0367300	ZWPF-5
0.9032258	0.0476000	ZWPF-6
0.9354839	0.0530000	ZWPF-30
0.9677419	0.0659700	ZWPF-10

3.2 TASK II
3.2.1 XWPF

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0263158	0.0000992	XWPF-20	370.162
0.0526316	0.0001809	XWPF-10	1028.881
0.0789474	0.0001871	XWPF-14	815.549
0.1052632	0.0002041	XWPF-26	583.748
0.1315790	0.0002186	XWPF-23	234.628
0.1578947	0.0002234	XWPF-35	909.402
0.1842105	0.0002235	XWPF-4	1204.732
0.2105263	0.0002326	XWPF-37	563.452
0.2368421	0.0002410	XWPF-13	586.857
0.2631579	0.0002429	XWPF-6	1144.803
0.2894737	0.0002488	XWPF-21	1076.590
0.3157895	0.0002503	XWPF-27	602.964
0.3421053	0.0002525	XWPF-28	468.598
0.3684210	0.0002592	XWPF-17	551.560
0.3947369	0.0002607	XWPF-33	1032.939
0.4210526	0.0002653	XWPF-19	290.945
0.4473684	0.0002665	XWPF-30	284.161
0.4736842	0.0002803	XWPF-25	1581.840
0.5000000	0.0003168	XWPF-12	322.837
0.5263158	0.0003275	XWPF-5	1056.670
0.5526316	0.0003421	XWPF-11	426.991
0.5789474	0.0003521	XWPF-2	335.253
0.6052632	0.0003746	XWPF-16	817.674
0.6315789	0.0004191	XWPF-24	1378.253
0.6578947	0.0004829	XWPF-29	855.571
0.6842105	0.0005128	XWPF-22	377.889
0.7105263	0.0005160	XWPF-1	1210.525
0.7368421	0.0005377	XWPF-15	371.642
0.7631579	0.0005600	XWPF-8	743.631
0.7894737	0.0005695	XWPF-34	218.013
0.8157895	0.0005828	XWPF-3	122.707
0.8421053	0.0006166	XWPF-31	553.349
0.8684211	0.0006277	XWPF-7	291.702
0.8947368	0.0007015	XWPF-18	481.572
0.9210526	0.0007023	XWPF-9	246.651
0.9473684	0.0012606	XWPF-38	605.658
0.9736842	0.0013870	XWPF-36	496.284

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0002311	XWPF-20
0.0526316	0.0005546	XWPF-10
0.0789474	0.0006827	XWPF-26
0.1052632	0.0008374	XWPF-14
0.1315790	0.0008549	XWPF-33
0.1578947	0.0009000	XWPF-37
0.1842105	0.0009079	XWPF-13
0.2105263	0.0011000	XWPF-27
0.2368421	0.0011148	XWPF-23
0.2631579	0.0012000	XWPF-17
0.2894737	0.0012000	XWPF-30
0.3157895	0.0013000	XWPF-19
0.3421053	0.0013000	XWPF-28
0.3684210	0.0013000	XWPF-35
0.3947369	0.0013965	XWPF-12
0.4210526	0.0014276	XWPF-2
0.4473684	0.0016079	XWPF-29
0.4736842	0.0017000	XWPF-21
0.5000000	0.0018000	XWPF-6
0.5263158	0.0019000	XWPF-4
0.5526316	0.0021000	XWPF-11
0.5789474	0.0023000	XWPF-5
0.6052632	0.0028000	XWPF-16
0.6315789	0.0028000	XWPF-25
0.6578947	0.0032000	XWPF-22
0.6842105	0.0037000	XWPF-3
0.7105263	0.0037000	XWPF-15
0.7368421	0.0038000	XWPF-7
0.7631579	0.0038000	XWPF-34
0.7894737	0.0040000	XWPF-18
0.8157895	0.0041000	XWPF-24
0.8421053	0.0050000	XWPF-8
0.8684211	0.0051000	XWPF-31
0.8947368	0.0054709	XWPF-9
0.9210526	0.0056000	XWPF-1
0.9473684	0.0125000	XWPF-38
0.9736842	0.0141000	XWPF-36

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0010000	XWPF-20
0.0526316	0.0026000	XWPF-14
0.0789474	0.0037000	XWPF-10
0.1052632	0.0050000	XWPF-4
0.1315790	0.0053000	XWPF-26
0.1578947	0.0055000	XWPF-23
0.1842105	0.0059000	XWPF-13
0.2105263	0.0060000	XWPF-35
0.2368421	0.0063000	XWPF-28
0.2631579	0.0070000	XWPF-30
0.2894737	0.0075000	XWPF-37
0.3157895	0.0079000	XWPF-19
0.3421053	0.0079000	XWPF-21
0.3684210	0.0080000	XWPF-27
0.3947369	0.0081000	XWPF-6
0.4210526	0.0087000	XWPF-33
0.4473684	0.0090000	XWPF-17
0.4736842	0.0093000	XWPF-25
0.5000000	0.0102000	XWPF-11
0.5263158	0.0112000	XWPF-12
0.5526316	0.0116000	XWPF-16
0.5789474	0.0118000	XWPF-5
0.6052632	0.0144000	XWPF-24
0.6315789	0.0148000	XWPF-2
0.6578947	0.0176000	XWPF-22
0.6842105	0.0190000	XWPF-15
0.7105263	0.0220000	XWPF-8
0.7368421	0.0225000	XWPF-34
0.7631579	0.0233000	XWPF-1
0.7894737	0.0252000	XWPF-29
0.8157895	0.0253000	XWPF-3
0.8421053	0.0258000	XWPF-31
0.8684211	0.0345000	XWPF-7
0.8947368	0.0370000	XWPF-9
0.9210526	0.0380000	XWPF-18
0.9473684	0.0464000	XWPF-36
0.9736842	0.0513000	XWPF-38

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0060000	XWPF-20
0.0526316	0.0155000	XWPF-10
0.0789474	0.0223000	XWPF-26
0.1052632	0.0228000	XWPF-4
0.1315790	0.0250000	XWPF-35
0.1578947	0.0269000	XWPF-25
0.1842105	0.0275000	XWPF-21
0.2105263	0.0292000	XWPF-6
0.2368421	0.0295000	XWPF-33
0.2631579	0.0309000	XWPF-37
0.2894737	0.0332000	XWPF-17
0.3157895	0.0336000	XWPF-27
0.3421053	0.0364000	XWPF-5
0.3684210	0.0384000	XWPF-28
0.3947369	0.0399000	XWPF-24
0.4210526	0.0403000	XWPF-23
0.4473684	0.0418000	XWPF-19
0.4736842	0.0438244	XWPF-13
0.5000000	0.0470000	XWPF-1
0.5263158	0.0529000	XWPF-11
0.5526316	0.0556000	XWPF-29
0.5789474	0.0564000	XWPF-2
0.6052632	0.0576000	XWPF-30
0.6315789	0.0645038	XWPF-12
0.6578947	0.0653000	XWPF-31
0.6842105	0.0714000	XWPF-14
0.7105263	0.0777502	XWPF-16
0.7368421	0.0825000	XWPF-15
0.7631579	0.0870000	XWPF-22
0.7894737	0.1046440	XWPF-8
0.8157895	0.1101000	XWPF-36
0.8421053	0.1171000	XWPF-38
0.8684211	0.1253000	XWPF-9
0.8947368	0.1253000	XWPF-34
0.9210526	0.1382000	XWPF-18
0.9473684	0.1481000	XWPF-3
0.9736842	0.1559000	XWPF-7

CUM PROB	CRACK DEPTH	SPECIMEN
0.0263158	0.0299000	XWPF-20
0.0526316	0.0670000	XWPF-6
0.0789474	0.0690000	XWPF-25
0.1052632	0.0760000	XWPF-21
0.1315790	0.0817000	XWPF-35
0.1578947	0.0838000	XWPF-27
0.1842105	0.0910000	XWPF-1
0.2105263	0.0980000	XWPF-33
0.2368421	0.0992000	XWPF-5
0.2631579	0.1004000	XWPF-10
0.2894737	0.1016000	XWPF-24
0.3157895	0.1034000	XWPF-4
0.3421053	0.1125000	XWPF-19
0.3684210	0.1138000	XWPF-37
0.3947369	0.1316000	XWPF-17
0.4210526	0.1318000	XWPF-26
0.4473684	0.1319586	XWPF-14
0.4736842	0.1333000	XWPF-11
0.5000000	0.1347000	XWPF-31
0.5263158	0.1360114	XWPF-13
0.5526316	0.1383000	XWPF-29
0.5789474	0.1453856	XWPF-23
0.6052632	0.1543610	XWPF-12
0.6315789	0.1549587	XWPF-30
0.6578947	0.1638272	XWPF-16
0.6842105	0.1739000	XWPF-2
0.7105263	0.1870564	XWPF-8
0.7368421	0.1872405	XWPF-22
0.7631579	0.2186821	XWPF-18
0.7894737	0.2370540	XWPF-3
0.8157895	0.2433000	XWPF-28
0.8421053	0.2580733	XWPF-7
0.8684211	0.2665000	XWPF-15
0.8947368	0.2798529	XWPF-36
0.9210526	0.2953000	XWPF-38
0.9473684	0.3030000	XWPF-34
0.9736842	0.3149000	XWPF-9

TEST SERIES: XWPB

NO.	EIFS	CUM PROB
1	0.022	0.0323
2	0.024	0.0645
3	0.030	0.0968
4	0.034	0.1290
5	0.035	0.1613
6	0.039	0.1935
7	0.039	0.2258
8	0.042	0.2581
9	0.042	0.2903
10	0.044	0.3226
11	0.044	0.3548
12	0.046	0.3871
13	0.055	0.4194
14	0.058	0.4516
15	0.061	0.4839
16	0.063	0.5161
17	0.063	0.5484
18	0.094	0.5806
19	0.123	0.6129
20	0.123	0.6452
21	0.130	0.6774
22	0.145	0.7097
23	0.160	0.7419
24	0.220	0.7742
25	0.220	0.8065
26	0.430	0.8387
27	0.616	0.8710
28	0.620	0.9032
29	0.920	0.9355
30	1.070	0.9677

3.2.3 XQPF

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0256410	0.0000091	XQPF-23	0.000
0.0512821	0.0000271	XQPF-3	0.000
0.0769231	0.0000469	XQPF-14	0.000
0.1025641	0.0000475	XQPF-1	0.000
0.1282051	0.0000493	XQPF-22	0.000
0.1538462	0.0000583	XQPF-16	0.000
0.1794872	0.0000585	XQPF-20	0.000
0.2051282	0.0000599	XQPF-37	0.000
0.2307692	0.0000664	XQPF-17	0.000
0.2564103	0.0000664	XQPF-18	0.000
0.2820513	0.0000671	XQPF-15	0.000
0.3076923	0.0000707	XQPF-10	0.000
0.3333333	0.0000707	XQPF-11	0.000
0.3589744	0.0000719	XQPF-5	0.000
0.3846154	0.0000944	XQPF-13	443.102
0.4102564	0.0001139	XQPF-19	1369.017
0.4358974	0.0001340	XQPF-21	1181.869
0.4615385	0.0001688	XQPF-24	1717.311
0.4871795	0.0001701	XQPF-2	855.180
0.5128205	0.0002074	XQPF-29	2180.192
0.5384616	0.0002083	XQPF-12	2094.326
0.5641026	0.0002093	XQPF-6	788.419
0.5897436	0.0002109	XQPF-36	1365.119
0.6153846	0.0002283	XQPF-26	2432.168
0.6410257	0.0002667	XQPF-25	880.506
0.6666667	0.0003328	XQPF-4	1511.194
0.6923077	0.0003751	XQPF-27	882.390
0.7179487	0.0005942	XQPF-9	987.326
0.7435898	0.0006009	XQPF-31	502.198
0.7692308	0.0006029	XQPF-30	761.541
0.7948718	0.0006580	XQPF-35	572.604
0.8205128	0.0008454	XQPF-34	969.157
0.8461539	0.0009540	XQPF-28	1372.311
0.8717949	0.0009905	XQPF-33	266.887
0.8974359	0.0010975	XQPF-32	78.522
0.9230769	0.0011985	XQPF-38	1028.827
0.9487180	0.0013263	XQPF-7	733.851
0.9743590	0.0030380	XQPF-8	249.389

CUM PROB	CRACK DEPTH	SPECIMEN
0.0256410	0.0000555	XQPF-3
0.0512821	0.0000973	XQPF-14
0.0769231	0.0000984	XQPF-1
0.1025641	0.0001023	XQPF-22
0.1282051	0.0001214	XQPF-16
0.1538462	0.0001218	XQPF-20
0.1794872	0.0001249	XQPF-37
0.2051282	0.0001398	XQPF-17
0.2307692	0.0001398	XQPF-18
0.2564103	0.0001414	XQPF-15
0.2820513	0.0001501	XQPF-10
0.3076923	0.0001501	XQPF-11
0.3333333	0.0001530	XQPF-5
0.3589744	0.0002145	XQPF-13
0.3846154	0.0002788	XQPF-19
0.4102564	0.0003558	XQPF-21
0.4358974	0.0005117	XQPF-24
0.4615385	0.0006000	XQPF-2
0.4871795	0.0006369	XQPF-36
0.5128205	0.0006419	XQPF-6
0.5384616	0.0007131	XQPF-29
0.5641026	0.0007718	XQPF-25
0.5897436	0.0008325	XQPF-26
0.6153846	0.0010852	XQPF-27
0.6410257	0.0011165	XQPF-4
0.6666667	0.0020000	XQPF-12
0.6923077	0.0020224	XQPF-9
0.7179487	0.0024557	XQPF-30
0.7435898	0.0025823	XQPF-34
0.7692308	0.0032448	XQPF-35
0.7948718	0.0047000	XQPF-31
0.8205128	0.0075715	XQPF-33
0.8461539	0.0090078	XQPF-32
0.8717949	0.0095086	XQPF-7
0.8974359	0.0168000	XQPF-38
0.9230769	0.0176000	XQPF-28
0.9487180	0.0245000	XQPF-8
0.9743590	0.1390000	XQPF-23

CUM PROB	CRACK DEPTH	SPECIMEN
0.0256410	0.0001154	XQPF-3
0.0512821	0.0002232	XQPF-14
0.0769231	0.0002268	XQPF-1
0.1025641	0.0002390	XQPF-22
0.1282051	0.0003061	XQPF-16
0.1538462	0.0003077	XQPF-20
0.1794872	0.0003195	XQPF-37
0.2051282	0.0003796	XQPF-17
0.2307692	0.0003796	XQPF-18
0.2564103	0.0003867	XQPF-15
0.2820513	0.0004244	XQPF-10
0.3076923	0.0004244	XQPF-11
0.3333333	0.0004376	XQPF-5
0.3589744	0.0007529	XQPF-13
0.3846154	0.0011442	XQPF-19
0.4102564	0.0016683	XQPF-21
0.4358974	0.0038587	XQPF-36
0.4615385	0.0040000	XQPF-2
0.4871795	0.0049861	XQPF-25
0.5128205	0.0063000	XQPF-24
0.5384616	0.0072000	XQPF-6
0.5641026	0.0103000	XQPF-12
0.5897436	0.0165000	XQPF-4
0.6153846	0.0170000	XQPF-26
0.6410257	0.0176000	XQPF-29
0.6666667	0.0240000	XQPF-31
0.6923077	0.0262000	XQPF-27
0.7179487	0.0270000	XQPF-30
0.7435898	0.0270000	XQPF-35
0.7692308	0.0292000	XQPF-9
0.7948718	0.0368000	XQPF-34
0.8205128	0.0381000	XQPF-28
0.8461539	0.0384000	XQPF-38
0.8717949	0.0432000	XQPF-7
0.8974359	0.0451000	XQPF-33
0.9230769	0.0500000	XQPF-32
0.9487180	0.0954000	XQPF-8
0.9743590	0.2085000	XQPF-23

CUM PROB	CRACK DEPTH	SPECIMEN
0.0256410	0.0002840	XQPF-3
0.0512821	0.0008029	XQPF-14
0.0769231	0.0008235	XQPF-1
0.1025641	0.0008958	XQPF-22
0.1282051	0.0013242	XQPF-16
0.1538462	0.0013351	XQPF-20
0.1794872	0.0014146	XQPF-37
0.2051282	0.0018397	XQPF-17
0.2307692	0.0018397	XQPF-18
0.2564103	0.0018913	XQPF-15
0.2820513	0.0021719	XQPF-10
0.3076923	0.0021719	XQPF-11
0.3333333	0.0022713	XQPF-5
0.3589744	0.0048265	XQPF-13
0.3846154	0.0110000	XQPF-19
0.4102564	0.0158000	XQPF-24
0.4358974	0.0161000	XQPF-21
0.4615385	0.0168000	XQPF-2
0.4871795	0.0215000	XQPF-12
0.5128205	0.0259000	XQPF-26
0.5384616	0.0268000	XQPF-29
0.5641026	0.0290000	XQPF-6
0.5897436	0.0302000	XQPF-36
0.6153846	0.0366000	XQPF-4
0.6410257	0.0387000	XQPF-25
0.6666667	0.0477000	XQPF-27
0.6923077	0.0584000	XQPF-9
0.7179487	0.0610000	XQPF-28
0.7435898	0.0636000	XQPF-34
0.7692308	0.0678000	XQPF-30
0.7948718	0.0815000	XQPF-35
0.8205128	0.0884000	XQPF-38
0.8461539	0.1068000	XQPF-31
0.8717949	0.1313000	XQPF-33
0.8974359	0.1500000	XQPF-32
0.9230769	0.1760000	XQPF-7
0.9487180	0.3390000	XQPF-8
0.9743590	5.8771262	XQPF-23

CUM PROB	CRACK DEPTH	SPECIMEN
0.0256410	0.0000000	XQPF-11
0.0512821	0.0000000	XQPF-18
0.0769231	0.0011200	XQPF-3
0.1025641	0.0052000	XQPF-14
0.1282051	0.0054200	XQPF-1
0.1538462	0.0060000	XQPF-22
0.1794872	0.0097000	XQPF-16
0.2051282	0.0098000	XQPF-20
0.2307692	0.0105000	XQPF-37
0.2564103	0.0141000	XQPF-17
0.2820513	0.0145000	XQPF-15
0.3076923	0.0167000	XQPF-10
0.3333333	0.0176000	XQPF-5
0.3589744	0.0203000	XQPF-19
0.3846154	0.0267000	XQPF-13
0.4102564	0.0324000	XQPF-21
0.4358974	0.0355000	XQPF-12
0.4615385	0.0415000	XQPF-24
0.4871795	0.0424000	XQPF-29
0.5128205	0.0426000	XQPF-26
0.5384616	0.0605000	XQPF-36
0.5641026	0.0616000	XQPF-2
0.5897436	0.0676000	XQPF-6
0.6153846	0.0751000	XQPF-4
0.6410257	0.0790000	XQPF-25
0.6666667	0.1185000	XQPF-27
0.6923077	0.1332000	XQPF-28
0.7179487	0.1669000	XQPF-9
0.7435898	0.1759000	XQPF-34
0.7692308	0.1962000	XQPF-30
0.7948718	0.2149797	XQPF-31
0.8205128	0.2530000	XQPF-35
0.8461539	0.2624000	XQPF-38
0.8717949	0.3072686	XQPF-33
0.8974359	0.3651741	XQPF-32
0.9230769	0.3881953	XQPF-7

3.2.4 XOPB

TEST SERIES: XOPB

NO.	EIFS	CUM PROB
1	0.006	0.0312
2	0.007	0.0625
3	0.008	0.0937
4	0.009	0.1250
5	0.009	0.1562
6	0.009	0.1875
7	0.009	0.2187
8	0.010	0.2500
9	0.012	0.2812
10	0.013	0.3125
11	0.014	0.3437
12	0.016	0.3750
13	0.016	0.4062
14	0.016	0.4375
15	0.016	0.4687
16	0.018	0.5000
17	0.020	0.5312
18	0.022	0.5625
19	0.024	0.5937
20	0.024	0.6250
21	0.024	0.6562
22	0.024	0.6875
23	0.027	0.7187
24	0.030	0.7500
25	0.033	0.7812
26	0.037	0.8125
27	0.037	0.8437
28	0.042	0.8750
29	0.044	0.9062
30	0.050	0.9375
31	0.053	0.9687

3.3 TASK III

3.3.1 YWPF

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0344828	0.0000641	YWPF-10	0.000
0.0689655	0.0001021	YWPF-3	1086.162
0.1034483	0.0001094	YWPF-17	1058.787
0.1379310	0.0001111	YWPF-9	345.433
0.1724138	0.0001209	YWPF-15	440.500
0.2068966	0.0001260	YWPF-8	809.792
0.2413793	0.0001805	YWPF-25	796.031
0.2758621	0.0001822	YWPF-19	665.105
0.3103448	0.0001918	YWPF-12	335.297
0.3448276	0.0002111	YWPF-29	125.834
0.3793103	0.0002186	YWPF-4	380.875
0.4137931	0.0002766	YWPF-11	815.014
0.4482759	0.0003048	YWPF-23	587.113
0.4827586	0.0003332	YWPF-13	395.629
0.5172414	0.0003351	YWPF-2	1574.959
0.5517241	0.0003452	YWPF-28	680.500
0.5862069	0.0003556	YWPF-1	562.804
0.6206896	0.0003792	YWPF-7	143.961
0.6551724	0.0004364	YWPF-30	1166.764
0.6896552	0.0004389	YWPF-5	1046.370
0.7241379	0.0004525	YWPF-6	418.194
0.7586207	0.0004716	YWPF-22	1061.571
0.7931035	0.0005636	YWPF-18	101.880
0.8275862	0.0006803	YWPF-27	343.318
0.8620690	0.0007134	YWPF-26	78.657
0.8965517	0.0010235	YWPF-14	213.835
0.9310345	0.0013852	YWPF-20	911.727
0.9655172	0.0014812	YWPF-21	1057.071

CUM PROB	CRACK DEPTH	SPECIMEN
0.0344828	0.0001344	YWPF-10
0.0689655	0.0002263	YWPF-3
0.1034483	0.0002629	YWPF-17
0.1379310	0.0002689	YWPF-9
0.1724138	0.0003044	YWPF-15
0.2068966	0.0003237	YWPF-8
0.2413793	0.0005080	YWPF-19
0.2758621	0.0005327	YWPF-25
0.3103448	0.0006131	YWPF-12
0.3448276	0.0007337	YWPF-29
0.3793103	0.0008714	YWPF-4
0.4137931	0.0009403	YWPF-28
0.4482759	0.0010612	YWPF-23
0.4827586	0.0011884	YWPF-22
0.5172414	0.0012111	YWPF-1
0.5517241	0.0016000	YWPF-13
0.5862069	0.0017000	YWPF-11
0.6206896	0.0018235	YWPF-6
0.6551724	0.0021057	YWPF-7
0.6896552	0.0022621	YWPF-30
0.7241379	0.0028516	YWPF-27
0.7586207	0.0038000	YWPF-2
0.7931035	0.0045949	YWPF-18
0.8275862	0.0049000	YWPF-5
0.8620690	0.0062000	YWPF-14
0.8965517	0.0075451	YWPF-26
0.9310345	0.0148000	YWPF-21
0.9655172	0.0171000	YWPF-20

CUM PROB	CRACK DEPTH	SPECIMEN
0.0344828	0.0003571	YWPF-10
0.0689655	0.0008209	YWPF-3
0.1034483	0.0010428	YWPF-17
0.1379310	0.0010808	YWPF-9
0.1724138	0.0013125	YWPF-15
0.2068966	0.0019000	YWPF-8
0.2413793	0.0022170	YWPF-19
0.2758621	0.0036638	YWPF-12
0.3103448	0.0043000	YWPF-29
0.3448276	0.0052000	YWPF-25
0.3793103	0.0060000	YWPF-4
0.4137931	0.0064210	YWPF-28
0.4482759	0.0095000	YWPF-11
0.4827586	0.0108000	YWPF-2
0.5172414	0.0130000	YWPF-13
0.5517241	0.0135000	YWPF-23
0.5862069	0.0153000	YWPF-7
0.6206896	0.0160000	YWPF-1
0.6551724	0.0174000	YWPF-5
0.6896552	0.0183000	YWPF-6
0.7241379	0.0214000	YWPF-30
0.7586207	0.0257000	YWPF-18
0.7931035	0.0344000	YWPF-27
0.8275862	0.0352000	YWPF-26
0.8620690	0.0414000	YWPF-22
0.8965517	0.0426000	YWPF-20
0.9310345	0.0500000	YWPF-14
0.9655172	0.0808000	YWPF-21

CUM PROB	CRACK DEPTH	SPECIMEN
0.0344828	0.0016775	YWPF-10
0.0689655	0.0079000	YWPF-3
0.1034483	0.0081000	YWPF-9
0.1379310	0.0098000	YWPF-8
0.1724138	0.0107000	YWPF-17
0.2068966	0.0121000	YWPF-15
0.2413793	0.0211000	YWPF-25
0.2758621	0.0284000	YWPF-19
0.3103448	0.0302000	YWPF-4
0.3448276	0.0313000	YWPF-2
0.3793103	0.0330000	YWPF-12
0.4137931	0.0348147	YWPF-29
0.4482759	0.0356000	YWPF-11
0.4827586	0.0450000	YWPF-23
0.5172414	0.0488000	YWPF-28
0.5517241	0.0493000	YWPF-5
0.5862069	0.0500000	YWPF-13
0.6206896	0.0513000	YWPF-1
0.6551724	0.0514000	YWPF-22
0.6896552	0.0627000	YWPF-6
0.7241379	0.0690000	YWPF-7
0.7586207	0.0832000	YWPF-20
0.7931035	0.0847000	YWPF-27
0.8275862	0.0895970	YWPF-30
0.8620690	0.1125000	YWPF-18
0.8965517	0.1370000	YWPF-14
0.9310345	0.1523000	YWPF-26
0.9655172	0.2784000	YWPF-21

CUM PROB	CRACK DEPTH	SPECIMEN
0.0344828	0.0128000	YWPF-10
0.0689655	0.0248000	YWPF-17
0.1034483	0.0268000	YWPF-3
0.1379310	0.0373000	YWPF-9
0.1724138	0.0395000	YWPF-15
0.2068966	0.0434000	YWPF-8
0.2413793	0.0680000	YWPF-19
0.2758621	0.0690000	YWPF-25
0.3103448	0.0749000	YWPF-11
0.3448276	0.0817000	YWPF-2
0.3793103	0.0869000	YWPF-28
0.4137931	0.0957000	YWPF-22
0.4482759	0.0978000	YWPF-5
0.4827586	0.1329000	YWPF-12
0.5172414	0.1243000	YWPF-4
0.5517241	0.1247013	YWPF-29
0.5862069	0.1290000	YWPF-1
0.6206896	0.1345000	YWPF-13
0.6551724	0.1400000	YWPF-23
0.6896552	0.1595000	YWPF-6
0.7241379	0.1727292	YWPF-30
0.7586207	0.2092000	YWPF-27
0.7931035	0.2383057	YWPF-20
0.8275862	0.2756000	YWPF-7
0.8620690	0.3063847	YWPF-26
0.8965517	0.3258000	YWPF-18
0.9310345	0.4701000	YWPF-14
0.9655172	0.7913205	YWPF-21

TEST SERIES: YWPB

NO.	EIFS	CUM PROB
1	0.010	0.0323
2	0.012	0.0645
3	0.013	0.0968
4	0.014	0.1293
5	0.015	0.1613
6	0.016	0.1935
7	0.021	0.2258
8	0.022	0.2581
9	0.023	0.2903
10	0.026	0.3225
11	0.026	0.3548
12	0.030	0.3871
13	0.033	0.4194
14	0.035	0.4516
15	0.035	0.4839
16	0.037	0.5161
17	0.040	0.5484
18	0.043	0.5806
19	0.044	0.6129
20	0.044	0.6452
21	0.046	0.6774
22	0.073	0.7097
23	0.091	0.7419
24	0.094	0.7742
25	0.109	0.8065
26	0.145	0.8387
27	0.159	0.8710
28	0.220	0.9032
29	0.229	0.9355
30	0.308	0.9677

3.3.3 HYWPF

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0909091	0.0002776	HYWPF-7	58.382
0.1818182	0.0004102	HYWPF-9	404 940
0.2727273	0.0004155	HYWPF-4	204 962
0.3636364	0.0006333	HYWPF-10	217 747
0.4545455	0.0007356	HYWPF-1	98.852
0.5454546	0.0008912	HYWPF-2	137.480
0.6363636	0.0008924	HYWPF-5	735.564
0.7272727	0.0011827	HYWPF-8	321.842
0.8181818	0.0012850	HYWPF-3	56.575
0.9090909	0.0013067	HYWPF-6	134.937

CUM PROB	CRACK DEPTH	SPECIMEN
0.0909091	0.0068000	HYWPF-7
0.1818182	0.0121400	HYWPF-9
0.2727273	0.0168000	HYWPF-4
0.3636364	0.0306000	HYWPF-5
0.4545455	0.0422000	HYWPF-1
0.5454546	0.0494000	HYWPF-10
0.6363636	0.0694000	HYWPF-6
0.7272727	0.0696000	HYWPF-3
0.8181818	0.0713000	HYWPF-8
0.9090909	0.0729000	HYWPF-2

3.3.4 HYWPB

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0909091	0.0000363	HYWPB-5	163.75
0.1818182	0.0000676	HYWPB-7	80.83
0.2727273	0.0000892	HYWPB-2	109.46
0.3636364	0.0001140	HYWPB-6	82.010
0.4545455	0.0001695	HYWPB-8	55.333
0.5454546	0.0001802	HYWPB-3	126.636
0.6363636	0.0001871	HYWPB-9	62.461
0.7272727	0.0002208	HYWPB-10	83.226
0.8181818	0.0003480	HYWPB-4	74.405
0.9090909	0.0005224	HYWPB-1	33.036

3.3.5 LYWPF

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0909091	0.0000866	LYWPF-10	0.000
0.1818182	0.0001125	LYWPF-6	0.000
0.2727273	0.0001270	LYWPF-4	0.000
0.3636364	0.0002824	LYWPF-1	2649.312
0.4545455	0.0002907	LYWPF-3	690.435
0.5454546	0.0003608	LYWPF-8	365.281
0.6363636	0.0004273	LYWPF-7	872.282
0.7272727	0.0004535	LYWPF-2	214.871
0.8181818	0.0007343	LYWPF-9	350.607
0.9090909	0.0019168	LYWPF-5	851.030

CUM PROB	CRACK DEPTH	SPECIMEN
0.0909091	0.0001109	LYWPF-10
0.1818182	0.0001801	LYWPF-6
0.2727273	0.0002099	LYWPF-4
0.3636364	0.0005305	LYWPF-3
0.4545455	0.0007004	LYWPF-8
0.5454546	0.0008422	LYWPF-7
0.6363636	0.0009276	LYWPF-2
0.7272727	0.0010400	LYWPF-1
0.8181818	0.0016905	LYWPF-9
0.9090909	0.0054944	LYWPF-5

CUM PROB	CRACK DEPTH	SPECIMEN
0.0909091	0.0001768	LYWPF-10
0.1818182	0.0003148	LYWPF-6
0.2727273	0.0003741	LYWPF-4
0.3636364	0.0006700	LYWPF-3
0.4545455	0.0015852	LYWPF-8
0.5454546	0.0018800	LYWPF-1
0.6363636	0.0019618	LYWPF-7
0.7272727	0.0022861	LYWPF-2
0.8181818	0.0042200	LYWPF-9
0.9090909	0.0116000	LYWPF-5

CUM PROB	CRACK DEPTH	SPECIMEN
0.0909091	0.0003082	LYWPF-10
0.1818182	0.0005971	LYWPF-6
0.2727273	0.0007337	LYWPF-4
0.3636364	0.0028500	LYWPF-3
0.4545455	0.0033900	LYWPF-1
0.5454546	0.0052200	LYWPF-8
0.6363636	0.0052800	LYWPF-2
0.7272727	0.0054562	LYWPF-7
0.8181818	0.0132000	LYWPF-9
0.9090909	0.0537000	LYWPF-5

CUM PROB	CRACK DEPTH	SPECIMEN
0.0909091	0.0005826	LYWPF-10
0.1818182	0.0013015	LYWPF-6
0.2727273	0.0016800	LYWPF-4
0.3636364	0.0062000	LYWPF-1
0.4545455	0.0100000	LYWPF-3
0.5454546	0.0124000	LYWPF-8
0.6363636	0.0175400	LYWPF-7
0.7272727	0.0193500	LYWPF-2
0.8181818	0.0391000	LYWPF-9
0.9090909	0.1840000	LYWPF-5

3.3.6 LYWPB

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0909091	0.0000118	LYWPB-4	76.562
0.1818182	0.0000153	LYWPB-10	128.425
0.2727273	0.0000169	LYWPB-7	152.924
0.3636364	0.0000170	LYWPB-9	180.602
0.4545455	0.0000896	LYWPB-3	217.565
0.5454546	0.0001397	LYWPB-5	59.970
0.6363636	0.0001505	LYWPB-8	59.091
0.7272727	0.0003569	LYWPB-1	45.957
0.8181818	0.0006049	LYWPB-6	132.283
0.9090909	0.0006465	LYWPB-2	211.609

3.3.7 XWIF

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0714286	0.0001358	XWIF-7	1753.164
0.1428571	0.0001654	XWIF-2	1828.638
0.2142857	0.0003026	XWIF-6	0.000
0.2857143	0.0004181	XWIF-11	1100.410
0.3571429	0.0007005	XWIF-13	100.250
0.4285714	0.0007504	XWIF-3	405.236
0.5000000	0.0009624	XWIF-12	249.132
0.5714286	0.0011119	XWIF-9	81.076
0.6428571	0.0011418	XWIF-1	645.496
0.7142857	0.0012981	XWIF-8	365.895
0.7857143	0.0015975	XWIF-4	207.834
0.8571429	0.0017557	XWIF-10	350.869
0.9285714	0.0019326	XWIF-5	0.000

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0003630	XWIF-7
0.1428571	0.0012000	XWIF-2
0.2142857	0.0013006	XWIF-6
0.2857143	0.0036516	XWIF-1
0.3571429	0.0043000	XWIF-11
0.4285714	0.0056000	XWIF-3
0.5000000	0.0072389	XWIF-8
0.5714286	0.0089897	XWIF-12
0.6428571	0.0106522	XWIF-13
0.7142857	0.0108806	XWIF-4
0.7857143	0.0111923	XWIF-5
0.8571429	0.0149763	XWIF-9
0.9285714	0.0160000	XWIF-10

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0030000	XWIF-7
0.1428571	0.0042000	XWIF-2
0.2142857	0.0095000	XWIF-6
0.2857143	0.0151000	XWIF-11
0.3571429	0.0310000	XWIF-3
0.4285714	0.0348000	XWIF-13
0.5000000	0.0416000	XWIF-12
0.5714286	0.0417000	XWIF-1
0.6428571	0.0499000	XWIF-8
0.7142857	0.0508000	XWIF-9
0.7857143	0.0560000	XWIF-10
0.8571429	0.0580000	XWIF-4
0.9285714	0.0640000	XWIF-5

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0098000	XWIF-7
0.1428571	0.0111000	XWIF-2
0.2142857	0.0477000	XWIF-11
0.2857143	0.0609210	XWIF-6
0.3571429	0.0869000	XWIF-1
0.4285714	0.0980000	XWIF-3
0.5000000	0.1212000	XWIF-8
0.5714286	0.1464000	XWIF-10
0.6428571	0.1530000	XWIF-4
0.7142857	0.1550000	XWIF-5
0.7857143	0.1670000	XWIF-12
0.8571429	0.2173000	XWIF-13
0.9285714	0.2738000	XWIF-9

CUM PROB	CRACK DEPTH	SPECIMEN
0.0714286	0.0169000	XWIF-7
0.1428571	0.0337000	XWIF-2
0.2142857	0.1516410	XWIF-6
0.2857143	0.1728000	XWIF-1
0.3571429	0.2095000	XWIF-11
0.4285714	0.2237180	XWIF-3
0.5000000	0.2954744	XWIF-8
0.5714286	0.3641747	XWIF-12
0.6428571	0.4462694	XWIF-10
0.7142857	0.4471169	XWIF-13
0.7857143	0.4602506	XWIF-4
0.8571429	0.4786556	XWIF-5
0.9285714	0.7774742	XWIF-9

3.4 TASK IV
3.4.1 Steel-
AF1410

EIFS FOR AF1410 STEEL NO-LOAD TRANSFER SPECIMENS

SPECIMEN NO	EIFS (IN)
ST-1	$.40 \times 10^{-6}$
2	$.38 \times 10^{-6}$
3	$.17 \times 10^{-6}$
4	$.20 \times 10^{-7}$
5	$.10 \times 10^{-7}$
6	$.13 \times 10^{-7}$
7	$.12 \times 10^{-8}$
8	$.38 \times 10^{-8}$
9	$.56 \times 10^{-8}$
10	$.38 \times 10^{-8}$
11	$.10 \times 10^{-7}$
12	$.40 \times 10^{-7}$
13	$.25 \times 10^{-7}$
14	$.12 \times 10^{-8}$
15	$.56 \times 10^{-8}$
16	-
17	$.32 \times 10^{-7}$
18	-
19	$.12 \times 10^{-7}$
20	$.12 \times 10^{-8}$
21	$.82 \times 10^{-7}$
22	$.10 \times 10^{-7}$
23	-
24	-
25	-
26	$.13 \times 10^{-7}$
27	$.20 \times 10^{-7}$
28	$.10 \times 10^{-7}$
29	$.10 \times 10^{-7}$
30	$.19 \times 10^{-7}$

3.4.2 Titanium - 6AL-4V

EIFS FOR Ti6Al-4V NO-LOAD TRANSFER SPECIMENS

SPECIMEN NO.	EIFS (IN.)
TXPF-1	.00190
-2	.00082
-3	.00067
-4	.00222
-5	.00067
-6	.00113
-7	.00110
-8	.00135
-9	.00066
-10	.00121
-11	.00090
-12	.00157
-13	.00189
-14	.00063
-15	.00081
TYPF-1	
-2	.00312
-3	
-4	.00106
-5	.00083
-6	.00145
-7	.00165
-8	.00103
-9	.00090
-10	.00157
-11	.00151
-12	.00110
-13	.00164
-14	.00084
-15	.00108

3.5 TASK V
3.5.1 Cold
Worked Holes

EIFS FOR COLD-WORKED SPECIMENS

CUM PROB	EIFS	SPECIMEN	STANDARD DEVIATION
0.0322581	0.0003	CWF-19	0.000
0.0645161	0.0003	CWF-4	0.000
0.0967742	0.0003055	CWF-28	0.000
0.1290323	0.0009054	CWF-3	0.000
0.1612903	0.0009054	CWF-26	0.000
0.1935484	0.0039790	CWF-7	0.000
0.2258064	0.0039790	CWF-12	0.000
0.2580645	0.0039790	CWF-13	0.000
0.2903226	0.0039790	CWF-14	0.000
0.3225806	0.0039790	CWF-25	0.000
0.3548387	0.0039790	CWF-30	0.000
0.3870968	0.0045941	CWF-8	0.000
0.4193548	0.0045941	CWF-16	0.000
0.4516129	0.0045941	CWF-23	0.000
0.4838710	0.0052710	CWF-11	0.000
0.5161290	0.0052710	CWF-18	0.000
0.5483871	0.0052710	CWF-20	0.000
0.5806451	0.0058096	CWF-10	0.000
0.6129032	0.0058096	CWF-27	0.000
0.6451613	0.0069514	CWF-22	0.000
0.6774194	0.0079435	CWF-6	0.000
0.7096774	0.0079435	CWF-21	0.000
0.7419355	0.0079435	CWF-29	0.000
0.7741935	0.0087807	CWF-2	0.000
0.8064516	0.0104765	CWF-9	0.000
0.8387097	0.0104765	CWF-15	0.000
0.8709677	0.0109171	CWF-17	0.000
0.9032258	0.0128480	CWF-5	0.000
0.9354839	0.0137170	CWF-24	0.000
0.9677419	0.0140963	CWF-1	0.000

APPENDIX A

IMPROVED DRILLING AND ASSEMBLY

VWPF Series

The VWPF Series represented the Improved Drilling and Assembly Procedures described in Volume I. These specimens were prepared using proper techniques and were tested for two equivalent lives of the F-16 fighter spectra at 34KS1 gross section stress. The following listings are final crack depths at the end of the two lives in ascending order. Crack depth values at one life and EIFS values plotted in Volume I were both computer generated.

1	0.001	inches	13	0.012	inches	25	0.0287	inches
2	0.001	"	14	0.0122	"	26	0.0301	"
3	0.0012	"	15	0.0124	"	27	0.0330	"
4	0.0013	"	16	0.0134	"	28	0.0396	"
5	0.0015	"	17	0.0147	"	29	0.0415	"
6	0.0059	"	18	0.0176	"	30	0.0424	"
7	0.006	"	19	0.0185	"	31	0.0502	"
8	0.0081	"	20	0.0197	"	32	0.0677	"
9	0.00941	"	21	0.0214	"	33	0.0689	"
10	0.0097	"	22	0.0215	"	34	0.0706	"
11	0.010	"	23	0.0216	"	35	0.0755	"
12	0.011	"	24	0.0250	"	36	0.1338	"

*U.S.Government Printing Office: 1979 — 657-002/56