

CONTINUOUS BASELINE STUDY

Project 1108-13

Progress Report 99

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

October 1, 1955

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THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

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In conjunction with the F.K.I. Continuous Baseline Study, one hundred and twenty-two different sample lots of 42-lb. Fourdrinier kraft linerboard were submitted by seventeen different F.K.I. mills to The Institute of Paper Chemistry for testing during the period September 1 through September 30. In addition to the 42-lb. kraft linerboard, one sample of drum linerboard and two samples of miscellaneous linerboard were submitted for evaluation by one of the participating mills. The results on the special stock are tabulated separately in this report. A tabulation on the number of samples classified according to mill may be seen in Table I.

TABLE I
DISTRIBUTION OF 42-LB. LINERBOARD SAMPLES

Mill Code	Samples Submitted
A	10
B	7
C	8
D	6
E	4
F	11
G	8
H	12
I	2
J	6
K	4
L	10
M	8
N	4
O	3
P	14
Q	<u>5</u>

These sample lots were tested for basis weight, caliper, bursting strength, G. E. puncture, and Elmendorf tear. The average strength results for each mill may be seen in Table II and are graphically presented in Figures 1 to 6. In addition to a comparison of the mill averages for the various tests, Table II also shows the current F.K.I. averages, the cumulative F.K.I. averages, and the F.K.I. indexes. The cumulative F.K.I. average is based on the results for the previous twelve months excluding the current period. Hence, in the case of the current report, it covers the period from September 1, 1954, to August 31, 1955. The F.K.I. indexes are obtained as follows:

$$\frac{\text{current F.K.I. average}}{\text{cumulative F.K.I. average}} \times 100 = \text{F.K.I. index (\%)}$$

The F.K.I. index provides a ready means of comparing the current quality with previous results. For example, the current F.K.I. average basis weight is 42.7 lb. The cumulative F.K.I. average basis weight is 43.0 lb. Hence, the index for basis weight determined in per cent as indicated above is 99.3. This signifies that the current average basis weight is slightly lower than the cumulative average, which in this case covered the period from September 1, 1954, through August 31, 1955.

A comparison of the results in Table II and Figure 1 shows that the average basis weight results for all mills except E, I, and N conform to the 42-lb. specification set forth in Rule 41. Mill G has the highest average basis weight, it being 44.0 lb. or approximately 4.8% higher than the 42-lb. specification. On the other hand, Mill I has the lowest average

basis weight, it being 40.7 lb., 3.1% lower than the 42-lb. specification.

The amount by which the mills vary from the 42-lb. specification is as follows:

Mill Code	Per cent
A	+2.6
B	+1.0
C	+3.6
D	+3.1
E	-0.7
F	+1.2
G	+4.8
H	+1.0
I	-3.1
J	+0.2
K	+3.8
L	+2.9
M	+3.1
N	-0.2
O	+1.0
P	+3.8
Q	+1.9

A comparison of the average basis weight data for the previous period with the current F.K.I. average indicates that the basis weight results have decreased slightly.

A comparison of the average caliper values for the various mills (see Figure 2) shows that the mill averages vary from a low of 11.5 for Mill O to a high of 13.7 for Mill C, the average being 12.6 which is lower than the cumulative F.K.I. average of 12.9.

The average bursting strength values obtained for each mill are graphically presented in Figure 3. It may be observed in Table II that the average bursting strength values for the various mills range from a low of 102 for Mill I to a high of 115 for Mills B and H. The current F.K.I. average bursting strength is 109, slightly lower than the cumulative F.K.I. average of 110.

The data of Table II and Figure 4 show that the current F.K.I. average G.E. puncture for all mills is 35 units. Mill N has the highest G.E. puncture average, 39 units, and Mill B has the lowest average, 30 units. The current F.K.I. G.E. puncture average of 35 units is slightly lower than the cumulative F.K.I. average of 36 units.

A graphic comparison of the Elmendorf tear results for the various mills is given in Figures 5 and 6. The data of Table II show that Mill F has the highest average machine direction tear value whereas Mill B has the lowest. Mills F and B also have the highest and lowest cross-machine tear values, respectively. It may be noted that the current F.K.I. average machine and cross-machine direction tear results are only slightly lower than the cumulative averages.

A comparison of the F.K.I. indexes indicates that, for the current period, all the current F.K.I. averages are slightly lower than the respective cumulative F.K.I. averages.

In order to compare the variation within a given mill, the test results for each particular mill have been tabulated in Tables III to XIX for Mills A to Q, respectively. In addition to the current and cumulative averages, the mill factor and mill index are given for each mill. The cumulative mill average is the average test result obtained on the samples submitted by the particular mill for the previous twelve months excluding the current period. The mill factor and the mill index are obtained as follows:

$$\frac{\text{current mill average}}{\text{cumulative mill average}} \times 100 = \text{mill factor } (\%)$$

$$\frac{\text{current mill average}}{\text{cumulative F.K.I. average}} \times 100 = \text{mill index } (\%)$$

The mill factor and the mill index serve as a ready means for comparing the current mill results either with the previous results for that particular mill or with the cumulative F.K.I. results. The reports also contain a comparison of the test data obtained at the mills with test data obtained at The Institute of Paper Chemistry.

The results obtained on the special drum stock may be seen in Table XX.

It may be noted in Table III through XX that the test data include information about the sheet finish. The summarized results for the mills which submitted sample lots during the current period are as follows:

Mill Code	No. of Sample Lots		
	W.F.	D.F.	Misc.
A	10		
B	7		
C	8 ^a		
D	6		
E	1, 3 ^a , 1 ^b		
F	11		
G	8		
H	6, 6 ^a		
I	2 ^a		
J	6		
K	4		
L			10 ^c
M	8		
N	4 ^a		
O	3		
P	14		
Q	5 ^a		

^a One side only

^b Drum linerboard

^c Sheet finish not reported

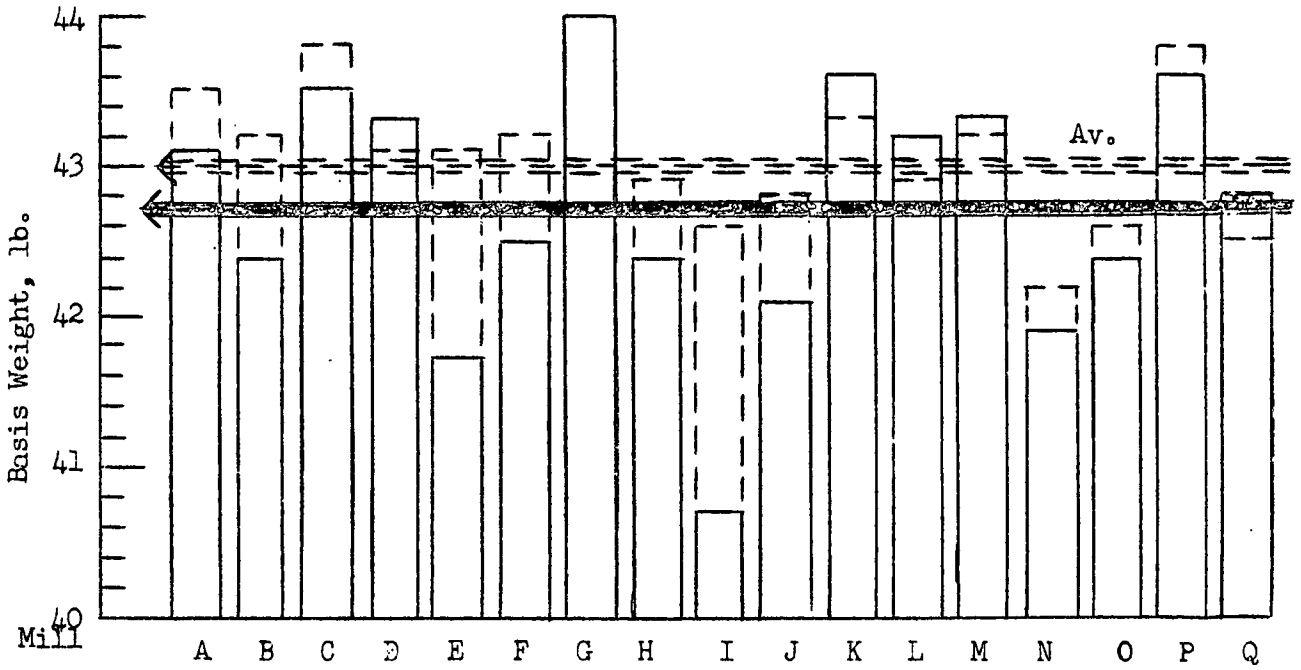
The results indicate that a majority of the mills are using a water finish on their 42-lb. linerboard.

TABLE II

SUMMARY OF COMPOSITE MILL AVERAGES--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955

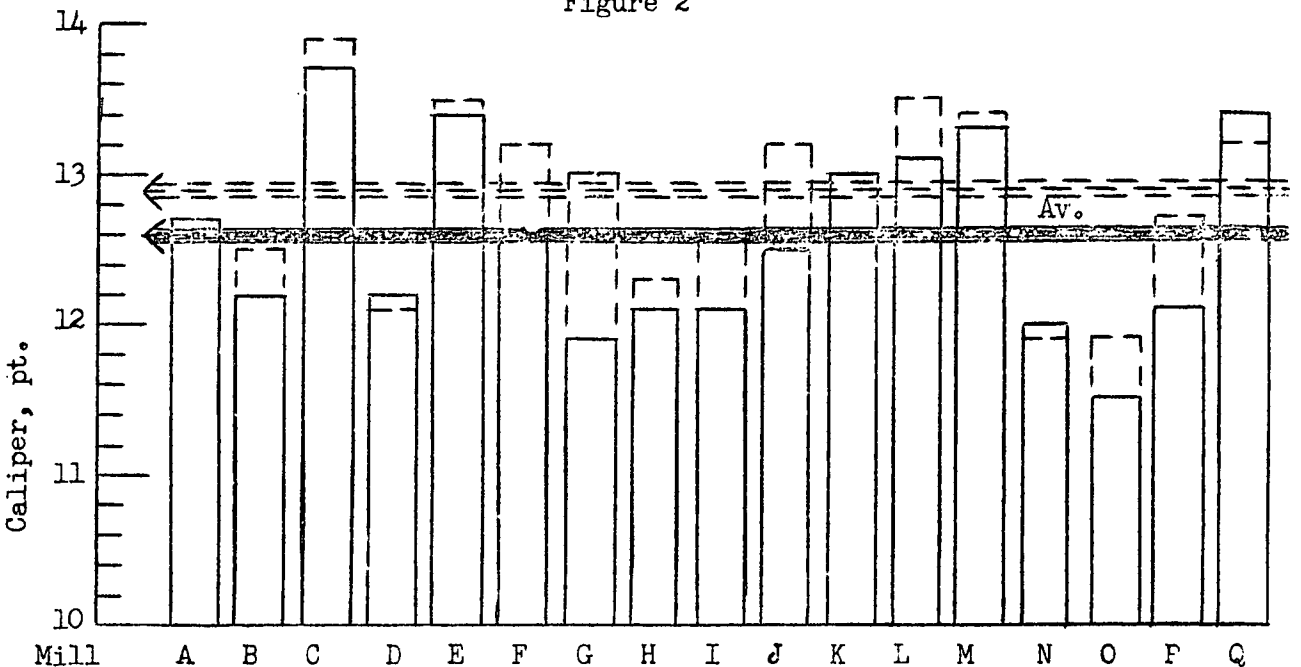
Code No.	Basis Weight, lb.	Caliper, points	Bursting Strength, p.s.i. gage	G. E. Puncture, units	Elmendorf Tear, g./sheet	In Direction Across Direction
A	43.1	12.7	111	35	334	383
B	42.4	12.2	115	30	301	350
C	43.5	13.7	103	35	345	369
D	43.3	12.2	112	35	360	393
E	41.7	13.4	105	33	335	366
F	42.5	12.6	108	37	393	418
G	44.0	11.9	110	34	331	376
H	42.4	12.1	115	32	342	376
I	40.7	12.1	102	31	337	366
J	42.1	12.5	107	31	362	357
K	43.6	13.0	103	38	388	392
L	43.2	13.1	112	36	345	380
M	43.3	13.3	112	34	371	390
N	41.9	12.0	109	39	352	393
O	42.4	11.5	111	38	369	386
P	43.6	12.1	109	38	381	392
Q	42.8	13.4	106	34	345	382
Current FKI Average	42.7	12.6	109	35	352	381
Cumulative FKI Average	43.0	12.9	110	36	355	384
FKI Index, %	99.3	97.7	99.1	97.2	99.2	99.2

Figure 1



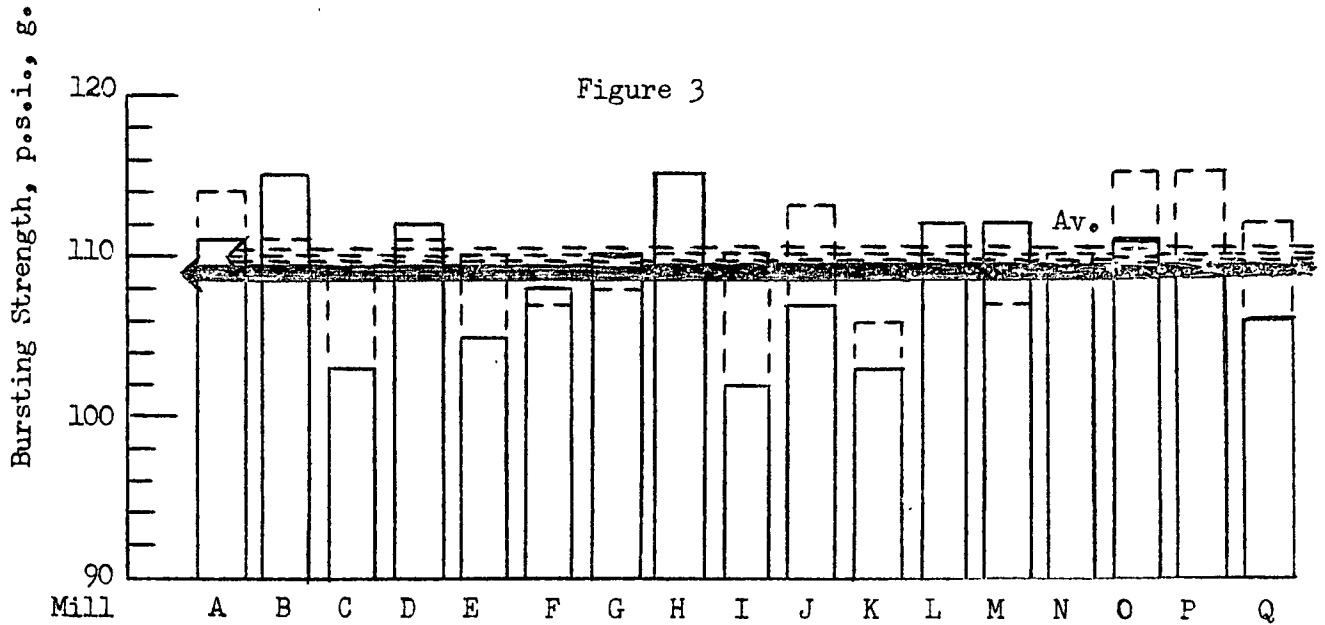
COMPARISON OF BASIS WEIGHT RESULTS
 (Period September 1--September 30, 1955)

Figure 2

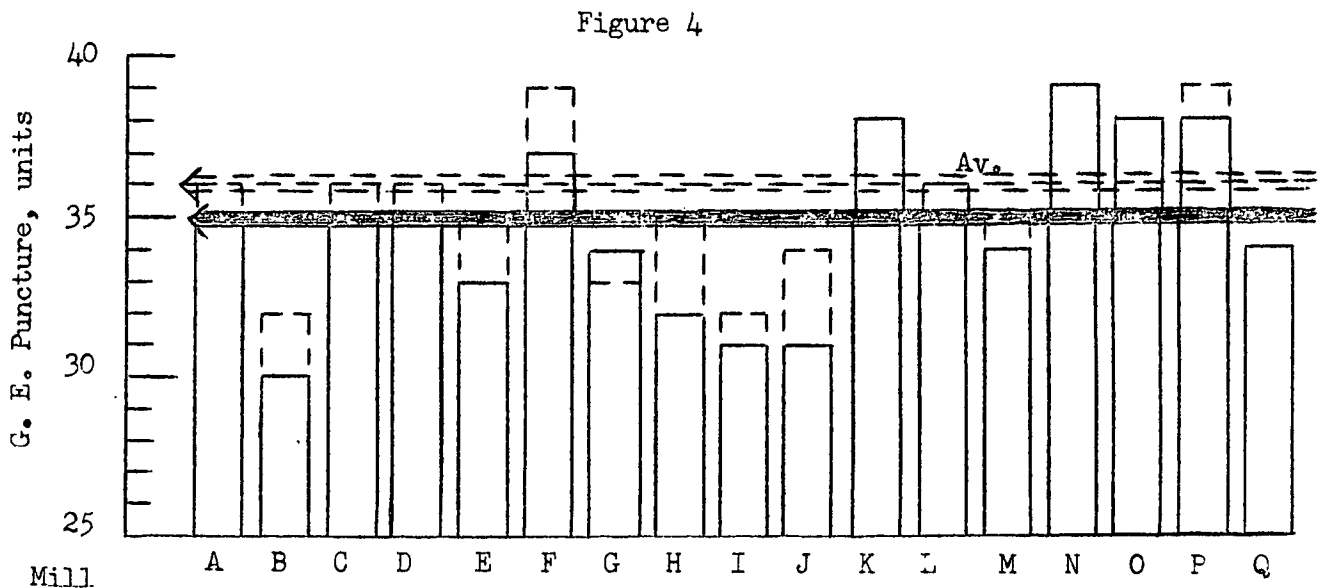


COMPARISON OF CALIPER RESULTS
 (Period September 1--September 30, 1955)

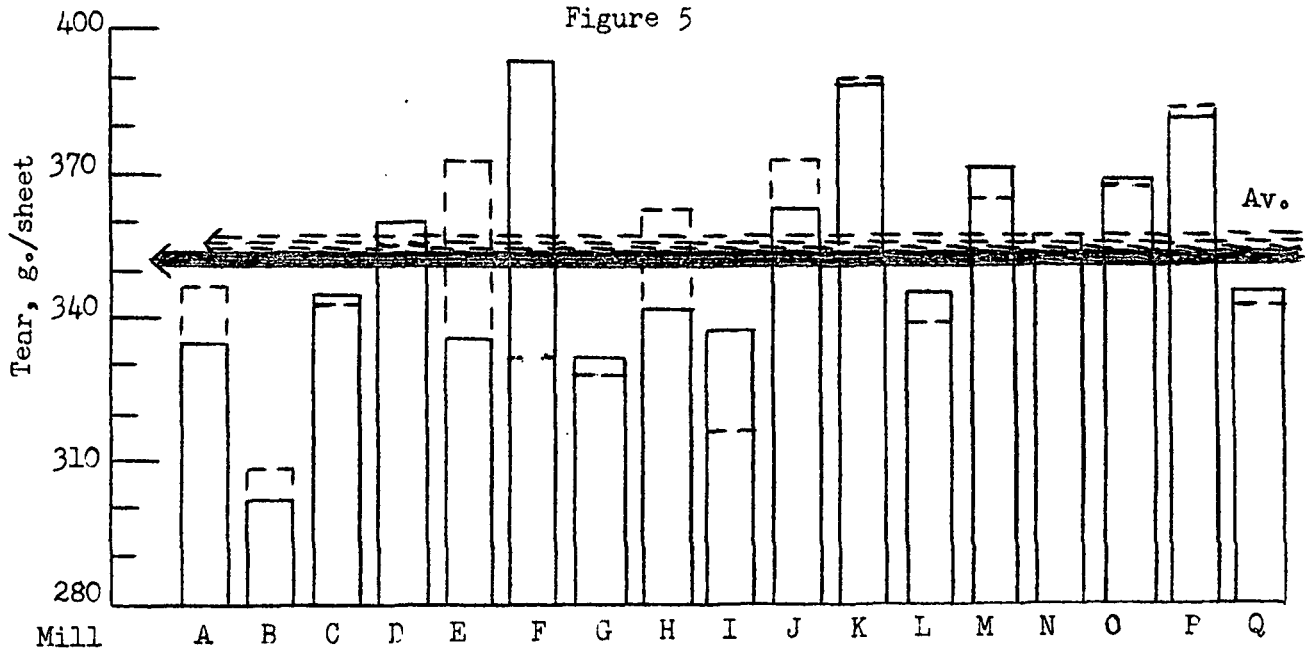
————— Current mill average
 - - - - - Cumulative mill average



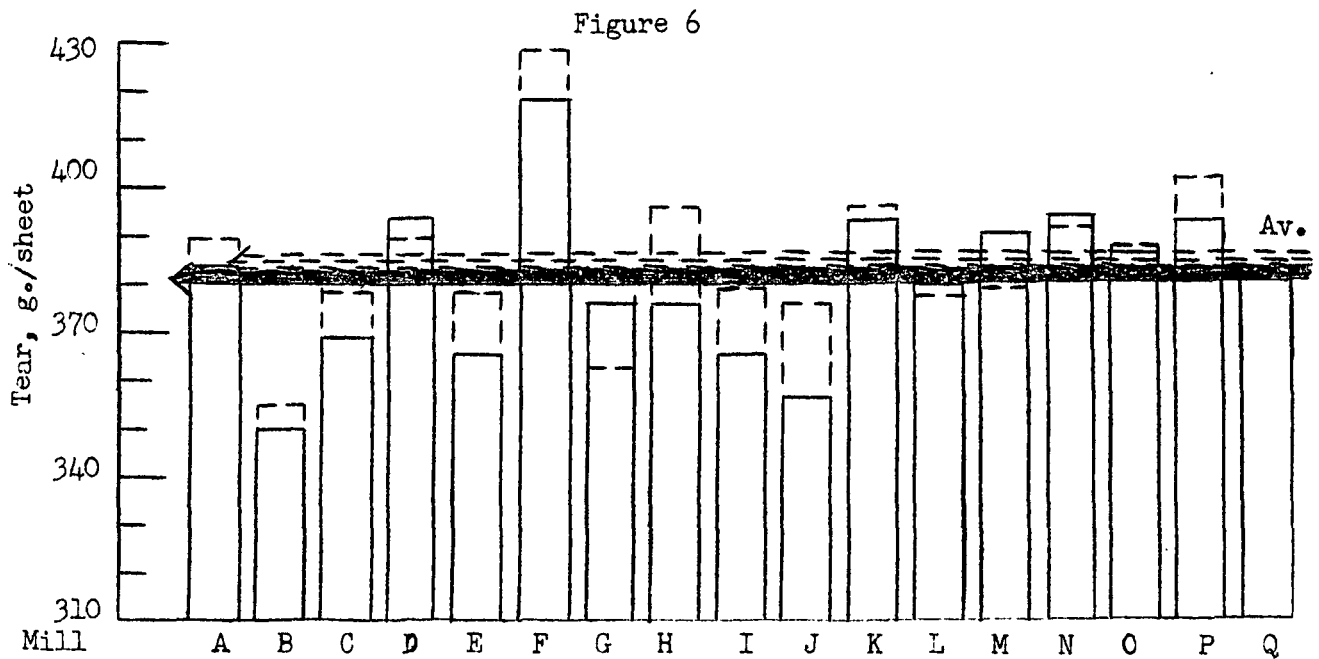
COMPARISON OF BURSTING STRENGTH RESULTS
(Period September 1--September 30, 1955)



COMPARISON OF G. E. PUNCTURE RESULTS
(Period September 1--September 30, 1955)



COMPARISON OF TEAR RESULTS, Machine Direction
 (Period September 1--September 30, 1955)



COMPARISON OF TEAR RESULTS, Cross-Machine Direction
 (Period September 1--September 30, 1955)

TABLE III
 SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet									
						Max.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.				
<u>Mill A--42-lb. Linerboard</u>																							
165586	A-680	W.F.	9/ 6/55	8/21/55	---	44.0	42.4	43.1	13.0	11.8	12.6	126	94	112	36	31	33	344	280	320 ^a	400	336	372 ^a
165587	A-681	W.F.	9/ 6/55	8/21/55	---	44.0	42.0	43.0	13.0	12.1	12.7	129	88	112	36	31	34	400	320	343 ^a	408	360	381 ^a
165624	A-682	W.F.	9/ 9/55	9/ 2/55	2	43.8	42.6	43.4	13.1	12.3	12.8	129	85	105	38	33	35	384	288	344 ^a	440	352	389 ^a
165625	A-683	W.F.	9/ 9/55	9/ 2/55	2	43.8	42.8	43.3	13.0	12.4	12.7	127	90	110	39	34	37	408	320	357 ^a	416	368	396 ^a
165693	A-684	W.F.	9/12/55	9/ 4/55	2	43.8	42.4	43.2	13.3	12.5	13.0	126	90	110	37	33	35	368	280	332 ^a	416	376	396 ^a
165694	A-685	W.F.	9/12/55	9/ 4/55	2	44.2	41.8	43.2	13.3	12.3	12.9	128	92	109	39	33	36	400	288	345 ^a	416	352	387 ^a
165939	A-686	W.F.	9/21/55	9/11/55	2	44.0	42.0	43.0	13.1	12.3	12.7	131	87	114	39	32	37	400	280	337 ^a	448	328	394 ^a
165940	A-687	W.F.	9/21/55	9/16/55	2	43.6	42.4	43.0	12.6	11.7	12.2	133	84	112	36	31	33	368	280	331	416	336	375 ^a
166002	A-688	W.F.	9/26/55	9/18/55	1	43.4	42.2	42.8	13.0	12.2	12.6	133	89	107	36	30	33	352	248	307	408	328	373 ^a
166003	A-689	W.F.	9/26/55	9/18/55	2	43.6	42.0	43.1	12.8	12.0	12.5	138	101	116	36	31	34	392	272	320	424	344	369 ^a
Current Mill Average:						43.1			12.7			111			35			334			334		383
Cumulative Mill Average:						43.5			12.6			114			36			347			347		369
Mill Factor, %						99.1			100.8			97.4			97.2			96.3			96.3		98.5
Mill Index, %:						100.2			98.4			100.9			97.2			94.1			94.1		99.7

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE IV
SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Fin- ish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			G. E. Puncture, units			Elmendorf Tear, g./sheet					
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	In		Across			
<u>Mill B--42-lb. Linerboard</u>																							
165562	B-1234	W.F.	9/ 1/55	8/22/55	1	43.2	40.2	41.5	13.5	12.1	12.5	125	82	104	34	29	31	336	272	313 ^a	400	328	357 ^a
165579	B-1235	W.F.	9/ 2/55	8/24/55	1	43.0	41.0	42.0	13.0	12.0	12.4	129	96	109	32	28	30	336	264	301a	363	312	343 ^a
165592	B-1236	W.F.	9/ 6/55	8/30/55	1	44.6	41.4	42.4	12.5	11.3	11.9	134	96	117	32	28	30	464	280	331a	376	320	343 ^a
165691	B-1237	W.F.	9/12/55	9/ 1/55	1	44.4	41.4	42.7	12.8	11.7	12.1	133	101	118	38	26	29	344	264	300	432	320	351a
165843	B-1238	W.F.	9/17/55	9/ 3/55	1	44.0	41.8	42.7	12.5	11.5	12.0	134	105	120	33	27	30	328	248	291 ^a	403	288	343 ^a
165928	B-1239	W.F.	9/20/55	9/ 6/55	1	43.4	42.0	42.6	12.5	11.5	12.1	138	100	118	33	28	31	304	240	275 ^a	392	344	358a
165938	B-1240	W.F.	9/21/55	9/12/55	1	44.4	42.0	43.0	12.4	11.5	12.0	152	100	119	32	27	30	368	240	296 ^a	472	288	358a
Current Mill Average:						42.4			12.2			115			30			301			350		
Cumulative Mill Average:						43.2			12.5			111			32			308			355		
Mill Factor, %						98.1			97.6			103.6			93.8			97.7			98.6		
Mill Index, %:						98.6			94.6			104.5			83.3			84.8			91.1		

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE V
 SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet		Av.								
						Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.	Max.	Min.	Av.			
<u>Mill C--42-lb. Linerboard</u>																								
165441	C-689	W.F.ISL	8/24/55	8/15/55	1	44.2	43.6	43.9	14.0	12.9	13.7	121	90	102	36	32	34	400	312	358a	440	320	368 ^a	
165454	C-690 ^b	W.F.ISL	8/25/55	8/15/55	1	44.2	43.0	43.8	14.5	13.1	13.7	121	82	103	41	32	36	400	312	355a	416	320	363a	
165455	C-691	W.F.ISL	8/25/55	8/18/55	1	44.2	42.2	43.3	14.0	11.8	13.3	115	83	100	35	32	34	360	296	326a	400	320	354a	
165456	C-692	W.F.ISL	8/25/55	8/18/55	1	44.0	42.4	43.4	13.8	12.7	13.3	123	86	106	38	34	36	368	312	331a	416	312	373a	
165687	C-693	W.F.ISL	9/12/55	9/1/55	1	45.0	43.4	44.0	14.6	13.5	14.2	126	85	103	38	34	36	408	296	357a	424	344	381a	
165688	C-694	W.F.ISL	9/12/55	9/1/55	1	44.2	43.4	43.8	14.9	13.6	14.4	132	88	107	38	34	36	424	328	369a	448	344	376a	
165689	C-695	W.F.ISL	9/12/55	9/2/55	1	44.0	42.2	43.0	14.2	13.1	13.5	122	88	102	36	31	33	384	280	338	408	320	363a	
165690	C-696	W.F.ISL	9/12/55	9/2/55	1	44.0	42.2	43.0	14.2	13.0	13.5	121	82	102	37	32	34	360	272	323a	408	344	373a	
Current Mill Average:							43.5		13.7		103		35		345		369							
Cumulative Mill Average:							43.8		13.9		109		36		343		378							
Mill Factor, %							99.3		98.6		94.5		97.2		100.6		97.6							
Mill Index, %							101.2		106.2		93.6		97.2		97.2		96.1							

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE VI

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955---Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i.gage		G. E. Puncture, units		Elmendorf Tear, g./sheet											
						Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.				
165760	D-890	W.F.	9/15/55	9/9/55	4	42.4	41.0	41.9	12.4	11.6	12.0	130	97	110	36	29	32	407	320	369 ^a	456	352	413 ^a		
165761	D-891	W.F.	9/15/55	9/10/55	4	43.2	42.0	42.4	12.3	11.5	11.9	133	99	112	35	31	33	408	312	358 ^a	480	368	399 ^a		
165936	D-892	W.F.	9/21/55	9/14/55	4	46.0	44.2	45.0	13.3	12.4	12.7	141	95	112	43	34	38	464	272	371 ^a	432	352	399 ^a		
165937	D-893	W.F.	9/21/55	9/15/55	4	44.0	43.0	43.6	12.6	11.9	12.1	139	90	114	41	33	37	456	328	377 ^a	432	344	382 ^a		
165967	D-894	W.F.	9/23/55	9/16/55 ^b	4	43.6	41.8	42.8	12.8	11.5	12.2	127	92	113	38	32	35	424	280	355 ^a	432	312	379 ^a		
165968	D-895	W.F.	9/23/55	9/17/55	4	45.0	43.2	44.0	12.9	12.1	12.5	128	85	109	40	34	36	368	304	331 ^a	456	336	387 ^a		
Current Mill Average:						43.3		43.3	12.2	12.2	12.2	112	35	112	36	29	35	360	320	360	456	352	393		
Cumulative Mill Average:						43.1		43.1	12.1	12.1	12.1	111	36	111	36	31	36	355	312	355	480	368	389		
Mill Factor, %:						100.5		100.5	100.8	100.8	100.9	100.9	97.2	97.2	101.4	101.4	97.2	97.2	101.4	101.4	101.4	101.4	101.0	101.0	
Mill Index, %:						100.7		100.7	94.6	94.6	101.8	101.8	97.2	97.2	101.4	101.4	97.2	97.2	101.4	101.4	101.4	101.4	101.4	102.3	102.3

Mill D-42-lb. Linenboard

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE VII

SUMMARY OF INDIVIDUAL TEST LOTS---SEPTEMBER 1 THROUGH 30, 1955---Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet										
						Max.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.					
165554	E-169	W.F.	9/ 1/55	8/24/55	2	43.0	40.0	41.6	13.9	13.0	13.4	115	84	102	36	30	34	376	312	333 ^a	392	312	355 ^a	
165580	E-170	WFIS	9/ 2/55	8/26/55	2	42.4	41.0	42.0	14.0	13.0	13.5	128	90	109	36	31	34	408	272	339 ^a	424	328	374 ^a	
165750	E-173	WFIS	9/14/55	9/ 8/55	2	43.2	41.2	42.2	14.3	13.0	13.6	118	89	106	34	30	32	384	272	325 ^a	424	312	371 ^a	
165978	E-175	WFIS	9/23/55	9/16/55	2	42.6	39.8	41.0	13.9	12.3	13.3	122	85	104	35	31	33	400	272	343 ^a	440	304	363 ^a	
Current Mill Average:								41.7	13.4		105		33					335		335		366		
Cumulative Mill Average:								43.1	13.5		110		35						372		372		378	
Mill Factor, %								96.8	99.3		95.5		94.3						90.1		90.1		96.8	
Mill Index, %								97.0	103.9		95.5		91.7						94.4		94.4		95.3	

Mill E--42-lb. Linerboard

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE VIII

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet		Av.								
						Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.	Max.	Min.	Max.			
165563	F-39	W.B.	9/ 1/55	8/11/55	--	43.6	41.2	42.4	14.0	12.6	13.4	122	83	104	40	34	37	472	360	407	472	400	426 ^a	
165564	F-40	W.B.	9/ 1/55	8/11/55	--	44.4	41.2	43.5	13.8	11.6	12.8	127	89	104	42	37	39	480	400	428 ^a	456	392	423 ^a	
165565	F-41	W.B.	9/ 1/55	8/12/55	--	43.0	41.4	42.1	13.8	12.5	13.0	126	89	108	42	36	40	424	328	384 ^a	480	384	410 ^a	
165566	F-42	W.B.	9/ 1/55	8/16/55	--	43.8	41.6	42.5	13.5	11.9	12.9	128	81	105	40	32	36	400	336	378	472	368	416 ^a	
165567	F-43	W.B.	9/ 1/55	8/19/55	--	43.2	40.6	42.2	12.8	11.1	12.1	132	90	107	38	32	35	472	336	395 ^a	488	344	396 ^a	
165735	F-44	W.B.	9/13/55	8/23/55	--	43.0	41.0	42.1	13.0	11.9	12.4	126	88	108	40	34	37	416	320	381 ^a	456	376	418 ^a	
165736	F-45	W.B.	9/13/55	8/29/55	--	44.4	40.8	42.9	14.0	12.4	13.2	128	94	109	45	35	39	416	320	373 ^a	464	376	419 ^a	
165737	F-46	W.B.	9/13/55	8/31/55	--	43.8	40.8	42.2	13.0	11.8	12.5	135	100	115	42	35	38	472	352	399 ^a	488	392	425 ^a	
165738	F-47	W.B.	9/13/55	9/ 2/55	--	42.4	40.0	41.3	13.0	12.0	12.6	129	98	111	39	31	36	424	344	376 ^a	480	400	438 ^a	
166024	F-48	W.B.	9/27/55	9/16/55	--	45.4	42.2	44.2	13.0	11.9	12.2	132	98	116	41	36	38	464	384	427 ^a	472	360	422 ^a	
166025	F-49	W.B.	9/27/55	9/19/55	--	44.4	41.8	42.6	12.1	11.0	11.6	121	79	101	40	34	37	400	344	373 ^a	480	368	409 ^a	
Current Mill Average:						42.5		42.5	12.6		12.6	108		108		37		37	393		393	418		418
Cumulative Mill Average:						43.2		43.2	13.2		13.2	107		107		39		39	393		393	423		423
Mill Factor, %						98.4		98.4	95.5		95.5	100.9		100.9		94.9		94.9	100.0		100.0	97.7		97.7
Mill Index, %						98.8		98.8	97.7		97.7	98.2		98.2		102.8		102.8	110.7		110.7	103.9		103.9

Mill F--42-lb. Linerboard

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE IX
 SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet									
						Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.			
<u>Mill G-42-lb. Linerboard</u>																							
165589	G-672	W.F.	9/ 6/55	8/29/55 ^b	2	45.2	43.0	43.6	12.2	11.1	11.8	137	92	111	37	32	34	368	272	319 ^a	408	328	369 ^a
165600	G-673	W.F.	9/ 7/55	8/29/55	2	46.0	43.6	44.6	13.1	11.1	12.0	142	88	113	38	32	36	400	298	351 ^a	440	360	397 ^a
165601	G-674	W.F.	9/ 7/55	8/28/55 ^c	2	44.6	42.8	43.6	12.0	11.0	11.6	135	83	109	37	32	35	352	280	315 ^a	416	336	373 ^a
165615	G-675	W.F.	9/ 8/55	8/30/55	2	44.2	43.0	43.8	12.2	11.0	11.7	138	82	111	36	31	33	384	280	319 ^a	416	336	375 ^a
165739	G-676	W.F.	9/13/55	9/ 1/55	2	45.0	42.6	43.7	12.5	11.2	11.8	135	85	114	35	30	32	352	280	317 ^a	400	320	358 ^a
165695	G-677	W.F.	9/12/55	9/ 2/55	2	46.2	44.0	44.8	12.7	10.4	11.8	138	89	109	38	31	34	392	288	352 ^a	432	336	393 ^a
165763	G-678	W.F.	9/15/55	9/ 3/55 ^d	2	45.8	44.0	44.6	12.4	11.4	11.9	135	89	110	38	32	34	360	296	332 ^a	400	328	369 ^a
165956	G-679	W.F.	9/22/55	9/13/55	2	44.2	42.6	43.4	13.5	11.9	12.9	125	82	103	38	32	35	416	296	341 ^a	416	304	373 ^a
Current Mill average:							44.0			11.9		110		110		34			331		331		376
Cumulative Mill Average:							43.0			13.0		108		108		33			328		328		362
Mill Factor, %:							102.3			91.5		101.9		101.9		103.0			100.9		100.9		103.9
Mill Index, %							102.3			92.2		100.0		100.0		94.4			93.2		93.2		97.9

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE X

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet									
						Max.	Av.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Av.					
<u>Mill H--42-lb. Linerboard</u>																							
165576	H-513	WFLS	9/ 1/55	8/17/55	2	43.6	42.4	43.0	12.4	11.9	12.1	155	95	115	33	30	31	376	320	344 ^a	400	352	377 ^a
165577	H-514	WFLS	9/ 1/55	8/18/55	2	43.0	41.0	42.1	12.8	11.7	12.3	131	88	116	34	29	32	344	296	321 ^a	432	328	375 ^a
165602	H-515	WFLS	9/ 7/55	8/21/55	2	43.4	41.8	42.4	12.5	11.4	11.9	153	87	108	38	31	34	448	288	377 ^a	512	320	391 ^a
165603	H-516	WFLS	9/ 7/55	8/22/55	2	43.8	41.6	42.3	12.6	11.7	12.1	136	85	116	34	30	32	392	288	329	440	288	373 ^a
165740	H-517	WFLS ^b	9/13/55	8/29/55	2	43.4	42.0	42.3	12.3	11.5	11.7	155	88	116	33	28	30	384	272	329 ^a	498	328	366 ^a
165741	H-518	WFLS ^b	9/13/55	8/30/55	2	42.2	41.0	41.7	12.1	11.7	12.0	143	93	115	34	29	31	424	296	331 ^a	384	336	363 ^a
165742	H-519	W.F.c	9/13/55	9/ 6/55	2	42.6	41.6	42.0	12.4	11.8	12.1	133	93	115	35	30	32	400	312	350 ^a	416	344	376 ^a
165743	H-520	W.F.c	9/13/55	9/ 7/55	2	42.2	41.0	41.7	12.2	11.7	12.0	135	94	115	35	30	32	416	230	341 ^a	424	328	383 ^a
165931	H-521	W.F.c	9/20/55	9/11/55	2	45.2	41.4	42.3	13.0	11.9	12.3	144	91	113	36	31	33	400	312	338 ^a	424	352	384 ^a
165932	H-522	W.F.c	9/20/55	9/11/55	2	43.4	42.0	42.3	12.5	11.9	12.1	135	94	113	34	30	32	392	312	347 ^a	432	328	372 ^a
166022	H-523	W.F.c	9/27/55	9/20/55	2	43.6	42.0	42.9	12.9	11.8	12.5	135	90	118	36	30	34	376	320	352 ^a	416	344	379 ^a
166023	H-524	W.F.c	9/27/55	9/21/55	2	43.8	42.0	43.2	12.9	11.8	12.3	138	92	117	36	31	33	440	200	347 ^a	408	344	378 ^a
Current Mill Average:						42.4			12.1			115			32			342			376		
Cumulative Mill Average:						42.9			12.3			110			35			362			395		
Mill Factor, %:						98.8			98.4			104.5			91.4			94.5			95.2		
Mill Index, %:						98.6			93.8			104.5			88.9			96.5			97.9		

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE XI

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. Mo.	Basis Weight, lb.		Calliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, G./sheet									
						Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.						
165590	I-490	WFLS	9/ 6/55	8/29/55	1	41.6	40.0	40.8	12.6	11.8	12.2	124	70	102	34	27	31	360	288	325 ^a	384	320	349 ^a
165591	I-491	WFLS	9/ 6/55	8/30/55	1	41.2	39.8	40.5	12.8	11.5	12.0	115	86	102	33	28	30	424	296	348	456	320	383 ^a
<u>Mill I--42-lb. Linerboard</u>																							
Current Mill Average:						40.7	12.1	102	31	27	31	337	366										
Cumulative Mill Average:						42.6	12.6	110	32	317	379												
Mill Factor, %						95.5	96.0	92.7	96.9	106.3	96.6												
Mill Index, %						94.7	93.8	92.7	86.1	94.9	95.3												
<u>Mill J--42-lb. Kraft Linerboard</u>																							
165593	J-551	W.F.	9/ 6/55	8/27/55 ^b	--	42.8	41.6	42.2	13.9	12.4	13.0	125	91	111	35	30	32	424	304	351 ^a	400	320	373 ^a
165594	J-552 ^c	W.F.	9/ 6/55	8/27/55 ^b	1	43.0	41.3	42.1	13.8	12.5	13.0	122	75	102	33	29	31	432	320	368 ^a	384	320	356 ^a
165696	J-553	W.F.	9/12/55	9/ 2/55	--	43.8	42.9	42.7	13.5	12.1	12.6	136	97	109	34	30	32	408	336	374 ^a	408	320	374 ^a
165697	J-554	W.F.	9/12/55	9/ 2/55	--	44.0	42.0	42.7	13.3	11.4	12.6	129	95	111	34	30	32	424	320	382 ^a	416	336	369 ^a
165995	J-555	W.F.	9/26/55	9/12/55	--	42.4	40.4	41.4	12.6	11.2	11.9	119	58	100	32	27	30	384	320	348 ^a	376	296	331 ^a
165996	J-556	W.F.	9/26/55	9/12/55	--	42.0	40.4	41.4	12.9	11.2	12.0	119	91	106	32	28	31	384	304	347 ^a	368	304	341 ^a
Current Mill Average:						42.1	12.5	107	31	362	357												
Cumulative Mill Average:						42.8	13.2	113	34	372	376												
Mill Factor, %						98.4	94.7	94.7	91.2	97.3	94.9												
Mill Index, %						97.9	96.9	97.3	86.1	102.0	93.0												

^aThis average includes the readings for one or more specimens which tore beyond the 3/8-inch limit. ^bThis date appeared on the sample received by the Institute. The mill data sheet gives the date of manufacture as August 26, 1955. ^cThe sample received by the Institute had an unidentified sheet in the 5-3 position. The sheet was treated as D-3.

TABLE XIII
 SUMMARY OF INDIVIDUAL TEST LOTS---SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955---Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, G./sheet										
						Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.				
165558	K-26	S.F.	9/ 1/55	8/24/55	7	46.0	43.6	44.6	14.3	12.7	13.6	126	88	107	43	36	40	432	360	395 ^a	424	384	412 ^a	
165614	K-27	S.F.	9/ 8/55	9/ 1/55	7	44.0	41.8	43.3	15.7	12.0	12.8	122	67	101	39	33	36	432	360	389 ^a	432	344	394 ^a	
165955	K-28	S.F.	9/22/55	9/13/55	7	43.8	42.6	43.5	13.7	12.2	13.0	121	88	106	41	36	38	416	320	369 ^a	416	288	369 ^a	
165994	K-29	S.F.	9/26/55	9/21/55	7	44.6	41.6	43.1	13.7	12.0	12.8	117	75	101	44	36	39	464	360	399	456	336	395 ^a	
Current Mill Average:							43.6		13.0		103		38		38		388		392					
Cumulative Mill Average:							43.3		13.0		106		38		38		389		395					
Mill Factor, %							100.7		100.0		97.2		100.0		100.0		99.7		99.2					
Mill Index, %							101.4		100.8		93.6		105.6		109.3		102.1							

MILL KRAFT BOARD

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE XIV

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30--Continued

File No.	Mill Code	Finish Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet									
					Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Av.					
165568	L-385	9/ 1/55	8/ 9/55	1	44.0	42.2	43.3	14.5	12.9	13.8	135	95	112	42	36	39	384	312	343 ^a	440	352	403 ^a
165569	L-386 ^b	9/ 1/55	8/12/55	1	43.6	40.6	42.2	14.0	12.1	13.2	134	95	113	37	32	34	400	344	364 ^a	392	344	365 ^a
165570	L-387 ^b	9/ 1/55	8/15/55	1	43.0	41.4	42.0	14.0	12.9	13.3	132	94	114	37	31	34	384	280	313 ^a	424	320	365 ^a
165571	L-388	9/ 1/55	8/20/55	1	44.8	43.2	44.0	14.0	12.2	13.0	136	83	109	41	35	38	376	296	338 ^a	416	360	386 ^a
165845	L-389	9/17/55	8/23/55	1	44.4	42.2	43.9	12.5	10.7	11.7	135	95	121	37	32	35	376	304	344 ^a	432	328	378 ^a
165846	L-390	9/17/55	8/26/55	1	44.2	41.0	42.6	14.4	12.1	13.7	129	88	112	42	33	38	448	320	365 ^a	416	352	392 ^a
165847	L-391	9/17/55	9/ 1/55	1	44.6	43.8	44.0	12.5	11.0	11.7	138	85	117	37	33	35	408	288	333 ^a	408	320	368 ^a
165848	L-392	9/17/55	9/ 7/55	1	44.2	42.2	43.4	14.7	12.8	14.0	117	76	102	39	35	37	376	336	352 ^a	424	360	389 ^a
166008	L-393 ^b	9/26/55	9/11/55	1	43.0	41.2	42.4	14.2	11.8	13.3	130	85	110	37	32	35	400	320	348 ^a	400	320	361 ^a
166009	L-394	9/26/55	9/16/55	1	45.2	43.0	44.0	14.9	11.6	13.3	133	79	108	40	35	37	400	312	350 ^a	432	352	389 ^a
Current Mill Average:							43.2		13.1		112				36				345			380
Cumulative Mill Average:							42.9		13.5		109				35				339			377
Mill Factor, %							100.7		97.0		102.8				102.9				101.8			100.8
Mill. Index, %							100.5		101.6		101.8				100.0				97.2			99.0

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE XV

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet										
						Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.				
<u>Mill M--42-lb.Linerboard</u>																								
165559	M-334	W.	9/ 1/55	8/16/55	2	44.2	41.6	43.2	13.5	12.8	13.2	127	94	113	36	30	33	416	336	365 ^a	448	352	375 ^a	
165560	M-335	W.	9/ 1/55	8/17/55	2	45.0	41.8	42.9	14.0	12.8	13.3	127	93	114	36	31	33	416	296	348	432	368	395 ^a	
165561	M-336	W.	9/ 1/55	8/23/55	4	44.0	41.8	42.6	13.9	12.5	13.4	135	88	112	35	30	33	456	352	389 ^a	416	360	389 ^a	
165692	M-337	W.	9/12/55	8/30/55 ^b	4	44.0	42.6	43.6	13.8	12.5	13.2	127	99	112	35	31	33	400	336	366 ^a	408	314	381 ^a	
165933	M-338 ^c	W.	9/20/55	9/ 8/55	2	45.6	42.2	43.8	14.2	12.6	13.2	133	81	110	37	31	34	400	312	346	440	368	403 ^a	
165934	M-339	W.	9/20/55	9/13/55	4	45.0	42.6	43.7	13.4	12.4	13.0	132	83	110	40	36	38	432	312	390 ^a	456	368	395 ^a	
166020	M-340	W.	9/27/55	9/14/55	4	44.6	42.6	43.6	14.1	13.0	13.6	131	88	114	38	32	36	440	344	388 ^a	416	352	385 ^a	
166021	M-341	W.	9/27/55	9/21/55	4	44.0	42.6	43.4	13.5	12.7	13.1	120	94	108	37	33	35	424	320	379 ^a	440	360	401 ^a	
Current Mill Average:						43.3			13.3			112	34		371		34			371		379		390
Cumulative Mill Average:						43.2			13.4			107	35		364		35			364		379		379
Mill Factor, %						100.2			99.3			104.7	97.1		101.9		97.1			101.9		102.9		102.9
Mill Index, %						100.7			103.1			101.8	94.4		104.5		94.4			104.5		101.6		101.6

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE XVI

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet									
						Max.	Av.	Max.	Min.	Av.	Min.	Av.	Min.	Av.	Max.	Min.	Av.	Max.					
165574	N-158	WFLS	9/ 1/55	8/19/55	---	42.4	40.8	41.4	12.3	10.7	11.4	122	92	107	42	35	38	384	296	343 ^a	424	336	379 ^a
165575	N-159	WFLS	9/ 1/55	8/21/55	1	43.2	41.6	42.0	12.1	11.2	11.8	130	78	112	43	36	38	400	320	352 ^a	416	352	393 ^a
165929	N-160	WFLS	9/20/55	8/31/55	1	43.6	42.0	42.5	13.0	11.8	12.4	122	88	107	43	34	39	416	320	367 ^a	472	368	413 ^a
165930	N-161	WFLS	9/20/55	9/ 2/55	1	43.8	40.8	41.7	13.0	12.0	12.5	125	95	110	44	36	39	384	280	349	424	352	387 ^a
Current Mill Average:																41.9	12.0	109	39	352	393		
Cumulative Mill Average:																42.2	11.9	110	39	357	391		
Mill Factor, %:																99.3	100.8	99.1	100.0	98.6	100.5		
Mill Index, %:																97.4	93.0	99.1	108.3	99.2	102.3		

TABLE XVII

Mill N--42-lb. Linerboard																							
File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet									
						Max.	Av.	Max.	Min.	Av.	Min.	Av.	Min.	Av.	Max.	Min.	Av.	Max.					
165578	O-89	W.F.	9/ 1/55	8/10/55	4	44.0	40.0	42.6	12.4	11.4	11.9	126	96	112	39	32	36	480	296	383 ^a	448	376	405 ^a
165849	O-90	W.F.	9/17/55	9/ 2/55	4	42.8	41.4	42.2	11.7	10.7	11.2	126	100	111	40	35	38	432	304	358 ^a	416	336	375 ^a
165850	O-91	W.F.	9/17/55	9/ 2/55	4	43.4	42.0	42.6	11.9	11.2	11.4	131	89	110	40	36	38	400	320	366 ^a	416	352	379 ^a
Current Mill Average:																42.4	11.5	111	38	369	386		
Cumulative Mill Average:																42.6	11.9	115	36	368	387		
Mill Factor, %:																99.5	96.6	96.5	105.6	100.3	99.7		
Mill Index, %:																98.6	89.1	100.9	105.6	103.9	100.5		

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE XVIII

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g/sheet									
						Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.						
<u>Mill P--42-lb. Linerboard</u>																							
165555	P-93	W.F.	9/ 1/55	8/22/55	--	46.0	43.8	44.7	13.1	12.1	12.5	120	87	109	42	36	39	456	328	384 ^a	464	360	395a
165572	P-94	W.F.	9/ 1/55	8/26/55	--	44.2	41.8	43.4	12.3	11.4	12.0	124	72	106	41	35	38	472	296	361a	456	344	385a
165573	P-95	W.F.	9/ 1/55	8/26/55	---	45.8	43.8	44.6	13.1	11.1	12.5	126	89	105	42	37	39	456	320	403a	456	328	415a
165582	P-96	W.F.	9/ 6/55	8/30/55	--	42.0	40.6	41.5	12.3	11.4	11.7	126	77	106	37	32	34	384	304	337a	368	312	343a
165583	P-97	W.F.	9/ 6/55	8/30/55	--	44.6	43.2	44.0	12.9	11.8	12.3	126	74	111	42	36	39	480	312	387a	424	344	381a
165584	P-98	W.F.	9/ 6/55	8/30/55	--	45.0	42.0	43.6	13.2	11.8	12.3	131	80	114	41	36	39	432	352	400a	448	344	414a
165585	P-99 ^b	W.F.	9/ 6/55	8/31/55	--	42.2	40.2	41.3	12.5	11.0	11.6	121	78	105	40	34	37	416	336	365a	440	360	395a
165941	P-100	W.F.	9/21/55	9/12/55	--	43.0	41.6	42.3	12.6	11.2	11.8	134	101	117	39	34	37	416	336	375a	440	336	395a
165942	P-101	W.F.	9/21/55	9/12/55	--	44.4	43.4	43.7	12.8	11.5	12.2	134	80	114	43	36	40	408	328	380a	480	352	407a
165943	P-102	W.F.	9/21/55	9/12/55	--	45.0	42.4	43.5	13.0	11.8	12.4	130	87	114	43	37	40	424	328	387a	480	376	419a
166004	P-103	W.F.	9/26/55	9/20/55	--	45.2	42.0	43.8	12.3	11.2	11.9	135	89	111	40	35	37	488	328	377a	424	360	381a
166005	P-104	W.F.	9/26/55	9/20/55	---	48.0	43.2	45.2	12.5	11.1	12.1	135	88	111	39	34	37	440	336	385a	448	328	393a
166006	P-105	W.F.	9/26/55	9/20/55	--	46.2	43.8	45.0	12.8	11.0	11.9	126	75	100	42	34	38	416	344	390a	416	336	375a
166007	P-106	W.F.	9/26/55	9/20/55	--	45.6	43.4	44.3	13.0	11.6	12.0	134	81	98	42	35	38	448	368	405a	464	344	390a
Current Mill Average:						43.6		43.6	12.1	12.1	12.1	109	38	109	381	38	38	381	381	381	464	360	392
Cumulative Mill Average:						43.8		43.8	12.7	12.7	12.7	115	39	115	383	39	39	383	383	383	464	360	401
Mill Factor, %:						99.5		99.5	95.3	95.3	95.3	94.8	97.4	94.8	99.5	97.4	97.4	99.5	99.5	99.5	99.5	99.5	97.8
Mill Index, %:						101.4		101.4	93.8	93.8	93.8	99.1	105.6	99.1	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	102.1

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE XIX
SUMMARY OF INDIVIDUAL TEST LOTS---SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet		Av.							
						Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.	Max.	Min.	Av.		
165556	Q-34	WF1S	9/ 1/55	8/16/55	3	43.8	40.4	42.2	13.8	12.5	13.2	127	76	102	35	29	33	368	288	329 ^a	400	328	365 ^a
165557	Q-35	WF1S	9/ 1/55	8/17/55	3	44.6	42.0	43.0	13.6	12.3	13.0	133	102	117	39	30	35	424	296	359 ^a	432	344	392 ^a
165588	Q-36 ^b	WF1S	9/ 6/55	8/22/55	3	45.0	42.0	43.0	14.0	13.0	13.3	133	94	110	35	31	33	360	304	337 ^a	392	352	371 ^a
165844	Q-37 ^b	WF1S	9/17/55	9/ 4/55	3	44.2	41.8	43.0	14.5	13.5	13.9	116	73	96	40	33	36	400	312	343 ^a	432	344	384 ^a
166018	Q-38 ^c	WF1S	9/27/55	9/11/55	3	44.0	42.0	42.6	14.5	13.2	13.9	133	83	107	38	31	33	440	296	357 ^a	464	344	397 ^a
Current Mill Average:								42.8	13.4		106			34						345			382
Cumulative Mill Average:								42.5	13.2		112			34						342			382
Mill Factor, %:								100.7	101.5		94.6			100.0						100.9			100.0
Mill Index, %:								99.5	103.9		96.4			94.4						97.2			99.5

Mill Q--42-lb. Linerboard

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE XX

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet									
						Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.				
165616	E-172 ^b	WFLS	9/ 8/55	9/ 1/55	2	49.8	47.2	48.6	15.9	15.2	15.6	139	79	113	47	40	43	440	368	405 ^a	480	400	425 ^a
<u>Mill E--44/46-lb. Drum Linerboard</u>																							
Current Mill Average:						48.6		48.6	15.6		15.6	113		113	43		43	405		405	425		425
Cumulative Mill Average:						46.8		46.8	14.0		14.0	102		102	41		41	396		396	398		398
Mill Factor, %						103.8		103.8	111.4		111.4	110.8		110.8	104.9		104.9	102.3		102.3	106.8		106.8
<u>Miscellaneous</u>																							
165581	E-171	38-lb.	9/ 2/55	8/29/55	2	40.8	37.8	38.8	13.0	11.4	12.3	114	80	97	33	26	30	336	296	320 ^a	376	288	341 ^a
WFLS																							
165762	E-174	69-lb.	9/15/55	9/12/55	2	70.8	67.0	69.1	21.8	19.8	20.8	165	125	144	73	65	69	688	400	581 ^a	768	648	701 ^a
W.F.																							

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

As a supplementary part of the Continuous Baseline Study, comparison of the mill test results with those obtained at The Institute of Paper Chemistry on corresponding samples have been included in this report. As may be noted in Table XXI, the atmospheric conditions used prior to and during the testing period varied considerably.

TABLE XXI

Code	Preconditioning			Conditioning		
	R.H. %	Temp., °F.	Time, hr.	R. H., %	Temp., °F.	Time, hr.
A	50-52	73	24	49-50	73	24
B	46-64	86-92	0.5	50	70	24-192
C	50	73	24-360	50	73	24-360
D	36	78-79	8	49-50	72	16
E		None		57-64	82-88	--
F		None		49-59	68-75	48
G	50	73	24	50	73	24
H		None		50	73	24
I		None		54-59	68-72	--
J		None		50	72-73	0.5
K	50	73	24	50	73	--
L		None		54-79	86-96	--
M		None		56-68	72-75	--
N	50	73	24	50	73	24
O		None		50	73	2-3.5
P	50	73	24	50	73	48
Q	58--69	75--87	62-96	57-69	76-84	1-2
E*		None		76	88	--

* Drum linerboard.

A summary of the mill comparisons for the current period as compared with the previous period may be seen in Tables XXII and XXIII, respectively. The comparison for the various mills is given in Tables XXIV to XXXX, for the 42-lb. liner samples. A comparison of the

special drum stock is given in Table XL. In all the comparisons given in Tables XXII to XLI, the Institute's test values have been used as the reference line.

A comparison of the test data in Tables XXII and XXIII indicates that agreement between the mill and Institute data is good in the majority of cases. Table XXII shows the average difference encountered in the comparison of Institute and mill test results for the sample lots submitted by each mill for the current period, as well as the maximum difference encountered in comparing the Institute and mill test results for a given sample lot. In Table XXIII, the average differences shown for each test in Table XXII have been calculated on a percentage basis for each mill. In addition, for purposes of comparison, the average percentage differences for the preceding two periods are shown.

It may be noted in Table XXIII that the maximum variation between the average basis weight results of the Institute and those of a given mill on corresponding samples is four per cent for the current period. This maximum percentage variation agrees favorably with the corresponding variations for the previous periods. Further, it may be noted that the average basis weight results for Mills A, G, J, K, L, M, N, and Q are lower than those for the Institute and the average results for the other mills are higher. In general, the agreement between Institute and mill basis weight results is very good with the exception of Mill I.

The maximum variation in caliper for the current period is six per cent. Compared with the values for the Institute, the average result for Mill I is higher, the average result for Mill B is the same, and the average results for the other mills are lower. The accord between Institute and Mill caliper values is good with possible exceptions in the cases of Mills E and M.

It may be noted in Table XXIII that the bursting strength results exhibit a maximum variation of five per cent for the current period. The average results for Mills A, E, F, I, K, M, and Q are higher than those for the Institute, the results for Mills B, C, G, H, and O are the same, and the results for the other mills are lower. The agreement in bursting strength results is good for all mills.

The G. E. puncture results exhibit a maximum variation of fourteen per cent for the current period. Compared with the values for the Institute, the results for Mills C, E, F, I, and K are higher, the results for Mills B, G, H, J, and M are lower, and the result for Mill A is the same. The agreement between the Institute and mill results is good for all mills except C and Q.

It may be seen in Tables XXII and XXIII that the average machine direction tear results for Mills B, C, F, G, H, I, L, M, N, P, and Q are higher than those for the Institute, and the results for the other mills are lower. The maximum variation for the current period is fourteen per cent. The differences encountered for Mills G and O appear to be excessive.

With regard to the cross-machine direction tear results, it may be noted that the average results for Mills B, C, D, E, F, G, H, I, K, L, M, N, P, and Q are higher than those for the Institute whereas the average results for the other mills are lower. The maximum variation for the current period is twenty per cent. Only the differences for Mills I and N appear to be excessive.

TABLE XXII

SUMMARY OF TEST RESULT COMPARISONS
(Average Mill and Institute Results)
Mills*

No. of Samples Compared	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	
																		Mills*
	10	7	8	6	4	11	8	12	2	6	4	10	8	4	3	14	5	
	<u>Basis Weight</u>																	
Institute Mill	43.1	42.4	43.5	43.3	41.7	42.5	44.0	42.4	40.7	42.1	43.6	43.2	43.3	41.9	42.4	43.6	42.8	
Av. Diff.**	-0.5	+0.3	+0.5	+0.4	+0.9	+0.1	-0.4	+0.8	+1.7	-0.1	-0.5	-0.8	-0.2	-0.1	+0.5	+0.1	-0.4	
Max. Diff.***	-0.9	+1.2	+0.7	+1.0	+1.5	+0.7	-0.6	+1.5	+1.9	-1.0	-0.9	-1.9	-0.7	-0.4	+0.6	+0.8	-1.2	
	<u>Caliper</u>																	
Institute Mill	12.7	12.2	13.7	12.2	13.4	12.6	11.9	12.1	12.1	12.5	13.0	13.1	13.3	12.0	11.5	12.1	13.4	
Av. Diff.**	-0.2	0.0	-0.3	-0.1	-0.8	-0.5	-0.2	-0.1	+0.1	-0.5	-0.3	-0.2	-0.6	-0.3	-0.2	-0.5	-0.3	
Max. Diff.***	-0.5	+0.3	-0.4	-0.4	-1.1	-0.6	-0.4	-0.5	+0.2	-1.0	-0.6	-1.1	-0.8	-0.4	-0.3	-1.1	-0.5	
	<u>Bursting Strength</u>																	
Institute Mill	111	115	103	112	105	108	110	115	102	107	103	112	112	109	111	109	106	
Av. Diff.**	+2	0	0	-5	+3	+5	0	0	+2	-4	+2	-4	+1	-2	0	-3	+3	
Max. Diff.***	+7	+5	+4	-7	+3	+17	-6	+5	+3	-8	+4	-13	+5	-4	+3	-8	+11	
	<u>G. E. Puncture</u>																	
Institute Mill	35	30	35	35	33	37	34	32	31	31	38	36	34	39	38	38	34	
Av. Diff.**	0	-2	+5	--	+3	+1	-4	-1	+3	-1	+1	--	-2	--	--	--	--	
Max. Diff.***	+2	-4	+7	--	+4	+2	-6	-2	+3	-2	+2	--	-5	--	--	--	--	

(Continued on the following page)

TABLE XXII (Continued)
SUMMARY OF TEST RESULT COMPARISONS
(Average Mill and Institute Results)

No. of Samples Compared	Mills*										Q						
	A	B	C	D	E	F	G	H	I	J		K	L	M	N	O	P
	10	7	8	6	4	11	8	12	2	6	4	10	8	4	3	14	5
	<u>Tearing Strength, in.</u>																
Institute	334	301	345	360	335	393	331	342	337	362	388	345	371	352	369	381	345
Mill	315	308	348	356	326	403	378	349	354	340	362	346	399	372	324	408	368
Av. Diff.**	-19	+7	+3	-4	-9	+10	+47	+7	+17	-22	-26	+1	+28	+20	-45	+27	+23
Max. Diff.***	-59	+31	-31	-39	-24	+43	+66	+55	+28	-37	-42	+43	+56	+33	-54	+69	+40
	<u>Tearing Strength, across</u>																
Institute	383	350	369	393	366	418	376	376	366	357	392	380	390	393	386	392	382
Mill	373	364	405	394	379	438	400	400	439	347	406	388	395	462	372	406	408
Av. Diff.**	-10	+14	+36	+1	+13	+20	+24	+24	+73	-10	+14	+8	+5	+69	-14	+14	+26
Max. Diff.***	-33	+35	+50	+16	+43	+33	+42	+60	+94	+25	+34	-32	+25	+99	-24	+65	+40

* Comparison based on averages involved only those samples on which mill test data were submitted.

** Average difference is the difference between the Institute mill average and the mill average based on mill test data.

*** Maximum difference encountered in comparing the Institute average and the mill average for any sample submitted by that particular mill.

TABLE XXIII

COMPARISON OF INSTITUTE-MILL DIFFERENCES BY PERIODS

Mill	Period	Difference, per cent					
		Basis Weight	Caliper	Bursting Strength	G. E. Puncture	Tearing In	Strength Across
A	Current	-1	-2	+2	0	-6	-3
	98th	-1	-0.8	0	0	-5	-3
	97th	-0.5	+0.8	+2	+3	-3	+2
B	Current	+0.7	0	0	-7	+2	+4
	98th	-0.7	0	+0.9	-3	+1	+7
	97th	-0.5	+2	+2	-3	-7	-5
C	Current	+1	-2	0	+14	+0.9	+10
	98th	+0.7	-1	+2	+14	+0.9	+4
	97th	+0.5	-3	+3	0	-9	-2
D	Current	+0.9	-0.8	-4	--	-1	+0.3
	98th	0	-3	-2	--	-3	-0.5
	97th	+0.7	-0.8	+2	--	+4	0
E	Current	+2	+6	+3	+9	-3	+4
	98th	+3	-5	+1	+17	+8	+5
	97th	+2	-6	-2	+26	+3	+14
F	Current	+0.2	-4	+5	+3	+3	+5
	98th	+0.2	-3	+4	+5	+2	+5
	97th	-0.2	-3	+5	+8	+3	+5
G	Current	-0.9	-2	0	-12	+14	+6
	98th	0	-2	+0.9	-6	+14	+8
	97th	0	-2	+4	-6	+8	+3
H	Current	+2	-0.8	0	-3	+2	+6
	98th	+2	0	-0.9	-3	+10	+13
	97th	+3	-0.8	+3	-3	+6	+14
I	Current	+4	+0.8	+2	+10	+5	+20
	98th	0	-0.8	0	+7	+10	+13
	97th	-1	+2	-2	+3	+15	+11
J	Current	-0.2	-4	-4	-3	-6	-3
	98th	-0.7	-2	-5	+3	-0.8	+6
	97th	+1	-2	-5	+9	-6	+4
K	Current	-1	-2	+2	+3	-7	+4
	98th	0	-2	+2	+6	-7	+0.8
	97th	-1	-3	+1	--	-7	+0.5
L	Current	-2	-2	-4	--	+0.3	+2
	98th	-0.2	-2	-4	--	+0.9	+5
	97th	-2	-2	-5	--	+2	+5
M	Current	-0.5	-5	+0.9	-6	+8	+1
	98th	+0.9	-5	-4	0	+13	+4
	97th	-0.5	-6	+3	-12	+8	-1
N	Current	-0.2	-2	-2	--	+6	+18
	98th	+0.2	-2	-2	--	+7	+15
	97th	+0.7	-2	-0.9	--	+8	+20
O	Current	+1	-2	0	--	-12	-4
	98th	+0.5	-0.9	-4	--	-11	-2
	97th	--	--	--	--	--	--
P	Current	+0.2	-4	-3	--	+7	+4
	98th	+0.2	-4	-3	--	+6	+5
	97th	+0.2	-4	-5	--	+0.8	-3
Q	Current	-0.9	-2	+3	--	+7	+7
	98th	0	-2	-0.9	--	+11	+8
	97th	+2	-0.8	-0.9	--	+11	+10

TABLE XXIV

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Diff.	Bursting Strength, p.s.i. gage		IPC Mill Diff.	G. E. Puncture, units	IPC Mill Diff.	Elmendorf Tear, g./sheet				
					IPC Mill	Diff.	IPC Mill	Diff.		IPC Mill	Diff.				In	Across			
165586	A-680	W.F.	8/21/55	--	43.1	42.5	12.6	12.7	+0.1	112	117	+5	33	35	346	+26	372 ^a	385	+13
165587	A-681	W.F.	8/21/55	--	43.0	42.5	12.7	12.6	-0.1	112	115	+3	34	35	343a	-22	381a	363	-18
165624	A-682	W.F.	9/ 2/55	2	43.4	42.5	12.8	12.5	-0.3	105	108	+3	35	37	344a	-59	389a	369	-20
165625	A-683	W.F.	9/ 2/55	2	43.3	42.6	12.7	12.5	-0.2	110	115	+5	37	36	357a	-37	396 ^a	387	- 9
165693	A-684	W.F.	9/ 4/55	2	43.2	42.6	13.0	12.5	-0.5	110	115	+5	35	36	332a	-10	397a	364	-33
165694	A-685	W.F.	9/ 4/55	2	43.2	42.7	12.9	12.5	-0.4	109	114	+5	36	36	345a	-19	387a	373	-14
165939	A-686	W.F.	9/11/55	2	43.0	42.3	12.7	12.3	-0.4	114	111	-3	37	35	337a	-41	394a	374	-20
165940	A-687	W.F.	9/16/55	2	43.0	42.9	12.2	12.4	+0.2	112	113	+1	33	34	331	-21	375a	374	- 1
166002	A-688	W.F.	9/18/55	1	42.8	42.5	12.6	12.3	-0.3	107	114	+7	33	34	307	+9	373a	376	+ 3
166003	A-689	W.F.	9/18/55	2	43.1	42.7	12.5	12.4	-0.1	116	110	-6	34	34	320	-14	369a	366	-3
Current Mill Average:					43.1	42.6	12.7	12.5	-0.2	111	113	+2	35	35	334	-19	383	373	-10

Mill A-42-lb. Linerboard

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

TABLE XXV
 SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet								
					IPC	Mill Diff.	IPC	Mill Diff.	IPC	Mill Diff.	IPC	Mill Diff.	In	Across	IPC	Mill Diff.					
165562	B-1234	W.F.	8/22/55	1	42.5	42.7	+1.2	12.5	12.6	+0.1	104	109	+5	31	30	-1	313 ^a	0	357 ^a	371	+14
165579	B-1235	W.F.	8/24/55	1	42.0	42.5	+0.5	12.4	12.7	+0.3	109	106	-3	30	30	0	301 ^a	+8	343 ^a	369	+26
165590	B-1236	W.F.	8/30/55	1	42.4	42.5	+0.1	11.9	11.9	0.0	117	119	+2	30	26	-4	331 ^a	-30	343 ^a	353	+10
165691	B-1237	W.F.	9/ 1/55	1	42.7	42.7	0.0	12.1	11.9	-0.2	118	117	-1	29	25	-4	300	+16	351 ^a	386	+35
165813	B-1238	W.F.	9/ 3/55	1	42.7	42.6	-0.1	12.0	11.9	-0.1	120	118	-2	30	28	-2	291 ^a	+10	343 ^a	362	+19
165928	B-1239	W.F.	9/ 6/55	1	42.6	42.8	+0.2	12.1	12.0	-0.1	118	117	-1	31	29	-2	275 ^a	+31	358 ^a	347	-11
165938	B-1240	W.F.	9/12/55	1	43.0	42.8	-0.2	12.0	12.0	0.0	119	118	-1	30	29	+1	296 ^a	+16	358 ^a	363	+5
Current Mill Average:					42.4	42.7	+0.3	12.2	12.2	0.0	115	115	0	30	28	-2	301	+7	350	364	+14

Mill B-1/2-lb. Linerboard

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

TABLE XXVII

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955---Continued

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet							
					IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	In	Across	IPC Mill	Diff.				
165760	D-890	W.F.	9/ 9/55	4	41.9	42.6	+0.7	12.0	12.2	+0.2	110	104	-6	32	369a	364	- 5	413a	428	+15
165761	D-891	W.F.	9/10/55	4	42.4	43.4	+1.0	11.9	12.1	+0.2	112	107	-5	33	358a	347	-11	399a	415	+16
165936	D-892	W.F.	9/14/55	4	45.0	45.6	+0.6	12.7	12.6	-0.1	112	111	-1	38	371a	367	- 4	399a	400	+ 1
165937	D-893	W.F.	9/15/55 ^b	4	43.6	44.0	+0.4	12.1	11.9	-0.2	114	107	-7	37	377a	379	+ 2	382a	371	-11
165967	D-894	W.F.	9/16/55	4	42.8	42.7	-0.1	12.2	11.9	-0.3	113	108	-5	35	355a	316	-39	379a	377	- 2
165968	D-895	W.F.	9/17/55	4	44.0	43.8	-0.2	12.5	12.1	-0.4	109	108	-1	36	331a	365	+34	387a	372	-15
Current Mill Average:					43.3	43.7	+0.4	12.2	12.1	-0.1	112	107	-5	35	360	356	- 4	393	394	+ 1

TABLE XXVIII

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet							
					IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	In	Across	IPC Mill	Diff.				
165554	E-169	W.F.	8/24/55	2	41.6	43.1	+1.5	13.4	12.3	-1.1	102	104	+2	34	333 ^a	334	+ 1	355 ^a	398	+43
165580	E-170	W.F.S	8/26/55	2	42.0	43.1	+1.1	13.5	12.6	-0.9	109	112	+3	34	339 ^a	315	-24	374 ^a	395	+21
165750	E-173	W.F.S	9/ 8/55	2	42.2	42.6	+0.4	13.6	12.5	-1.1	106	109	+3	32	325 ^a	304	-21	371 ^a	344	-27
165978	E-175	W.F.S	9/16/55	2	41.0	41.8	+0.8	13.3	12.8	-0.5	104	104	0	33	343a	353	+10	363a	379	+16
Current Mill Average:					41.7	42.6	+0.9	13.4	12.6	-0.8	105	108	+3	33	335	326	- 9	366	379	+13

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE XXIX

SUMMARY OF INDIVIDUAL TEST LOTS---SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955---Continued

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.		IPC Mill Diff.	Caliper, points	IPC Mill Diff.	Bursting Strength, p.s.i. gage		IPC Mill Diff.	G. E. Puncture, units	IPC Mill Diff.	Elmendorf Tear, g./sheet		IPC Mill Diff.				
					IPC Mill	Diff.				IPC Mill	Diff.				In	Across					
165563	F-39	W.B.	8/11/55	--	42.4	42.3	-0.1	13.4	12.8	104	110	+ 6	37	38	+1	407	404	- 3	426 ^a	439	+13
165564	F-40	W.B.	8/11/55	--	43.5	43.3	-0.2	12.8	12.3	104	109	+ 5	39	39	0	428 ^a	428	0	423 ^a	447	+24
165565	F-41	W.B.	8/12/55	--	42.1	42.0	-0.1	13.0	12.4	108	105	- 3	40	39	-1	384 ^a	392	+ 8	410 ^a	435	+25
165566	F-42	W.B.	8/16/55	--	42.5	42.4	-0.1	12.9	12.4	105	108	+ 3	36	37	+1	378	373	- 5	416 ^a	432	+16
165567	F-43	W.B.	8/19/55	--	42.2	41.9	-0.3	12.1	11.8	107	110	+ 3	35	37	+2	395 ^a	399	+ 4	396 ^a	416	+20
165735	F-44	W.B.	8/23/55	--	42.1	42.0	-0.1	12.4	11.8	108	113	+ 5	37	38	+1	381 ^a	424	+43	418 ^a	447	+29
165736	F-45	W.B.	8/29/55	--	42.9	43.5	+0.6	13.2	12.7	109	110	+ 1	39	40	+1	373 ^a	400	+27	419 ^a	441	+22
165737	F-46	W.B.	8/31/55	--	42.2	42.9	+0.7	12.5	12.1	115	120	+ 5	38	39	+1	399 ^a	419	+20	425 ^a	445	+20
165738	F-47	W.B.	9/ 2/55	--	41.3	41.7	+0.4	12.6	12.1	111	116	+ 5	36	37	+1	376 ^a	396	+20	438 ^a	439	+ 1
166024	F-48	W.B.	9/16/55	--	44.2	44.1	-0.1	12.2	11.8	116	118	+ 2	38	40	+2	427 ^a	424	- 3	422 ^a	455	+33
166025	F-49	W.B.	9/19/55	--	42.6	42.4	-0.2	11.6	11.3	101	118	+17	37	38	+1	373 ^a	372	- 1	409 ^a	423	+14
Current Mill Average:					42.5	42.6	+0.1	12.6	12.1	108	113	+ 5	37	38	+1	393	403	+10	418	438	+20

Mill F-42-lb. Linerboard

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

TABLE XXX
SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet									
					IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	In Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.				
<u>Mill G--42-lb. Linerboard</u>																						
165589	G-672	W.F.	8/29/55 ^b	2	43.6	43.1	-0.5	11.8	11.5	-0.3	111	110	-1	34	29	-5	319 ^a	361	+42	369 ^a	383	+14
165600	G-673	W.F.	8/29/55	2	44.6	44.0	-0.6	12.0	11.8	-0.2	113	107	-6	36	30	-6	351 ^a	392	+41	397 ^a	411	+14
165601	G-674	W.F.	8/28/55 ^c	2	43.6	43.3	-0.3	11.6	11.5	-0.1	109	110	+1	35	29	-6	315 ^a	369	+54	373 ^a	387	+14
165615	G-675	W.F.	8/30/55	2	43.8	43.5	-0.3	11.7	11.5	-0.2	111	110	-1	33	29	-4	319 ^a	385	+66	375 ^a	399	+24
165739	G-676	W.F.	9/ 1/55	2	43.7	43.3	-0.4	11.8	11.7	-0.1	114	111	-3	32	31	-1	317 ^a	366	+49	358 ^a	398	+40
165695	G-677	W.F.	9/ 2/55	2	44.8	44.5	-0.3	11.8	11.9	+0.1	109	110	+1	34	30	-4	352 ^a	380	+28	393 ^a	397	+ 4
165763	G-678	W.F.	9/ 3/55 ^d	2	44.6	44.3	-0.3	11.9	11.6	-0.3	110	112	+2	34	30	-4	332 ^a	372	+40	369 ^a	411	+42
165956	G-679	W.F.	9/13/55	2	43.4	42.9	-0.5	12.9	12.5	-0.4	103	107	+4	35	30	-5	341 ^a	397	+56	373 ^a	410	+37
Current Mill Average:					44.0	43.6	-0.4	11.9	11.7	-0.2	110	110	0	34	30	-4	331	378	+47	376	400	+24

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE XXXI

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Diff.		Eursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet		
					IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill
65576	H-513	WFLS	8/17/55	2	43.0	+1.4	12.1	12.1	0.0	115	120	31	30	383	+39	377a	437
65577	H-514	WFLS	8/18/55	2	42.1	+1.0	12.3	12.3	0.0	116	117	32	31	376	+55	375a	413
65602	H-515	WFLS	8/21/55	2	42.4	+1.3	11.9	12.0	+0.1	108	108	34	33	369	-8	391a	412
65609	H-516	WFLS	8/22/55	2	42.3	+0.6	12.1	11.9	-0.2	116	116	32	30	329	0	373a	392
65740	H-517	WFLS ^b	8/29/55	2	42.3	+0.8	11.7	12.0	+0.3	116	114	30	31	357	+28	366a	400
65741	H-518	WFLS ^b	8/30/55	2	41.7	+1.0	12.0	12.0	0.0	115	113	31	31	326	-5	363a	385
65742	H-519	W.F.C	9/ 6/55	2	42.0	+1.5	12.1	12.1	0.0	115	111	32	31	344	-6	376a	388
65743	H-520	W.F.C	9/ 7/55	2	41.7	+1.0	12.0	12.4	+0.4	115	110	32	31	335	-6	383a	365
65931	H-521	W.F.C	9/11/55	2	42.3	+0.6	12.3	11.9	-0.4	113	113	33	31	332	-6	384a	403
65932	H-522	W.F.C	9/11/55	2	42.3	+0.9	12.1	11.9	-0.2	113	115	32	32	340	-7	372a	300
66022	H-523	W.F.C	9/20/55	2	42.9	+0.4	12.5	12.0	-0.5	118	120	34	34	341	-11	379a	438
66023	H-524	W.F.C	9/21/55	2	43.2	-0.5	12.3	11.9	-0.4	117	119	33	33	361	-14	378a	439
Current Mill Average:					42.4	+0.8	12.1	12.0	-0.1	115	115	32	31	342	+7	376	400
																	+24

Mill H-42-lb. Linerboard

This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

TABLE XXXII

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet									
					IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	IPC Mill	Diff.	In	Across	IPC Mill	Diff.						
65597	I-490	WFLS	8/29/55	1	40.8	42.4	+1.6	12.2	12.3	+0.1	102	105	+3	31	34	+3	325 ^a	353	+28	349 ^a	443	+94
65591	I-491	WFLS	8/30/55	1	40.5	42.4	+1.9	12.0	12.2	+0.2	102	103	+1	30	33	+3	348	355	+7	383 ^a	435	+52
Current Mill Average:					40.7	42.4	+1.7	12.1	12.2	+0.1	102	104	+2	31	34	+3	337	354	+17	366	439	+73

Mill I-42-lb. Linerboard

TABLE XXXIII

Mill J-42-lb. Linerboard

65593	J-551	W.F.	8/27/55 ^b	--	42.2	41.9	-0.3	13.0	12.7	-0.3	111	109	-2	32	30	-2	351 ^a	317	-34	373 ^a	350	-23
65594	J-552 ^c	W.F.	8/27/55 ^b	1	42.1	41.1	-1.0	13.0	12.5	-0.5	102	100	-2	31	31	0	368 ^a	336	-32	356 ^a	334	-22
65696	J-553	W.F.	9/ 2/55	--	42.7	42.6	-0.1	12.6	11.6	-1.0	109	107	-2	32	30	-2	374 ^a	349	-25	374 ^a	351	-23
65697	J-554	W.F.	9/ 2/55	--	42.7	42.7	0.0	12.6	12.0	-0.6	111	106	-5	32	31	-1	382 ^a	345	-37	369 ^a	348	-21
65995	J-555	W.F.	9/12/55	--	41.4	41.8	+0.4	11.9	11.7	-0.2	100	99	-1	30	29	-1	348 ^a	343	-5	331 ^a	356	+25
65996	J-556	W.F.	9/12/55	--	41.4	41.8	+0.4	12.0	11.6	-0.4	106	98	-8	31	29	-2	347 ^a	351	+4	341 ^a	343	+2
Current Mill Average:					42.1	42.0	-0.1	12.5	12.0	-0.5	107	103	-4	31	30	-1	362	340	-22	357	347	-10

This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

TABLE XXXIV

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Purstring Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet									
					IPC Mill Diff.	IPC Mill Diff.	IPC Mill Diff.	IPC Mill Diff.	IPC Mill Diff.	IPC Mill Diff.	In	Across	IPC Mill Diff.	IPC Mill Diff.								
165558	K-26	S.F.	8/24/55	7	44.6	43.9	-0.7	13.6	13.0	-0.6	107	110	+3	40	40	40	40	366	-29	412 ^a	425	+13
165614	K-27	S.F.	9/1/55	7	43.3	42.4	-0.9	12.8	12.4	-0.4	101	105	+4	36	37	+1	389 ^a	351	-38	394 ^a	393	-1
165955	K-28	S.F.	9/13/55	7	43.5	43.4	-0.1	13.0	12.9	-0.1	106	103	-3	38	40	+2	369 ^a	374	+5	369 ^a	403	+34
165994	K-29	S.F.	9/21/55	7	43.1	42.5	-0.6	12.8	12.3	-0.5	101	105	+4	39	39	0	399	357	-42	395 ^a	404	+9
Current Mill Average:					43.6	43.1	-0.5	13.0	12.7	-0.3	103	105	+2	38	39	+1	388	362	-26	392	406	+14

Mill K--42-lb. Linerboard

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

TABLE XXXV

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		IPC Mill Diff.	IPC Mill Diff.	IPC Mill Diff.	G. E. Puncture, units		IPC Mill Diff.	IPC Mill Diff.	Elmendorf Tear, g./sheet			
				IPC Mill	Diff.	IPC Mill	Diff.				IPC Mill	Diff.			In	Across	IPC Mill	Diff.
165568	L-385	8/ 9/55	1	43.3	42.6	13.8	13.1	-0.7	112	105	-7	39	343 ^a	327	-16	403 ^a	371	-32
165569	L-386 ^b	8/12/55	1	42.2	41.9	13.2	13.1	-0.1	113	110	-3	34	364 ^a	336	-28	365 ^a	392	+27
165570	L-387 ^b	8/15/55	1	42.0	42.2	13.3	13.2	-0.1	114	109	-5	34	313 ^a	356	+43	365 ^a	386	+21
165571	L-388	8/20/55	1	44.0	43.3	13.0	12.9	-0.1	109	108	-1	38	338 ^a	354	+16	386 ^a	398	+12
165845	L-389	8/23/55	1	43.9	42.4	11.7	12.0	+0.3	121	108	-13	35	344 ^a	338	- 6	378 ^a	386	+ 8
165846	L-390	8/26/55	1	42.6	42.4	13.7	13.2	-0.5	112	107	-5	38	365 ^a	358	- 7	392 ^a	394	+ 2
165847	L-391	9/ 1/55	1	44.0	42.5	11.7	12.1	+0.4	117	107	-10	35	333 ^a	336	+ 3	368 ^a	383	+15
165848	L-392	9/ 7/55	1	43.4	42.6	14.0	12.9	-1.1	102	106	+4	37	352 ^a	348	- 4	389 ^a	392	+ 3
166008	L-393 ^b	9/11/55	1	42.4	42.2	13.3	13.4	+0.1	110	110	0	35	348 ^a	357	+ 9	361 ^a	392	+31
166009	L-394	9/16/55	1	44.0	42.1	13.3	12.6	-0.7	108	110	+2	37	350 ^a	349	- 1	389 ^a	389	0
Current Mill Average:				43.2	42.4	13.1	12.9	-0.2	112	108	-4	36	345	346	+ 1	380	388	+ 8

Mill L--42-lb. Linerboard

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

TABLE XXXVII

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955---Continued

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, g./sheet							
					IPC	Mill Diff.	IPC	Mill Diff.	IPC	Mill Diff.	IPC	Mill Diff.	In	Across	IPC	Mill Diff.				
165574	N-158	WF1S	8/19/55	--	41.4	41.5	+0.1	11.4	11.2	-0.2	107	105	-2	38	343 ^a	371	+28	379 ^a	442	+63
165575	N-159	WF1S	8/21/55	1	42.0	41.6	-0.4	11.8	11.4	-0.4	112	108	-4	38	352 ^a	378	+26	393 ^a	466	+73
165929	N-160	WF1S	8/31/55	1	42.5	42.4	-0.1	12.4	12.0	-0.4	107	107	0	39	367 ^a	356	-11	413 ^a	456	+43
165930	N-161	WF1S	9/ 2/55	1	41.7	41.7	0.0	12.5	12.2	-0.3	110	109	-1	39	349	382	+33	387 ^a	486	+99
Current Mill Average:					41.9	41.8	-0.1	12.0	11.7	-0.3	109	107	-2	39	352	372	+20	393	462	+69

Mill N---42---lb. Linerboard

TABLE XXXVIII

Mill O---42---lb. Linerboard																				
165578	O-89	W.F.	8/10/55	4	42.6	43.0	+0.4	11.9	11.6	-0.3	112	111	-1	36	383 ^a	344	-39	405 ^a	381	-24
165849	O-90	W.F.	9/ 2/55	4	42.2	42.8	+0.6	11.2	11.1	-0.1	111	114	+3	38	358 ^a	316	-42	375 ^a	368	-7
165850	O-91	W.F.	9/ 2/55	4	42.6	43.0	+0.4	11.4	11.3	-0.1	110	108	-2	38	366 ^a	312	-54	379 ^a	365	-14
Current Mill Average:					42.4	42.9	+0.5	11.5	11.3	-0.2	111	111	0	38	369	324	-45	386	372	-14

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

TABLE XXXIX
 SUMMARY OF INDIVIDUAL TEST LOTS---SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955---Continued

File No.	Mill Code	Fin- ish	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		Bursting Strength, p.s.i. gage		G. E. Puncture, units		Elmendorf Tear, G./sheet						
					IPC	Mill Diff.	IPC	Mill Diff.	IPC	Mill Diff.	IPC	Mill Diff.	In	Across	IPC	Mill Diff.			
<u>Mill P--42-lb. Linerboard</u>																			
165555	P-93	W.F.	8/22/55	--	44.7	44.6	-0.1	12.5	11.9	109	108	-1	39	384 ^a	379	-5	395 ^a	375	-20
165572	P-94	W.F.	8/26/55	--	43.4	43.4	0.0	12.0	11.2	106	102	-4	38	361 ^a	388	+27	385 ^a	409	+24
165573	P-95	W.F.	8/26/55	--	44.6	44.5	-0.1	12.5	11.8	105	105	0	39	403 ^a	379	-24	415 ^a	401	-14
165582	P-96	W.F.	8/30/55	--	41.5	41.2	-0.3	11.7	11.0	106	107	+1	34	337 ^a	387	+50	343 ^a	376	+33
165583	P-97	W.F.	8/30/55	--	44.0	43.6	-0.4	12.3	11.4	111	109	-2	39	387 ^a	399	+12	381 ^a	397	+16
165584	P-98	W.F.	8/30/55	--	43.6	43.8	+0.2	12.3	11.2	114	114	0	39	400 ^a	413	+13	414 ^a	413	-1
165585	P-99 ^b	W.F.	8/31/55	--	41.3	42.1	+0.8	11.6	11.4	105	100	-5	37	365 ^a	387	+22	395 ^a	387	-8
165941	P-100	W.F.	9/12/55	--	42.3	42.6	+0.3	11.8	11.6	117	112	-5	37	375 ^a	440	+65	395 ^a	460	+65
165942	P-101	W.F.	9/12/55	--	43.7	43.6	-0.1	12.2	11.8	114	106	-8	40	380 ^a	449	+69	407 ^a	411	+4
165943	P-102	W.F.	9/12/55	--	43.5	43.8	+0.3	12.4	12.1	114	110	-4	40	387 ^a	413	+26	419 ^a	417	-2
166004	P-103	W.F.	9/20/55	--	43.8	43.5	-0.3	11.9	11.5	111	107	-4	37	377 ^a	408	+31	381 ^a	400	+19
166005	P-104	W.F.	9/20/55	--	45.2	45.1	-0.1	12.1	12.1	111	107	-4	37	385 ^a	411	+26	393 ^a	420	+27
166006	P-105	W.F.	9/20/55	--	45.0	45.1	+0.1	11.9	11.9	100	99	-1	38	390 ^a	431	+41	375 ^a	425	+50
166007	P-106	W.F.	9/20/55	--	44.3	44.3	0.0	12.0	12.0	98	98	0	38	405 ^a	425	+20	390 ^a	395	+5
Current Mill Average:					43.6	43.7	+0.1	12.1	11.6	109	106	-3	38	381	408	+27	392	406	+14

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

TABLE XXXX

SUMMARY OF INDIVIDUAL TEST LOTS--SEPTEMBER 1 THROUGH SEPTEMBER 30, 1955--Continued

File No.	Mill Code	Fin- ish	Date Made	Mch. No.	Basis Weight, lb.		Caliper, points		IPC Mill Diff.	Bursting Strength, p.s.i. gage		IPC Mill Diff.	G. E. Puncture, units		Elmendorf Tear, g./sheet		IPC Mill Diff.	IPC Mill Diff.	IPC Mill Diff.	
					IPC Mill Diff.	IPC Mill Diff.	IPC Mill Diff.	IPC Mill Diff.		In IPC Mill Diff.	Across IPC Mill Diff.									
165556	Q-34	WF1S	8/16/55	3	42.2	42.3	+0.1	13.2	13.1	-0.1	102	103	+ 1	33	329 ^a	369	+40	365 ^a	405	+40
165557	Q-35	WF1S	8/17/55	3	43.0	42.8	-0.2	13.0	12.6	-0.4	117	112	- 5	35	359 ^a	375	+16	392 ^a	409	+17
165558	Q-36	WF1S	8/22/55	3	43.0	41.8	-1.2	13.3	12.8	-0.5	110	110	0	33	337 ^a	363	+26	371 ^a	411	+40
165844	Q-37 ^b	WF1S	9/ 4/55	3	43.0	42.7	-0.3	13.9	13.6	-0.3	96	107	+11	36	343 ^a	364	+21	384 ^a	399	+15
166018	Q-38 ^c	WF1S	9/11/55	3	42.6	42.3	-0.3	13.9	13.5	-0.4	107	112	+ 5	33	357 ^a	370	+13	397 ^a	417	+20
Current Mill Average:					42.8	42.4	-0.4	13.4	13.1	-0.3	106	109	+3	34	345	368	+23	382	408	+26

Mill Q-42-lb. Linerboard

^a This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

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