WCAP8651 - Flecht Cosine Test Data Report - Parts 1 - 4

This report is archived in ADAMS in 4 ML numbers with the following sequence:

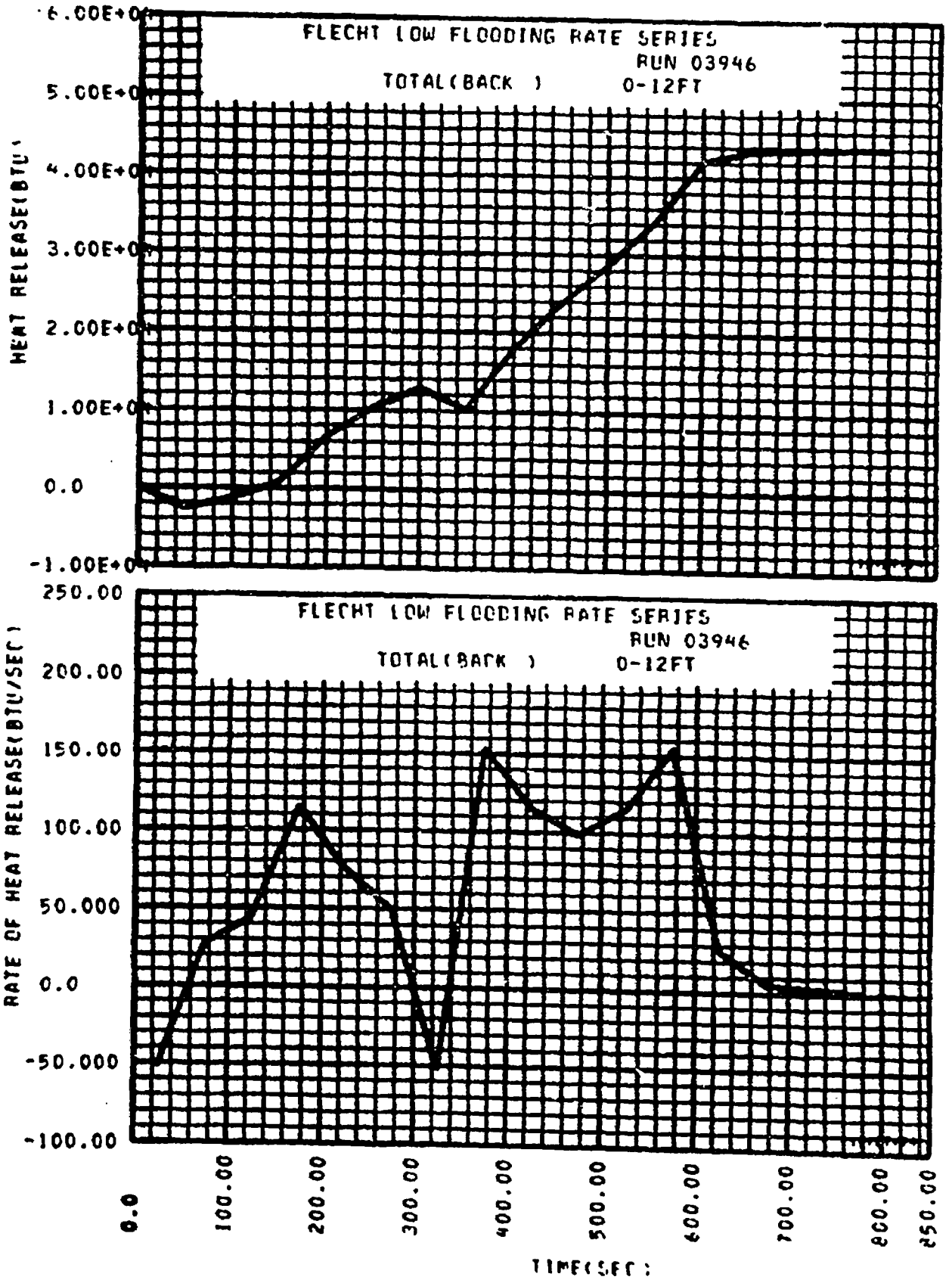
ML050380247 for the first part of the report,

ML050380208 for the second part of the report,

ML050380261 for the third part of the report, and

ML050380146 for the last part of the report.

FLECHT Low Flooding Rate Cosine Test Series Data Report
Appendix E, Section 2


FLECHT LOW FLOODING RATE SERIES
RUN 03946
TOTAL(BACK)
0-12FT
HEAT RELEASE(BTU
6.00E+0
5.00E+0
4.00E+0
3.00E+0
2.00E+0
1.00E+0
0.0
-1.00E+0
FLECHT LOW FLOODING RATE SERIES
RUN 03946
TOTAL(BACK)
0-12FT
RATE OF HEAT RELEASE(BTU/SEC)
250.00
200.00
150.00
100.00
50.000
0.0
-50.000
-100.00
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
850.00
TIME(SEC)

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 06019

DATE: 4/22/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	39	
Initial Clad Temperature (6 Ft)°F At Flood	1,602	Rod T/C 4H6
Rod Peak Power, kw/ft	0.89	
Flooding Rate, in/sec	6 (5 sec)	
	1.5	

Coolant Temperature, °F	131	
Bundle Radial Power Profile	FLECHT	
Disconnected Rods	7F	

B. INITIAL HOUSING TEMPERATURE

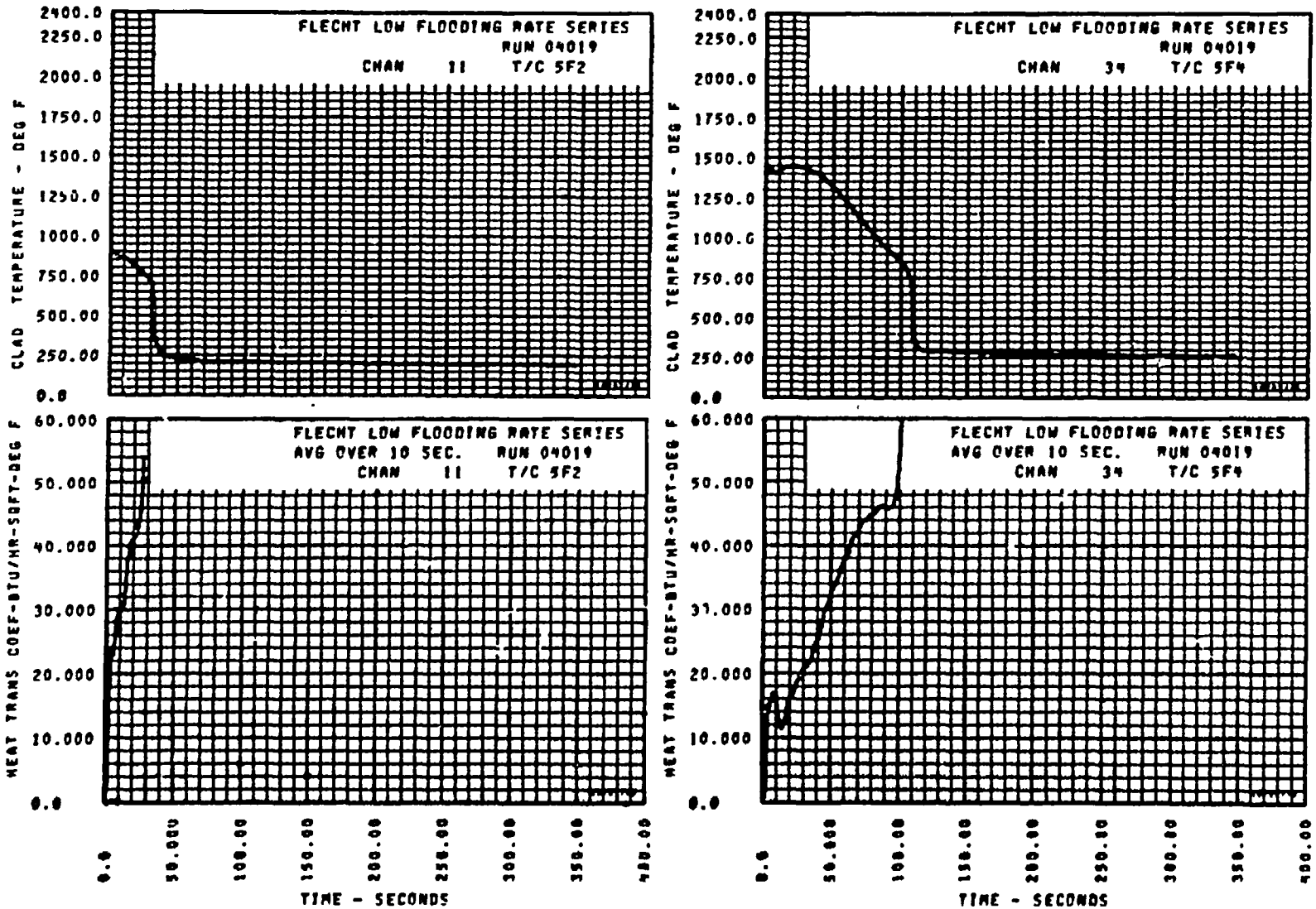
Back Side Elevation, Ft.	Temperature, °F
0	259
2	429
4	573
5.5	659
6	652
6.5	539
7	532
7.5	533
8	554
10	423
12	271
Average	493
Lower Plenum	112
Upper Plenum	280

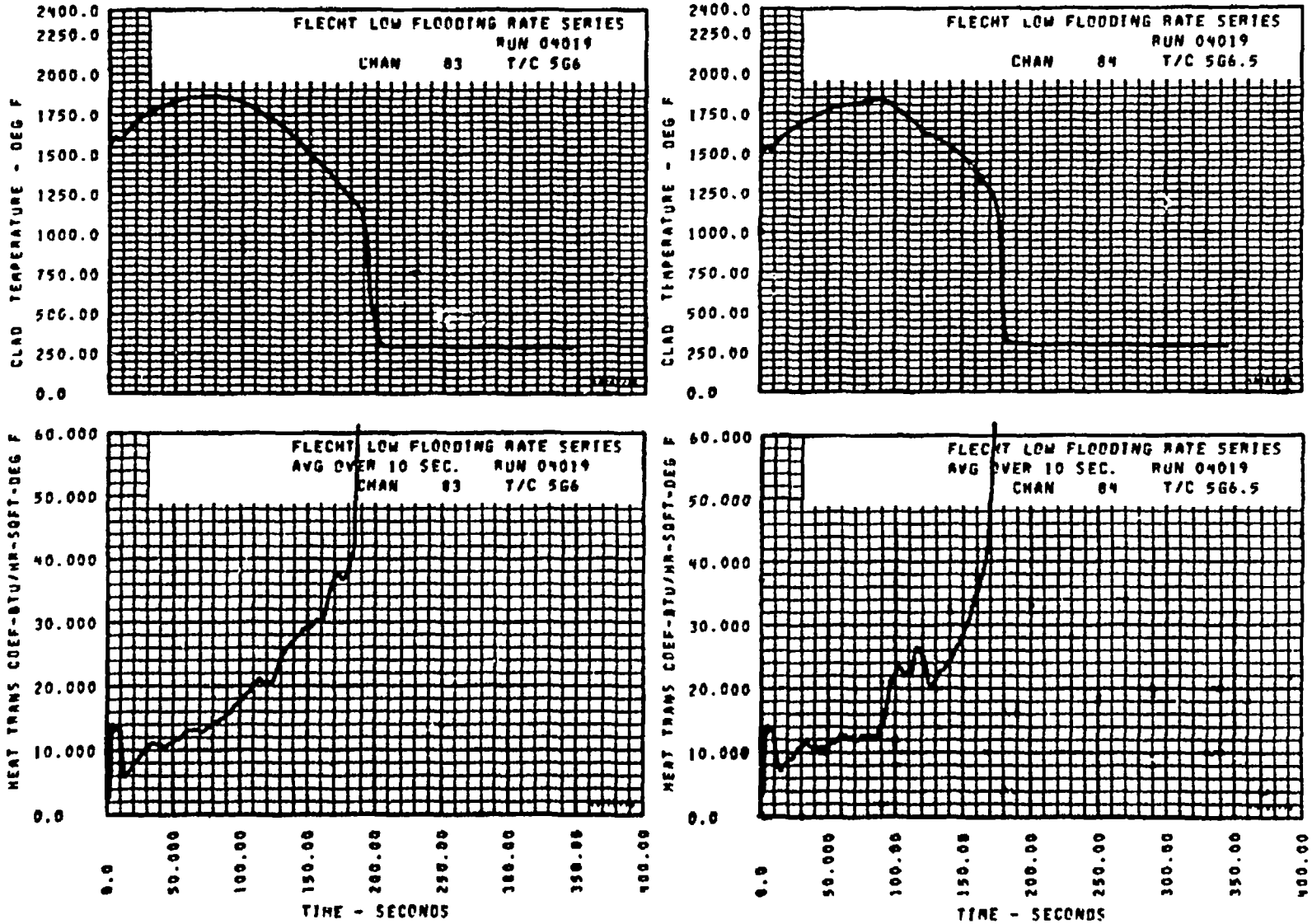
BLANK PAGE

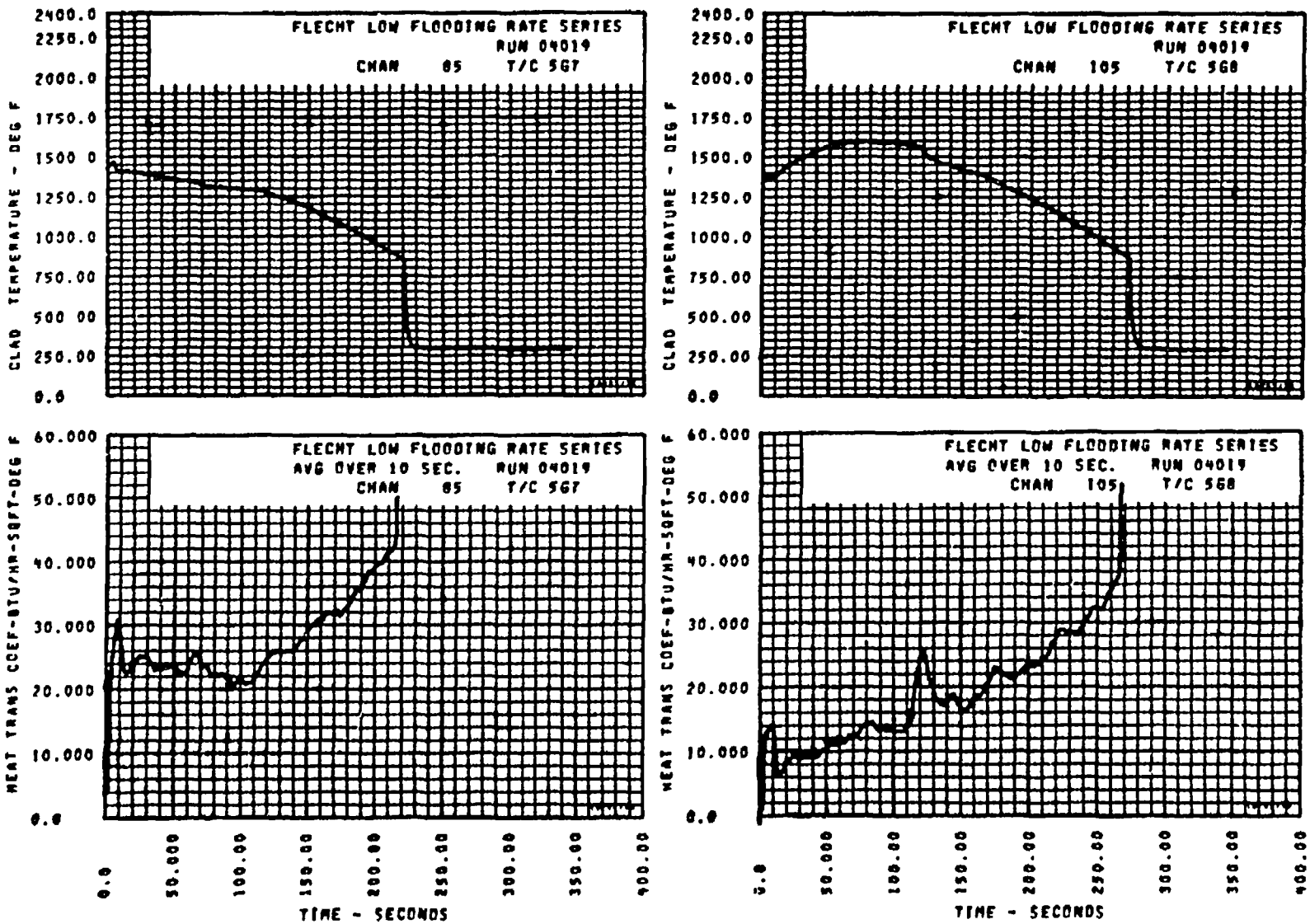
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

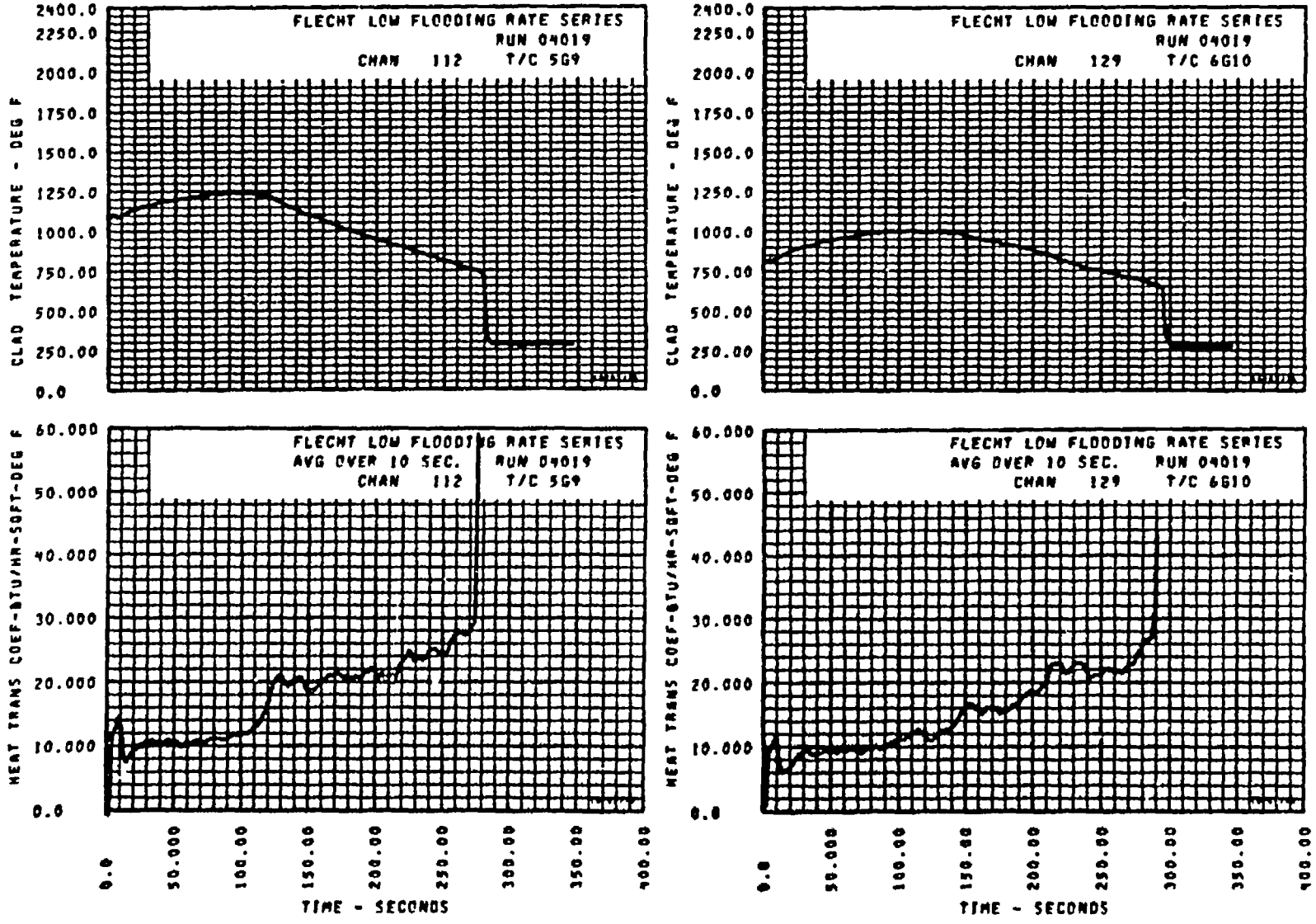
RUN NUMBER 04019

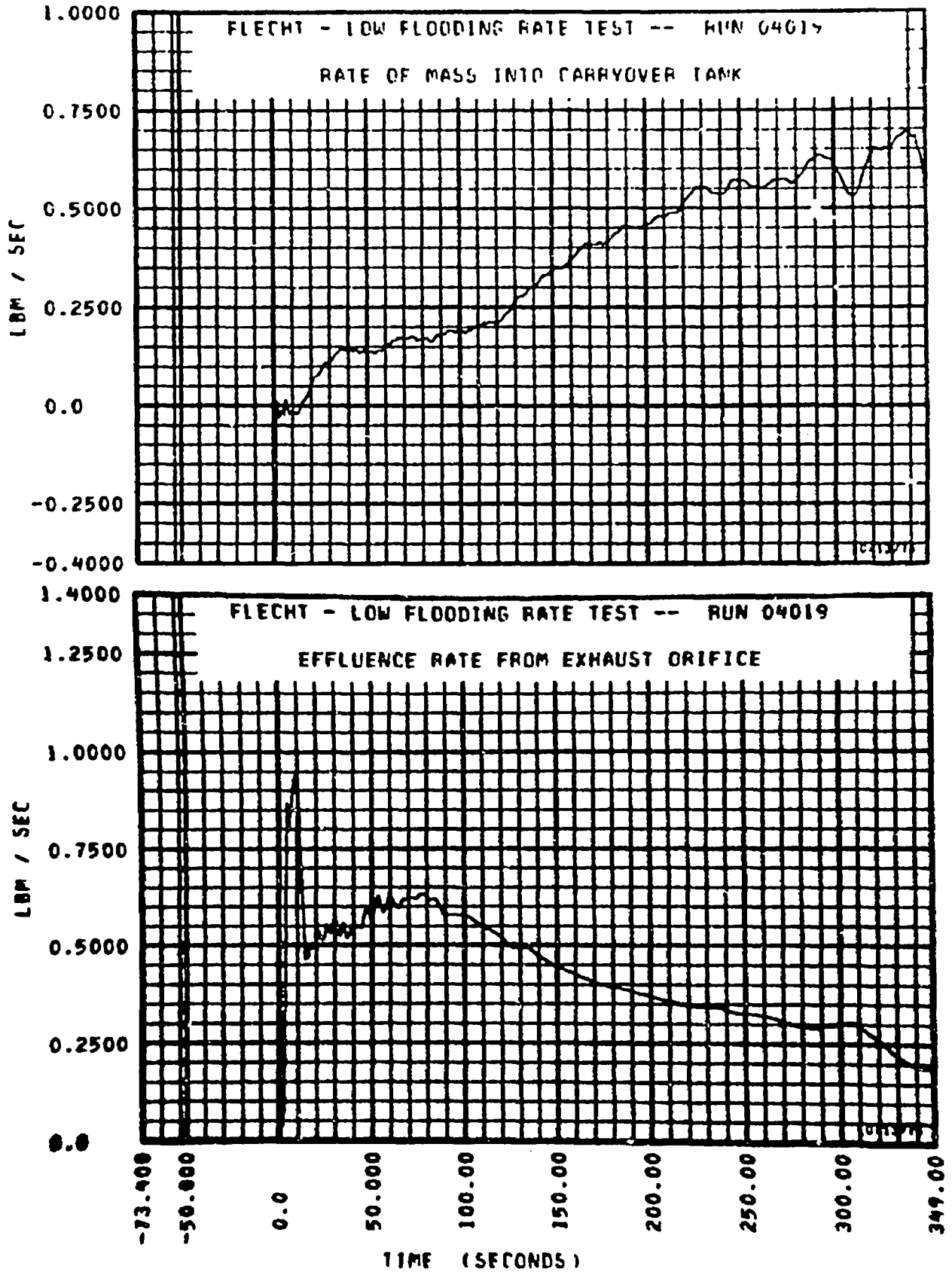
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	269.	-69.4	621.	627.	6.	1.2	583.	3.9
4H1	291.	-70.4	651.	662.	10.	2.2	588.	8.5
4H1.5	355.	-69.4	688.	699.	11.	2.2	610.	21.6
4H2	414.	-70.4	913.	929.	16.	2.8	708.	34.5
4H4	557.	-70.4	1414.	1472.	58.	23.6	745.	112.5
4H6	559.	-70.4	1602.	1804.	202.	59.2	980.	192.0
8D6	430.	-69.4	1513.	1740.	226.	66.6	873.	200.7
8D6.5	433.	-69.4	1459.	1761.	302.	75.6	850.	220.5
8D7	408.	-69.4	1381.	1425.	44.	4.4	832.	246.9
8D8	411.	-69.4	1253.	1471.	218.	47.6	703.	284.0
8D9	335.	-69.4	1059.	1141.	82.	41.0	605.	303.0
8D10	349.	-69.4	831.	1031.	199.	105.0	668.	282.1
8D11	269.	-69.4	619.	834.	215.	113.0	625.	249.8
8D12	272.	-69.4	491.	617.	126.	154.0	582.	181.1
5F0	259.	-69.4	432.	432.	0.	0.0	424.	1.0
5F0.5	268.	-70.4	619.	624.	4.	1.0	594.	4.6
5F1	269.	-70.4	622.	631.	9.	2.0	569.	10.4
5F1.5	357.	-69.4	665.	680.	16.	4.6	284.	36.8
5F2	332.	-70.4	896.	902.	16.	2.8	709.	31.3
5F3	436.	-69.4	1155.	1179.	24.	3.0	777.	62.5
5F4	544.	-70.4	1397.	1451.	54.	20.0	712.	108.3
5F6	459.	-69.4	1552.	1781.	229.	60.5	842.	195.5
5G6	516.	-69.4	1565.	1467.	101.	76.6	955.	192.9
5G6.5	441.	-69.4	1495.	1838.	343.	91.4	1066.	177.8
5G7	456.	-69.4	1430.	1471.	41.	4.0	845.	221.5
5G8	484.	-69.4	1338.	1598.	260.	78.2	671.	272.0
5G9	409.	-69.4	1071.	1235.	164.	90.6	685.	240.6
5G11	269.	-70.4	623.	780.	156.	109.2	705.	174.0
5G12	272.	-69.4	593.	695.	102.	104.4	661.	114.9
1G4	556.	-69.4	1321.	1346.	25.	3.4	810.	95.3
1G6	609.	-70.4	1526.	1591.	64.	40.6	945.	199.0
1G10	272.	-69.4	740.	946.	186.	77.0	283.	318.0
3H2	404.	-69.4	923.	941.	18.	2.9	704.	30.6
3H6	340.	-69.4	1587.	1809.	221.	61.0	924.	188.8
3H8	314.	-69.4	1351.	1548.	197.	52.6	858.	267.0
3H10	332.	-70.4	821.	1103.	282.	97.0	697.	310.6

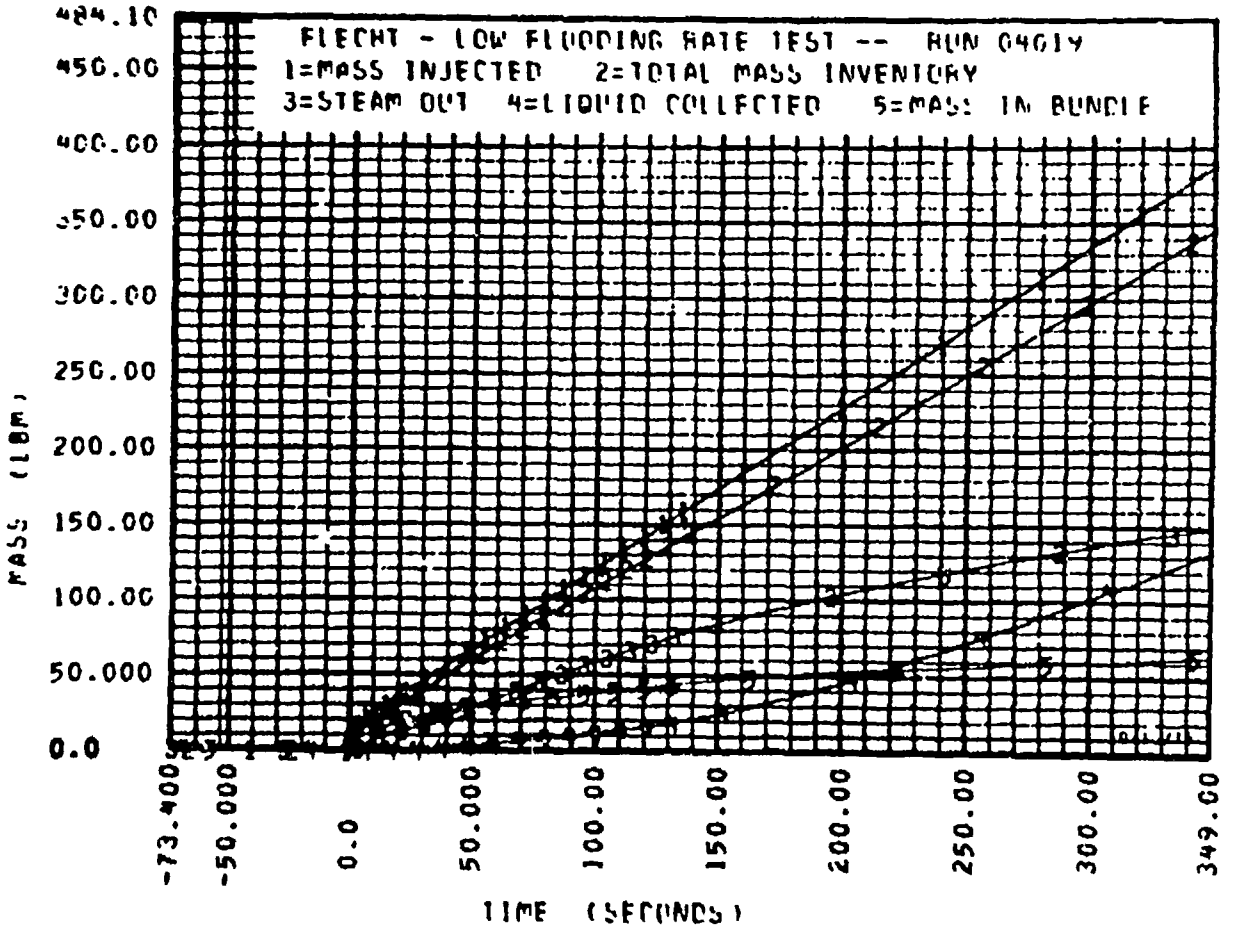

FLECHT LOW FLOODING RATE SERIES
RUN 04019
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04019
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04019
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04019
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS
TIME - SECONDS

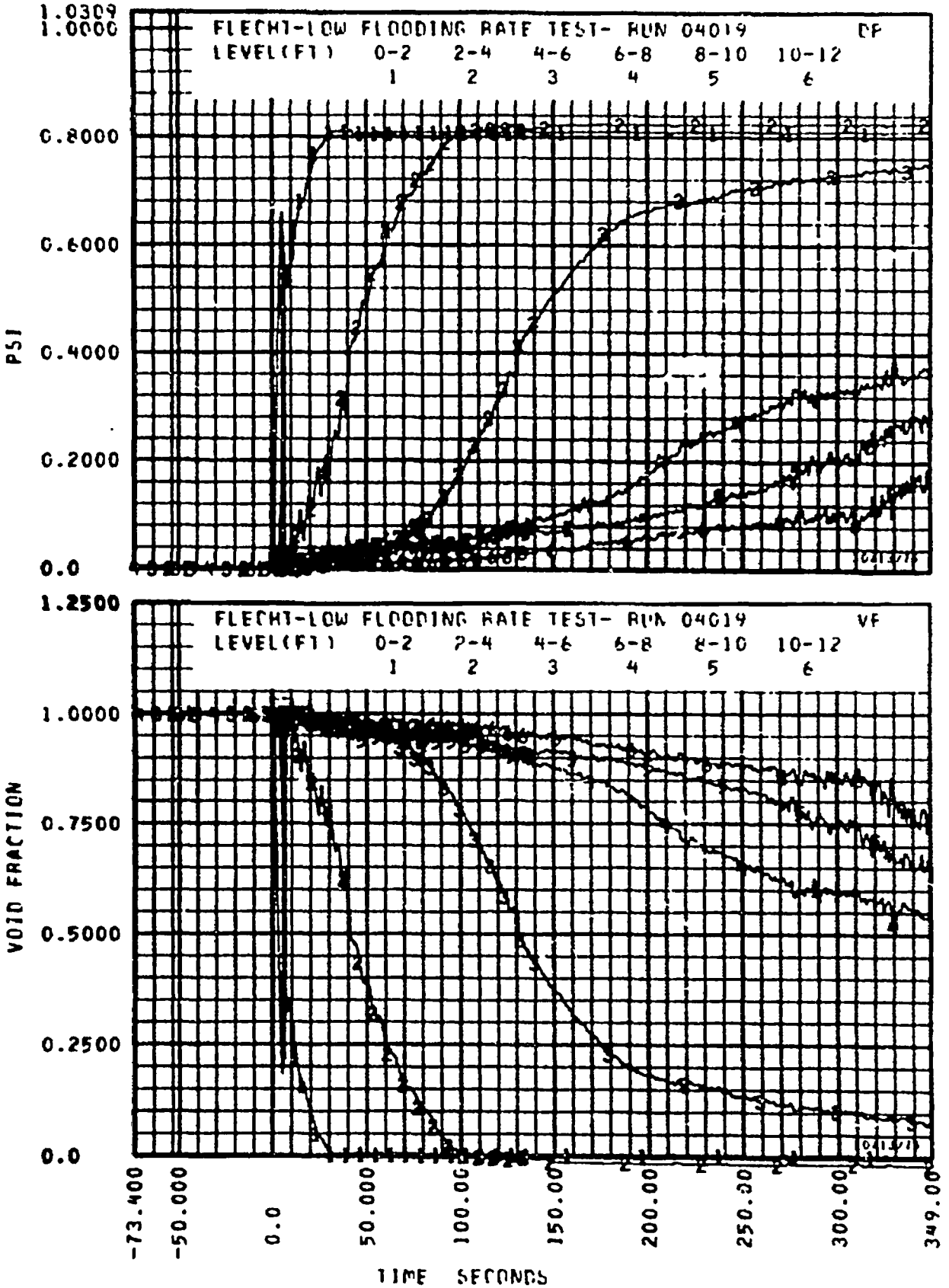

FLECHT LOW FLOODING RATE SERIES
RUN 04019
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04019
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04019
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04019
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

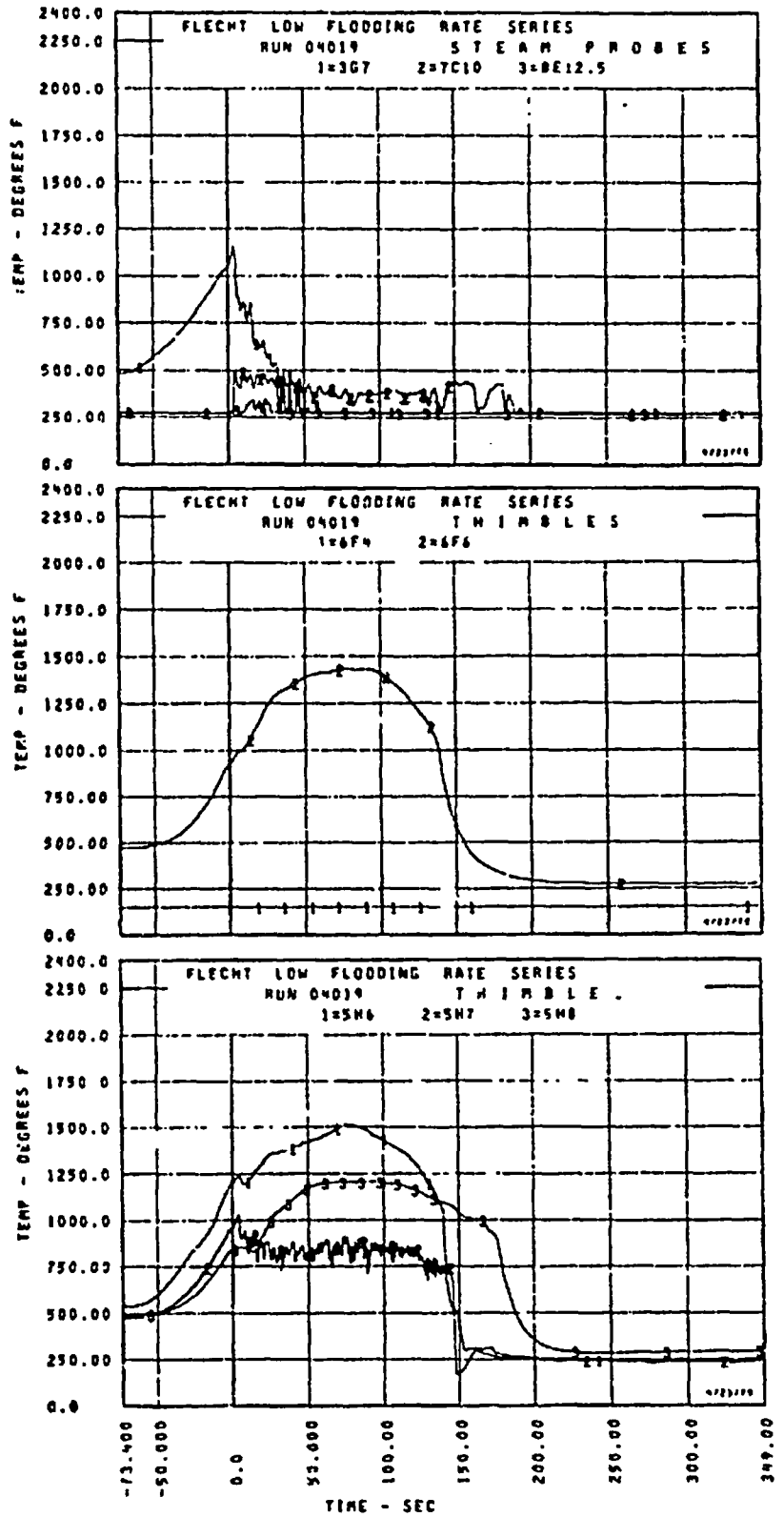

FLECHT LOW FLOODING RATE SERIES
RUN 04019
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04019
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04019
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04019
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

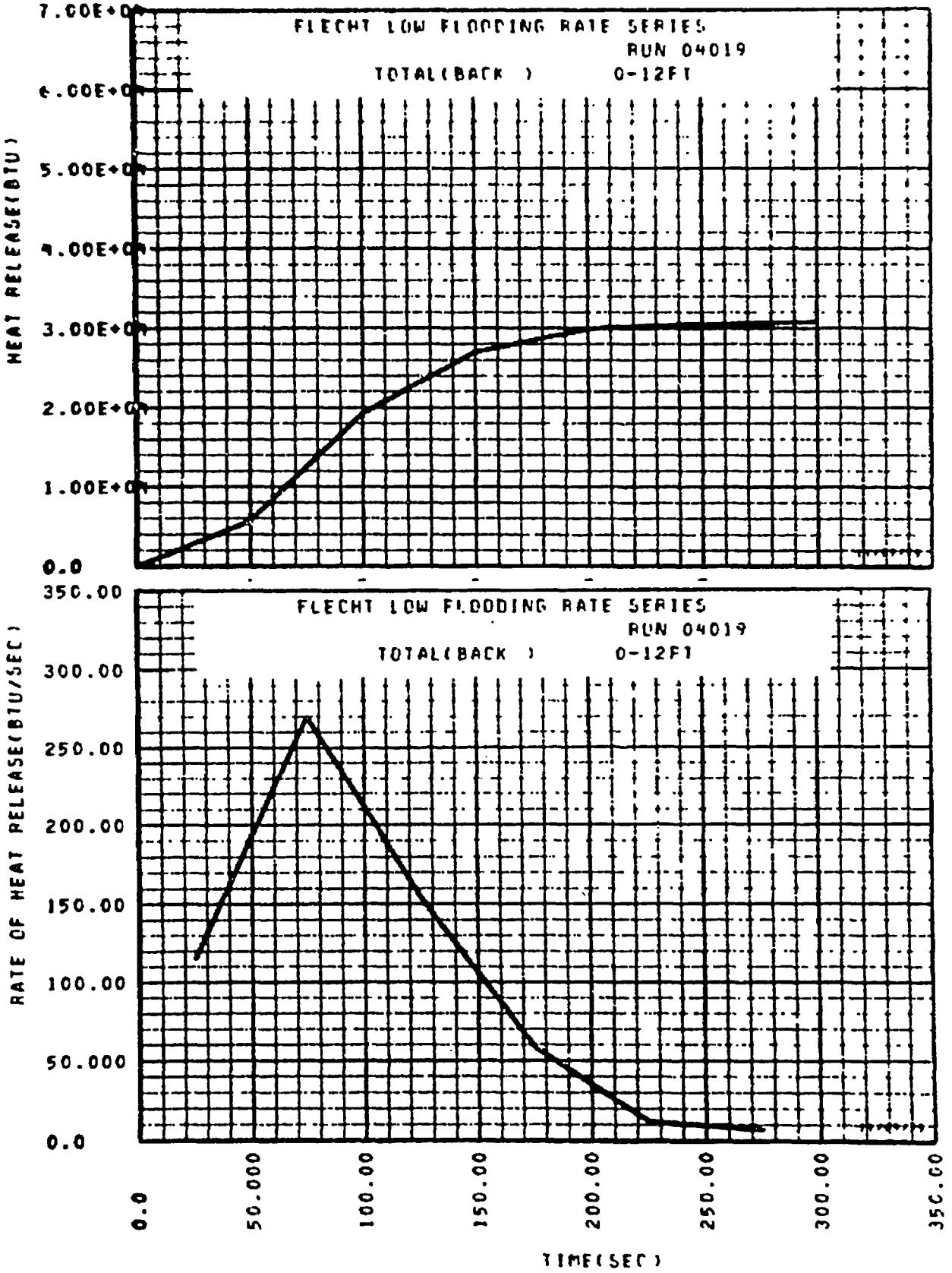

FLECHT LOW FLOODING RATE SERIES
RUN 04019
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04019
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04019
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04019
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 04019
RATE OF MASS INTO CARRYOVER TANK
1.0000
0.7500
0.5000
0.2500
0.0
-0.2500
-0.4000
LBM / SEC
FLECHT - LOW FLOODING RATE TEST -- RUN 04019
EFFLUENCE RATE FROM EXHAUST ORIFICE
1.4000
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
LBM / SEC
-73.400
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
349.00
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 04014
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
484.10
450.00
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.000
0.0
MASS (LBM)
-73.400
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
349.00
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 04019
DP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.0309
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 04019
VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-73.400
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
349.00
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 04019 STEAM PROBES
1=3G7 2=TC10 3=8E12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04019 THIMBLES
1=6F4 2=6F6
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 04019 THIMBLE
1=5N6 2=5N7 3=5N8
TEMP - DEGREES F
-73.400
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
349.00
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 04019
TOTAL(BACK) 0-12FT
HEAT RELEASE(BTU)
7.00E+0
6.00E+0
5.00E+0
4.00E+0
3.00E+0
2.00E+0
1.00E+0
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04019
TOTAL(BACK) 0-12FT
RATE OF HEAT RELEASE(BTU/SEC)
350.00
300.00
250.00
200.00
150.00
100.00
50.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
TIME(SEC)

BLANK PAGE

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 04220

DATE: 4/25/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	39	
Initial Clad Temperature (6 ft)°F At Flood	1,601	Rod T/C 4H6
Rod Peak Power, kw/ft	0.89	
Flooding Rate, in/sec	6 (5 sec)	
	0.4 (5 sec)	
	1.0	
Coolant Temperature, °F	124	
Buhdle Radial Power Profile	FLECHT	
Disconnected Rods	7F	

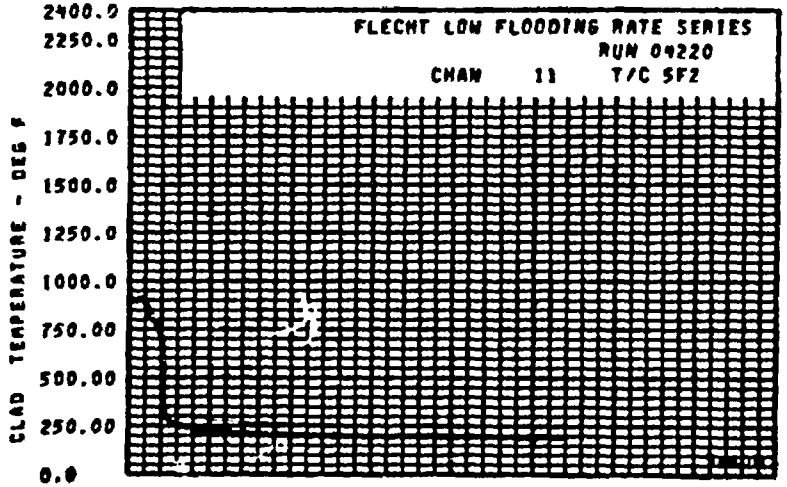
B. INITIAL HOUSING TEMPERATURE

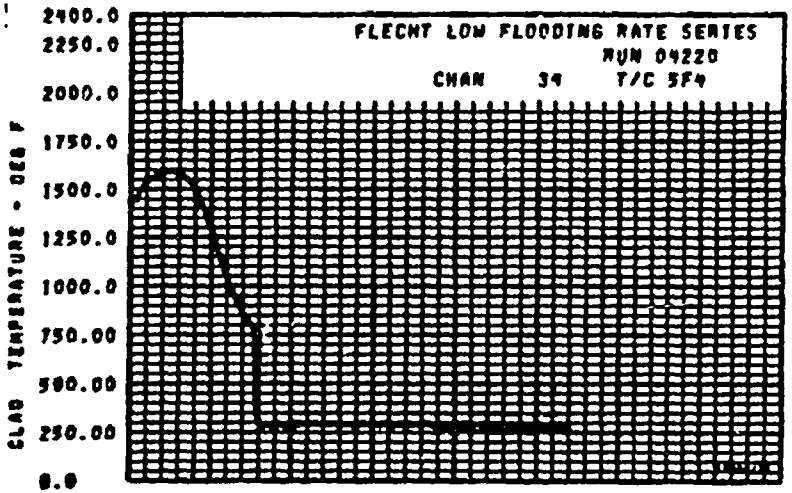
Back Side Elevation, Ft.	Temperature, °F
0	255
2	498
4	674
5.5	774
6	789
6.5	604
7	606
7.5	616
8	685
10	482
12	270
Average	568
Lower Plenum	111
Upper Plenum	343

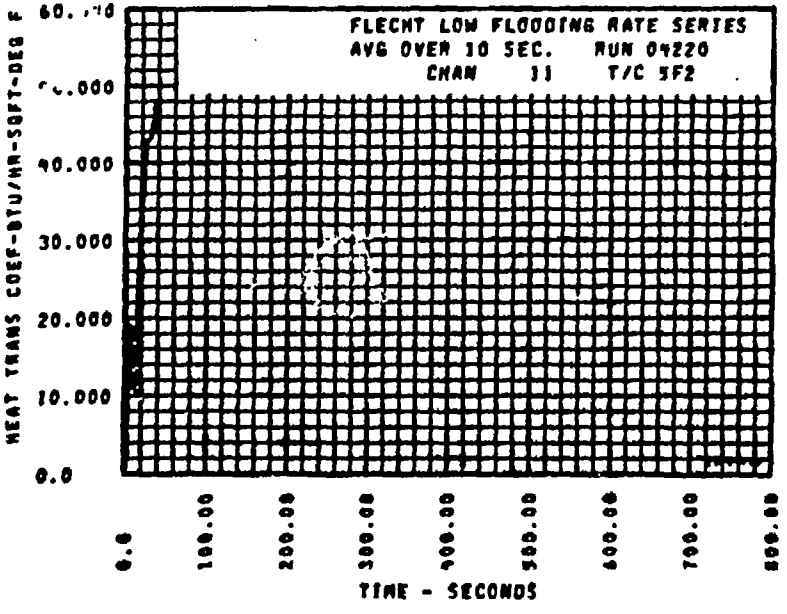
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

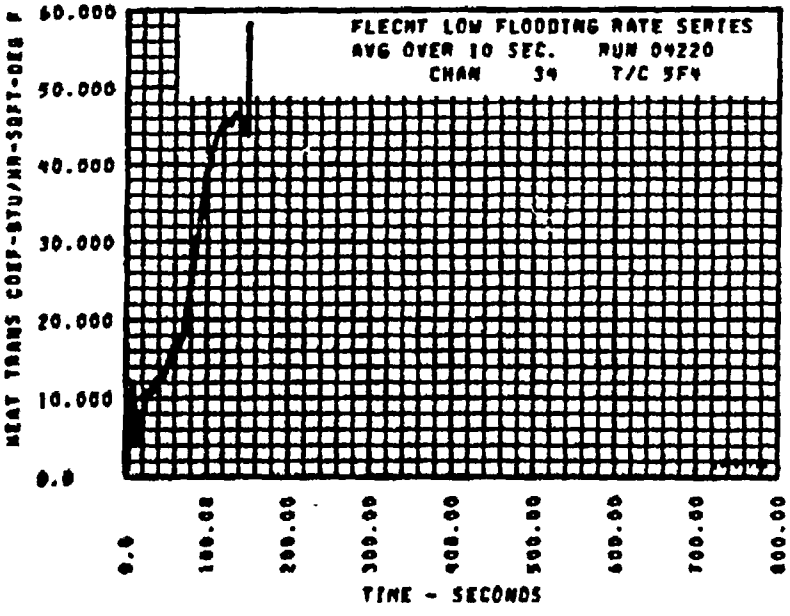
RUN NUMBER 04721

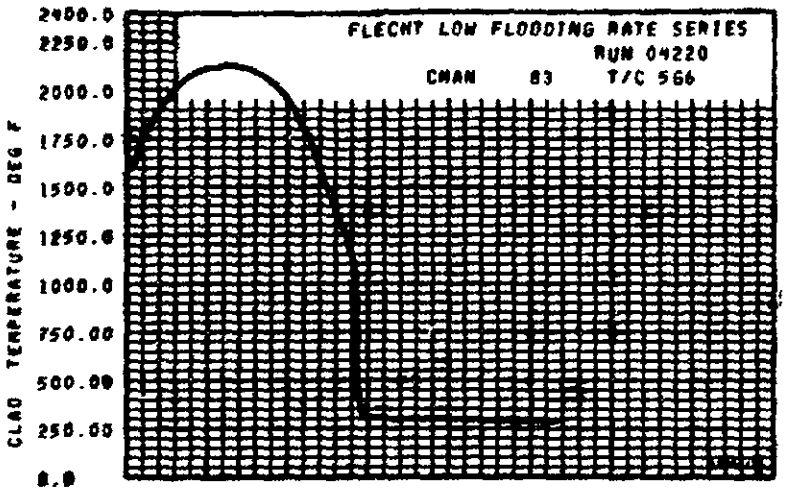
ROD/ELEV	TEMPERATURE AT TIME ZERO (DEG.F)	TIME OF [illegible] ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	[illegible]	[illegible]	603.	610.	7.	1.5	579.	3.1
4H1	537.	[illegible]	646.	658.	11.	2.2	572.	13.8
4H1.5	[illegible]	[illegible]	693.	703.	12.	2.6	555.	27.6
4H2	[illegible]	[illegible]	931.	955.	24.	16.2	727.	43.8
4H4	[illegible]	[illegible]	1443.	1611.	169.	60.3	931.	154.9
4H6	[illegible]	[illegible]	1631.	2085.	454.	121.2	1354.	281.9
8O5	417.	-63.6	1478.	1976.	499.	99.9	953.	279.1
8O6.5	[illegible]	[illegible]	1404.	1995.	591.	177.8	934.	320.0
8O7	[illegible]	[illegible]	1367.	1826.	459.	172.[illegible]	825.	363.9
8O8	[illegible]	[illegible]	1219.	1819.	600.	145.3	839.	425.0
8O9	514.	-63.6	966.	1155.	193.	185.3	610.	469.0
8O10	[illegible]	[illegible]	749.	1237.	489.	195.3	780.	430.7
8O11	[illegible]	[illegible]	612.	1016.	404.	197.9	811.	373.8
8O12	[illegible]	-63.6	478.	844.	366.	194.3	427.	29.4
5F0	243.	-65.1	441.	442.	1.	.7	440.	.7
5F0.5	[illegible]	[illegible]	595.	600.	5.	1.3	560.	4.8
5F1	[illegible]	[illegible]	626.	635.	9.	2.3	551.	14.6
5F1.5	[illegible]	[illegible]	779.	793.	14.	21.[illegible]	597.	539.0
5F2	[illegible]	-63.6	899.	917.	13.	15.6	659.	41.8
5F3	449.	[illegible]	1239.	1273.	73.	23.8	699.	97.9
5F4	517.	[illegible]	1427.	1597.	173.	49.[illegible]	768.	155.7
5F6	[illegible]	[illegible]	1576.	2059.	483.	133.3	1349.	277.8
5G6	517.	[illegible]	1574.	2133.	559.	122.[illegible]	976.	295.5
5G6.5	530.	[illegible]	1447.	2197.	650.	133.3	1325.	297.9
5G7	413.	[illegible]	1421.	1968.	547.	145.3	951.	344.0
5G8	[illegible]	[illegible]	1324.	2145.	721.	195.3	949.	416.4
5G9	447.	[illegible]	1369.	1869.	494.	172.3	699.	466.0
5G11	275.	[illegible]	613.	994.	375.	179.3	503.	504.0
5G12	272.	[illegible]	575.	963.	385.	177.3	560.	510.0
1G4	[illegible]	[illegible]	1360.	1427.	67.	72.4	843.	121.2
1G6	733.	[illegible]	1551.	1721.	170.	76.6	509.	275.6
1G10	[illegible]	[illegible]	773.	1391.	312.	115.7	563.	500.0
3H2	414.	[illegible]	341.	349.	13.	3.3	725.	38.9
3H6	410.	[illegible]	1537.	2018.	481.	31.5	975.	292.0
3H9	517.	[illegible]	1373.	1964.	596.	133.6	893.	616.0
3H10	467.	[illegible]	443.	1410.	569.	181.3	1037.	373.7

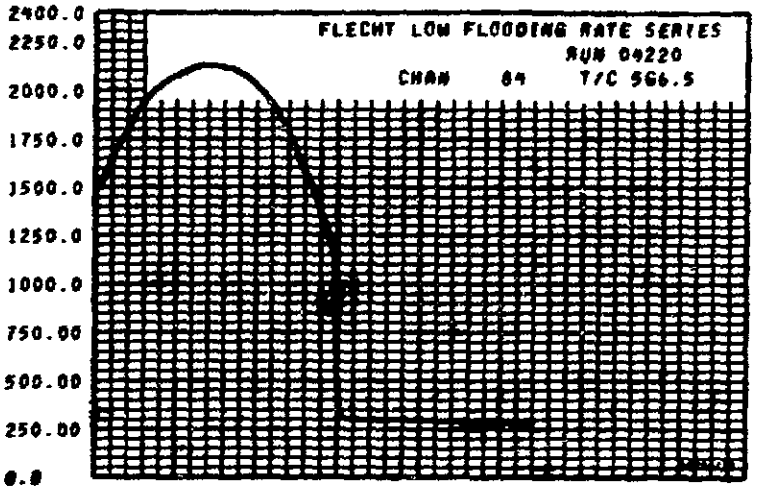

FLECHT LOW FLOODING RATE SERIES
RUN 04220
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

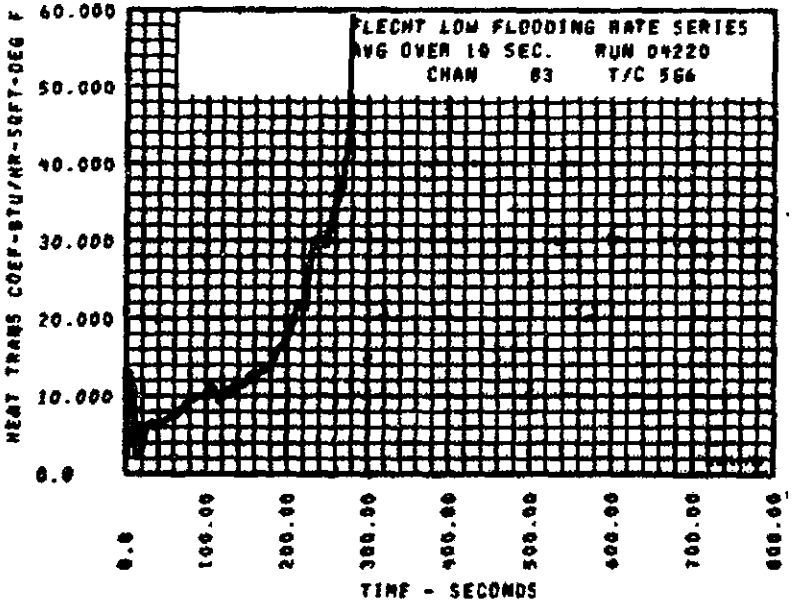

FLECHT LOW FLOODING RATE SERIES
RUN 04220
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

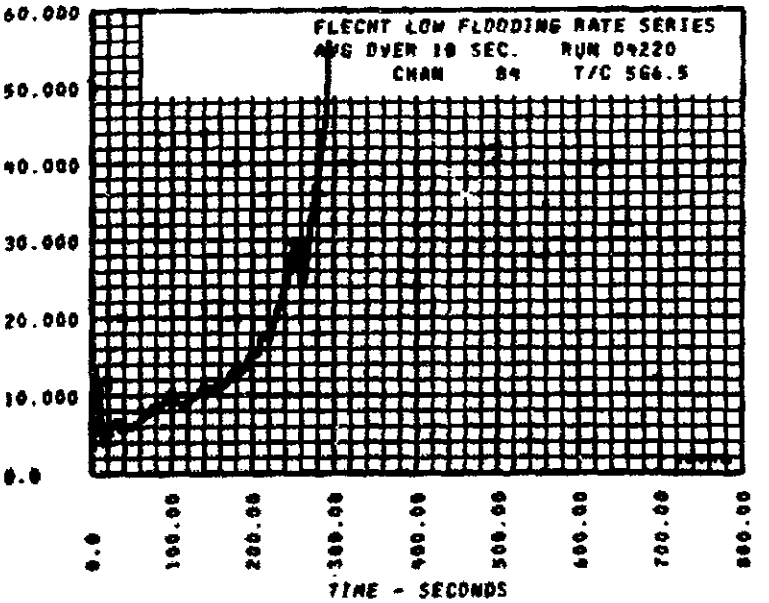

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04220
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

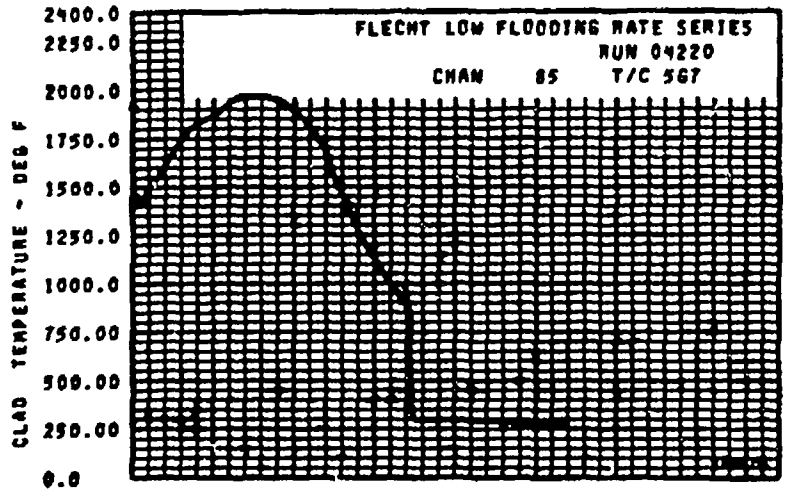

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04220
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

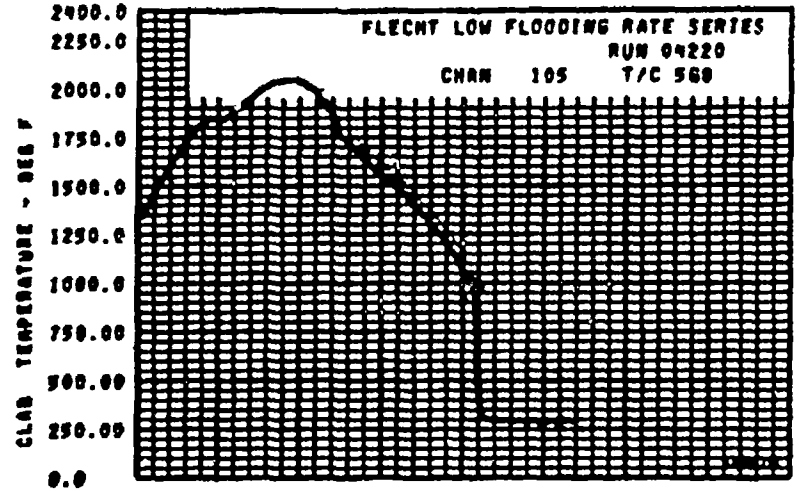

FLECHT LOW FLOODING RATE SERIES
RUN 04220
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

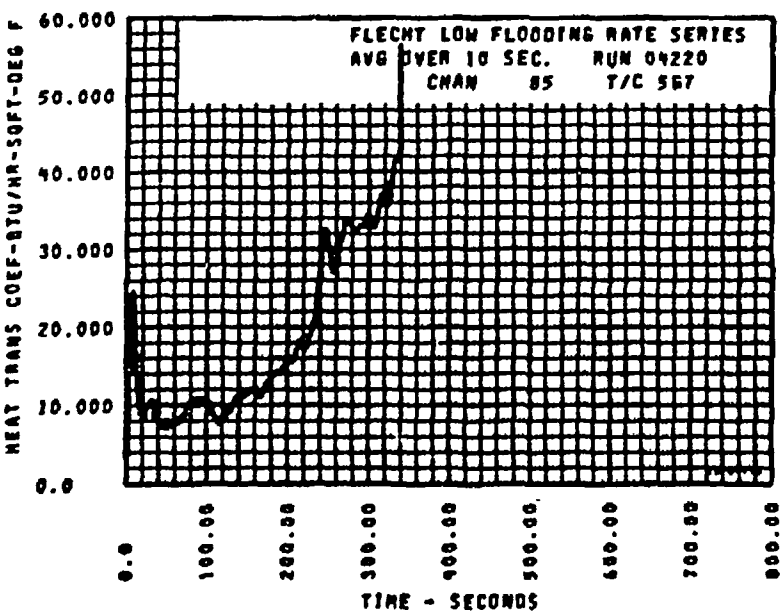

FLECHT LOW FLOODING RATE SERIES
RUN 04220
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

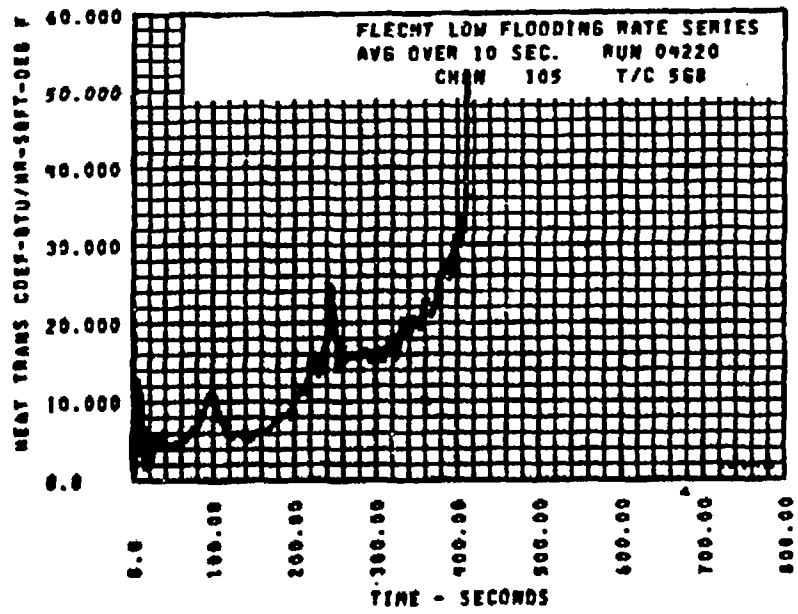

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04220
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

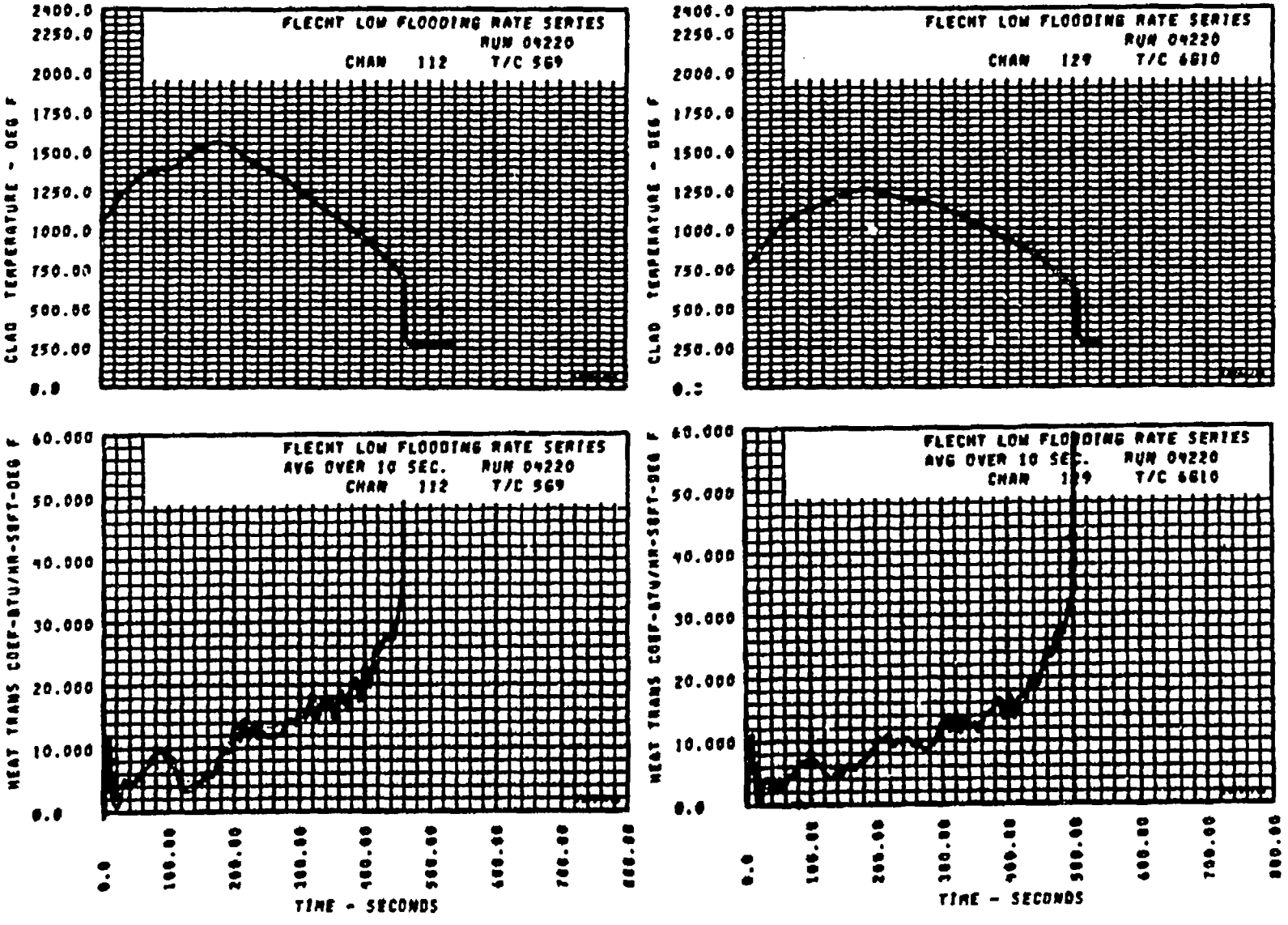

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04220
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

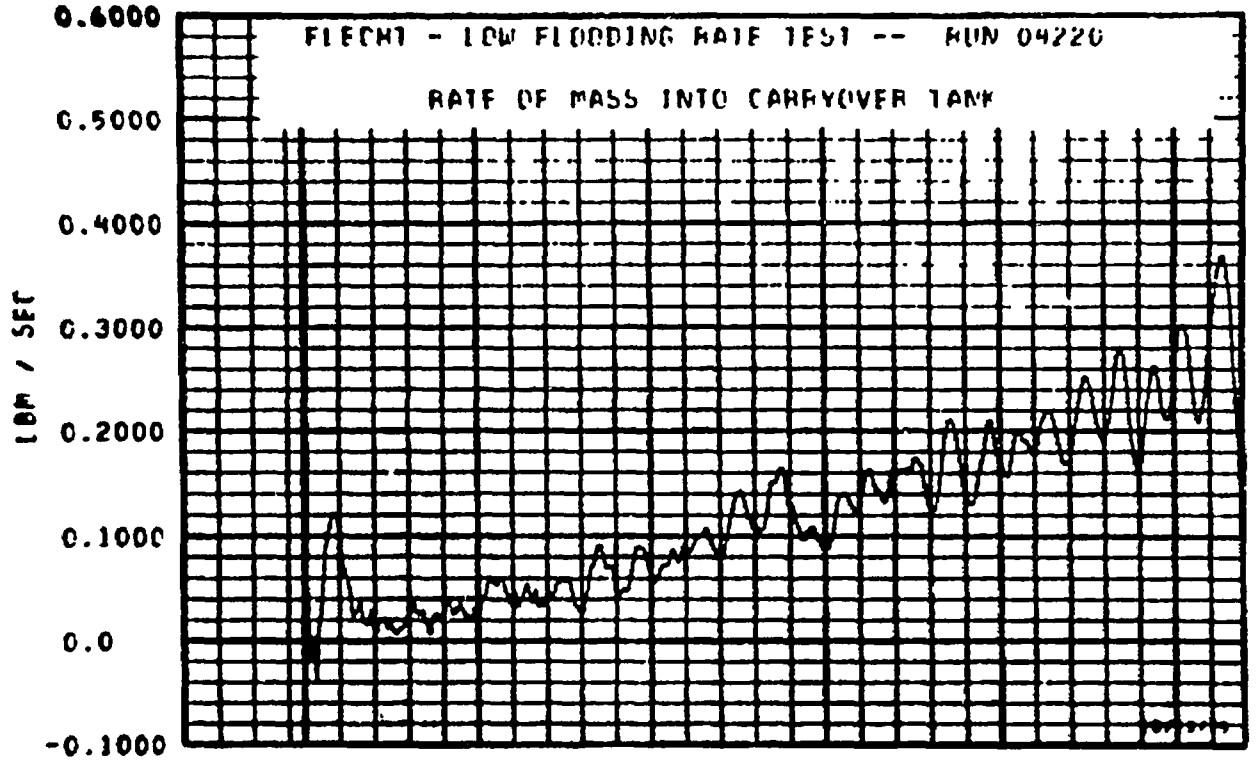

FLECHT LOW FLOODING RATE SERIES
RUN 04220
CHAN 85 T/C 567
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

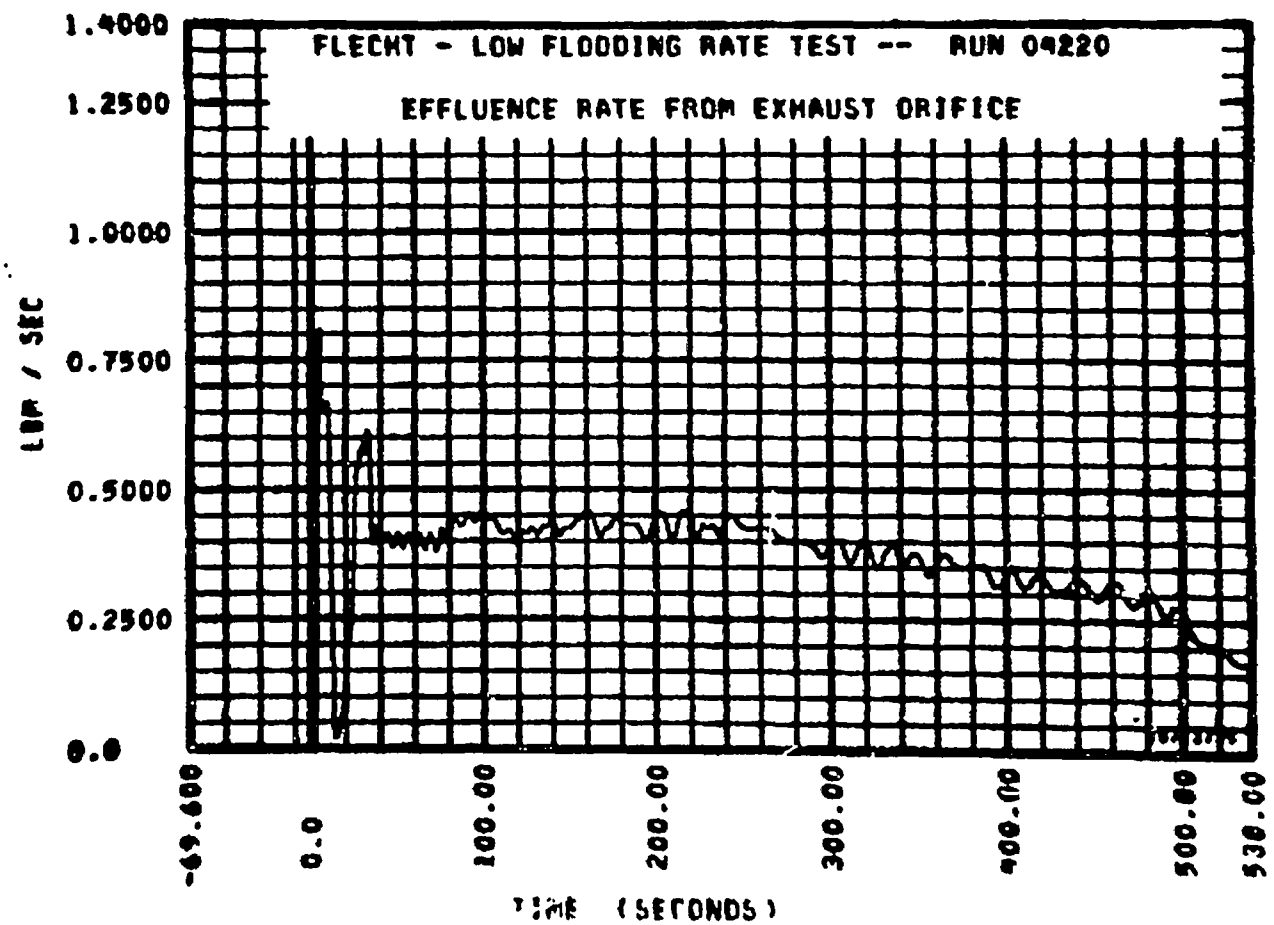

FLECHT LOW FLOODING RATE SERIES
RUN 04220
CHAN 105 T/C 568
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

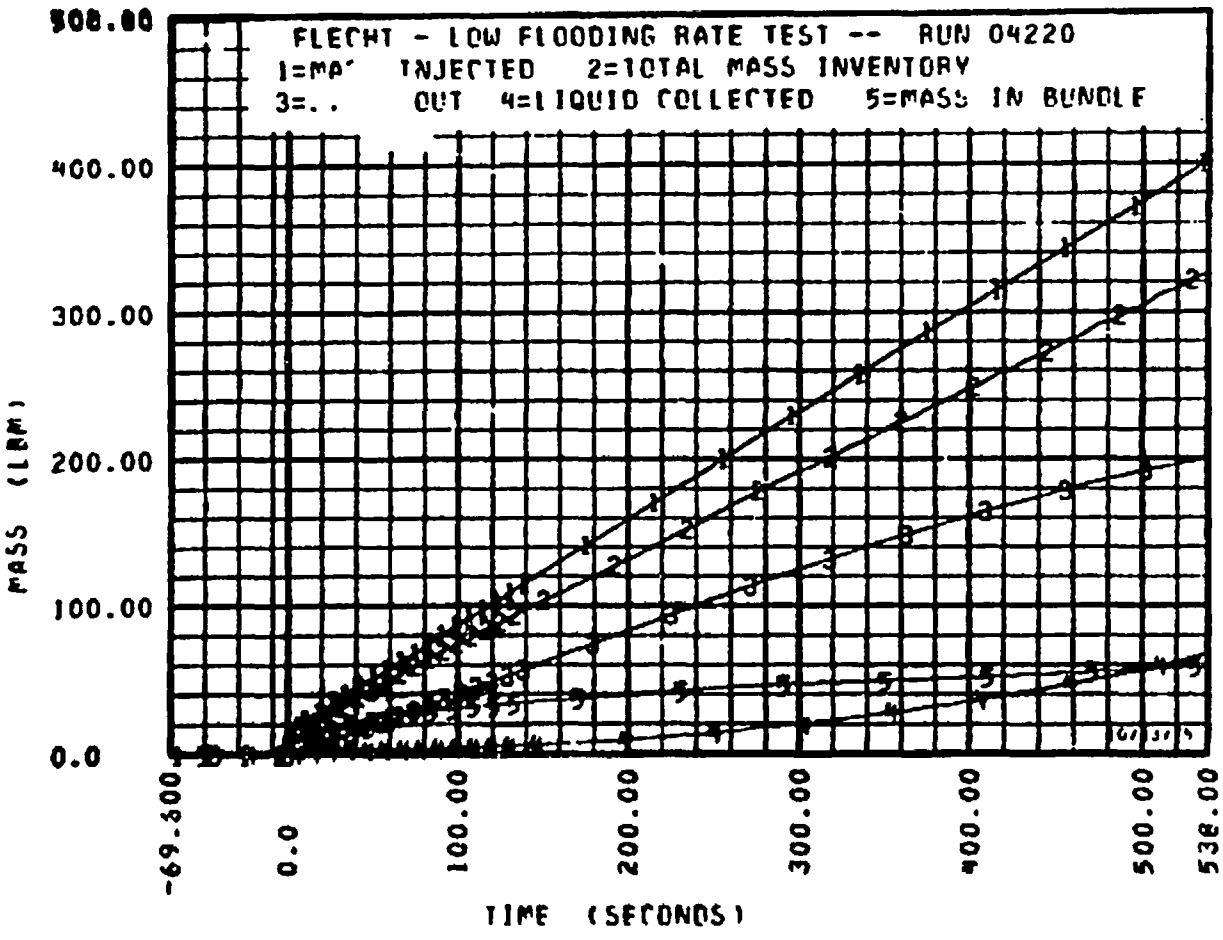

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04220
CHAN 85 T/C 567
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS


FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04220
CHAN 105 T/C 568
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

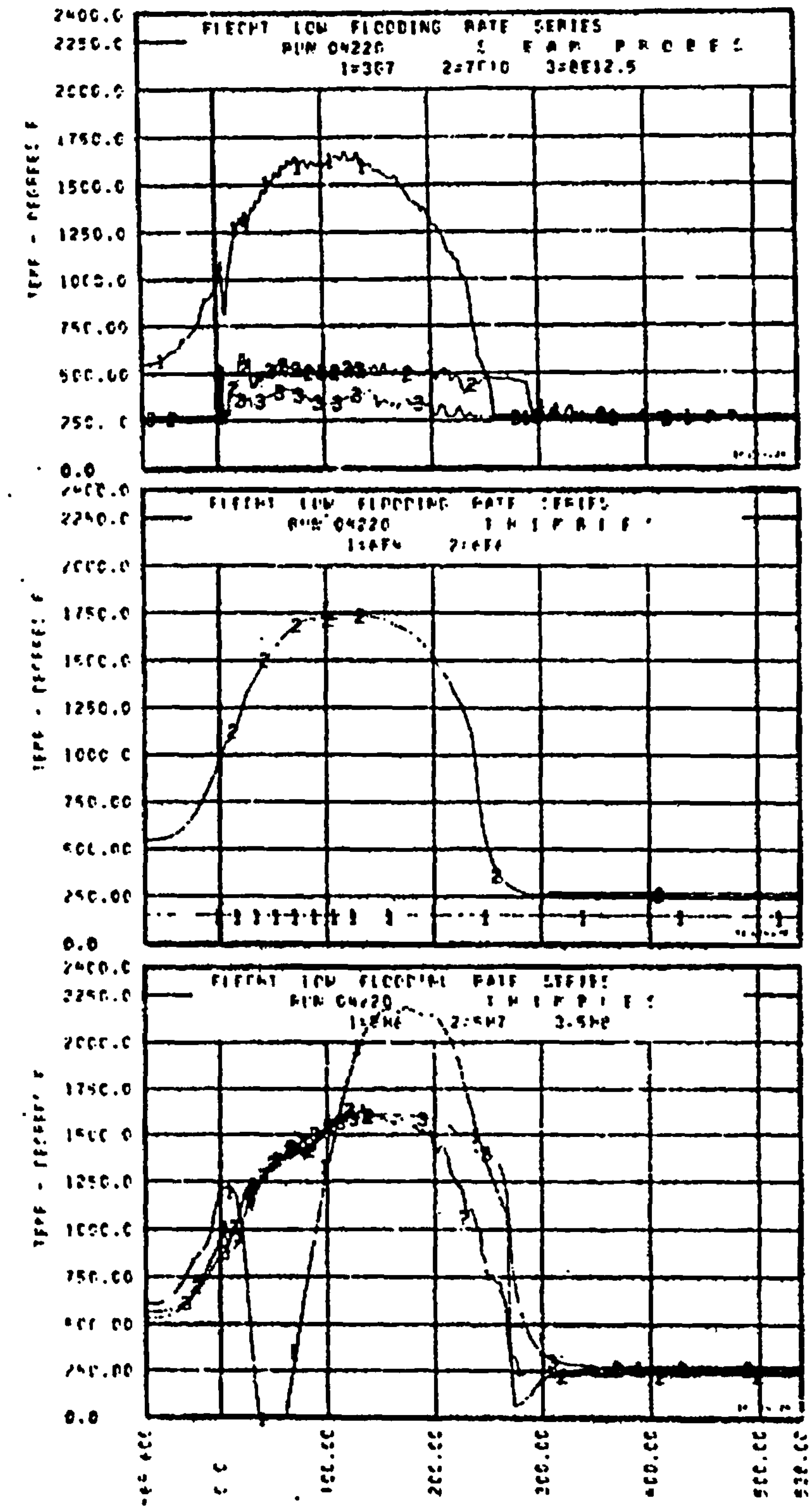

FLECHT LOW FLOODING RATE SERIES
RUN 04220
CHAN 112 T/C 569
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04220
CHAN 129 T/C 6810
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04220
CHAN 112 T/C 569
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04220
CHAN 129 T/C 6810
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 04220
RATE OF MASS INTO CARRYOVER TANK
LBM / SEC
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
-0.1000

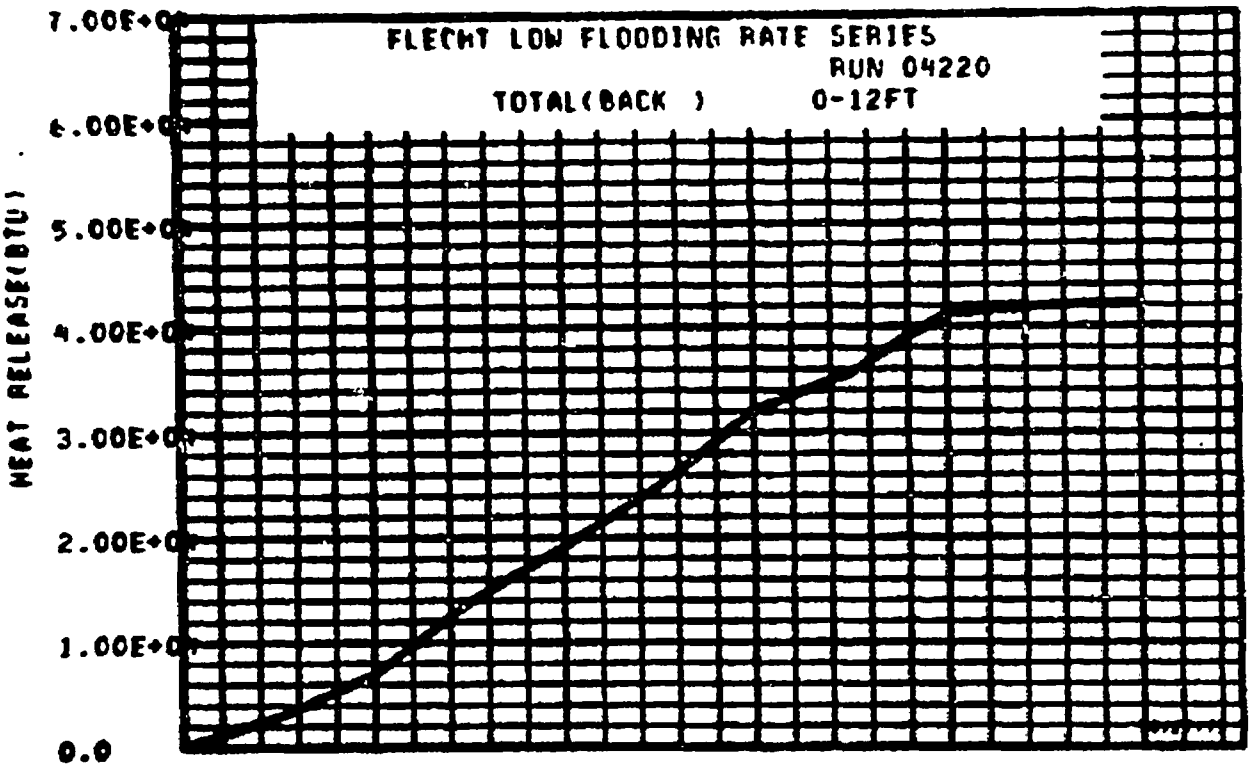

FLECHT - LOW FLOODING RATE TEST -- RUN 04220
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
1.4000
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
-49.600
0.0
100.00
200.00
300.00
400.00
500.00
530.00
TIME (SECONDS)

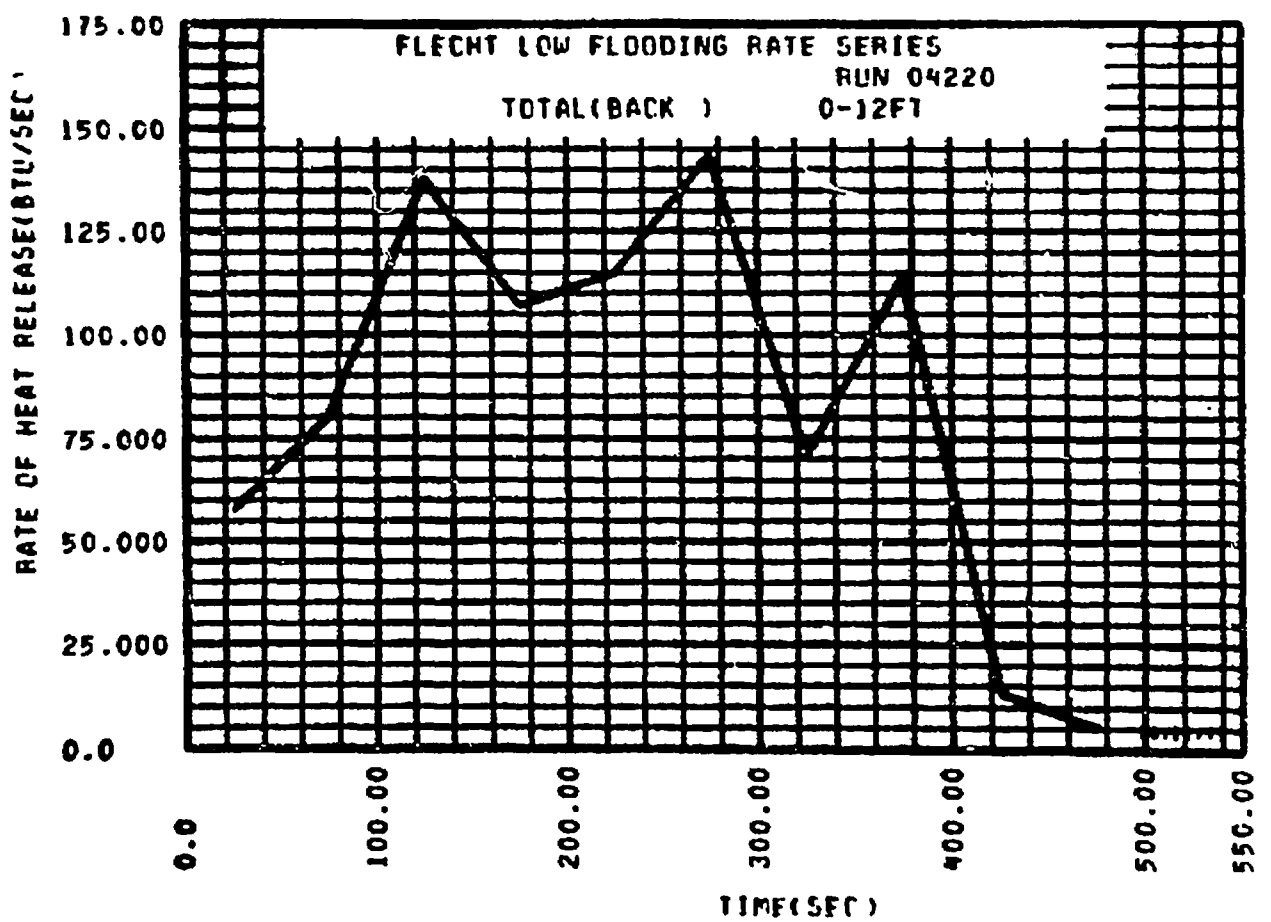

FLECHT - LOW FLOODING RATE TEST -- RUN 04220
1=MA' INJECTED 2=TOTAL MASS INVENTORY
3=.. OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
500.00
400.00
300.00
200.00
100.00
0.0
MASS (LBM)
-69.300
0.0
100.00
200.00
300.00
400.00
500.00
530.00
TIME (SECONDS)

OB = ON
@PJL USTATUS PAGE = OFF
@PJL USTATUS DEVICE = ON
@PJL USTATUS TIMED = 0



FLECHT LOW FLOODING RATE SERIES
RUN 04220
FLECHT LOW FLOODING RATE SERIES
RUN 04220
FLECHT LOW FLOODING RATE SERIES
RUN 04220
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
TEMP - DEGREES F
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 04220
TOTAL(BACK) 0-12FT
HEAT RELEASE(BTU)
7.00E+0
6.00E+0
5.00E+0
4.00E+0
3.00E+0
2.00E+0
1.00E+0
0.0


FLECHT LOW FLOODING RATE SERIES
RUN 04220
TOTAL(BACK) 0-12FT
RATE OF HEAT RELEASE(BTU/SEC)
175.00
150.00
125.00
100.00
75.000
50.000
25.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
550.00
TIME(SEC)

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 04444

DATE: 5/2/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	58		
Initial Clad Temperature (6 Ft)°F At Flood	1,815	Rod T/C	4H6
Rod Peak Power, kw/ft	1.22		
Flooding Rate, in/sec	5.8		

Coolant Temperature, °F	155		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

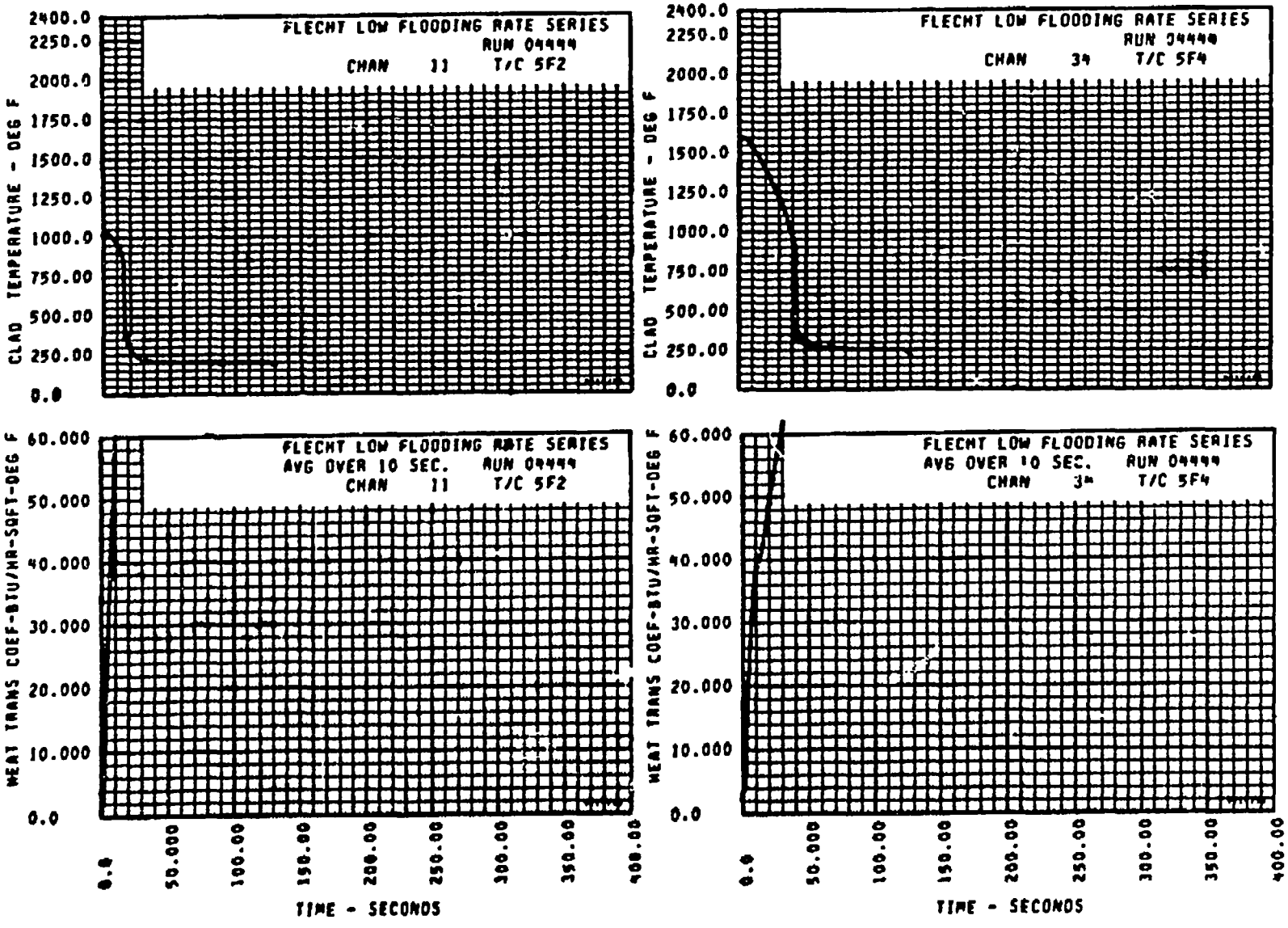
B. INITIAL HOUSING TEMPERATURE

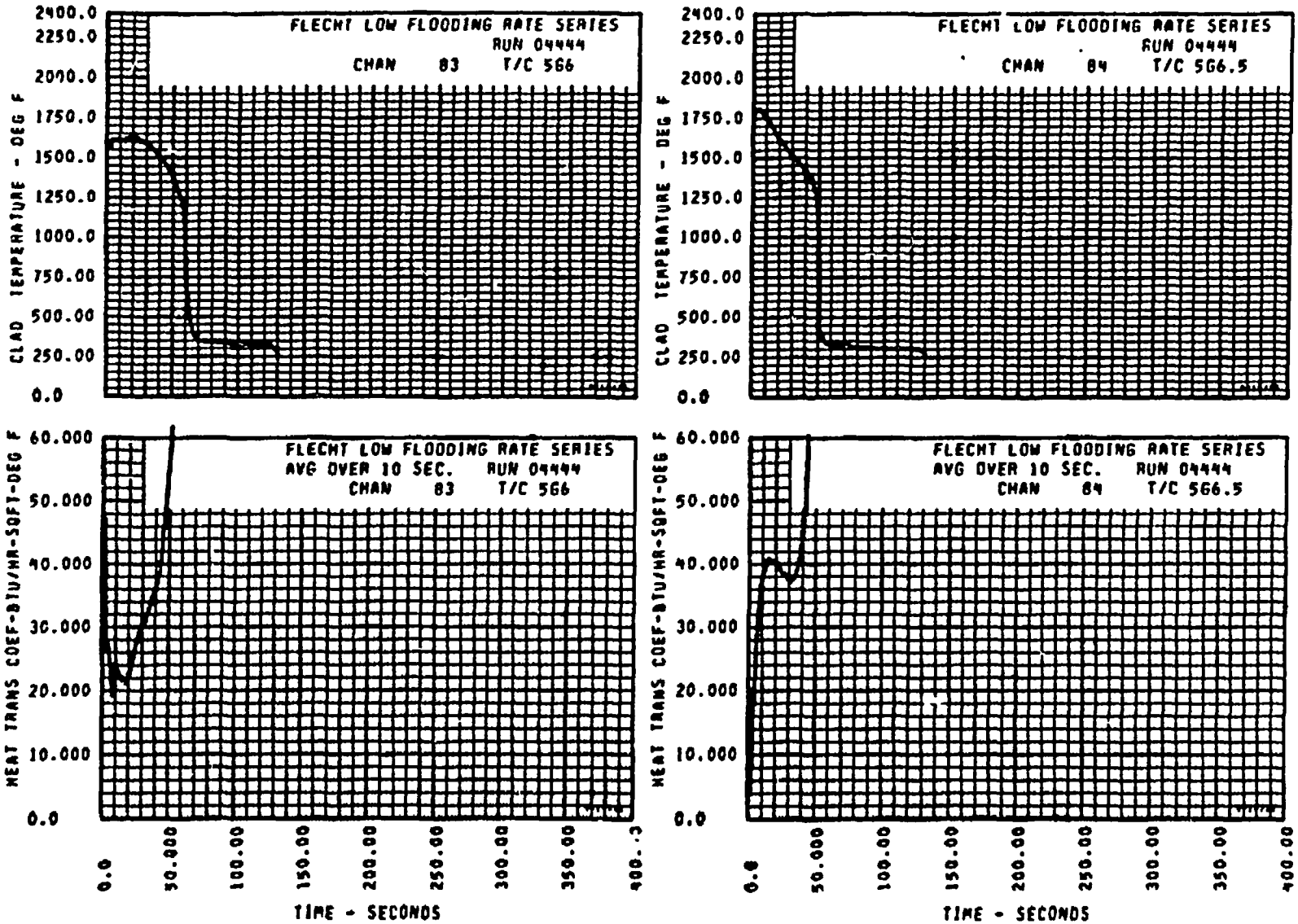
Back Side Elevation, Ft.	Temperature, °F
0	273
2	433
4	533
5.5	555
6	617
6.5	509
7	510
7.5	506
8	504
10	441
12	295
Average	471
Lower Plenum	150
Upper Plenum	358

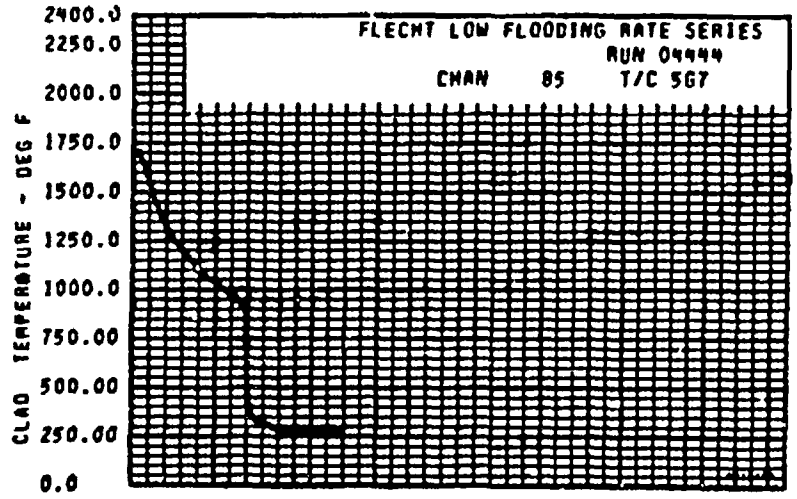
BLANK PAGE

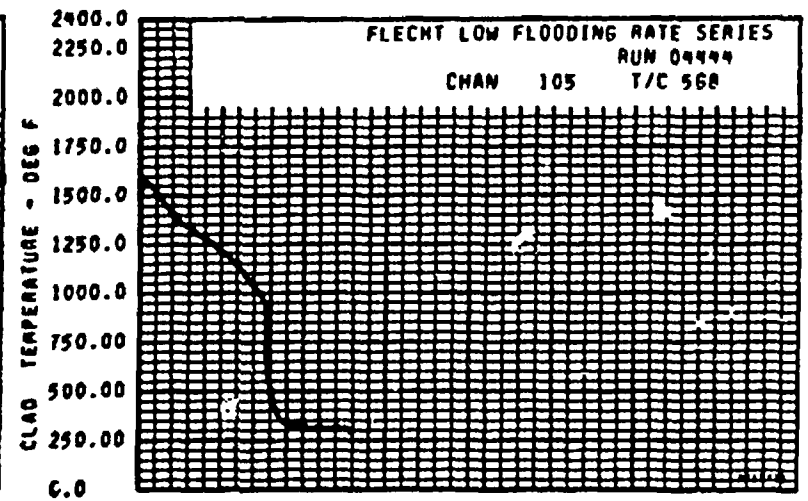
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

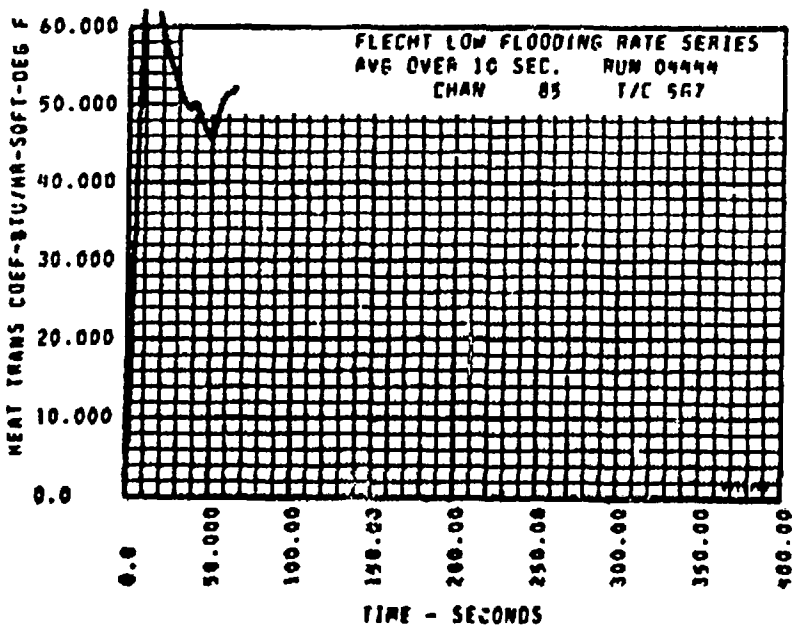
ROD/ELEV	T[illegible] AT [illegible] (DEG.F)	TI[illegible] PEAK (DEG.F)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	RUN NUMBER 04444 MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	734.	-62.6	739.	738.	0.	1.4	692.	4.2
4H1	761.	-61.6	759.	773.	14.	2.2	710.	7.4
4H1.5	744.	-62.6	767.	784.	17.	2.6	689.	11.3
4H2	814.	-61.6	1024.	1049.	25.	3.1	633.	16.8
4H4	339.	-61.6	1570.	1615.	45.	3.6	958.	45.6
4H6	574.	-62.6	1415.	1471.	55.	4.0	1059.	62.8
8D6	317.	-62.6	1747.	1934.	57.	3.8	952.	69.7
8D6.5	442.	-61.6	1667.	1727.	61.	4.2	884.	76.5
8D7	459.	-61.6	1602.	1653.	51.	3.4	819.	81.7
8D8	346.	-62.6	1414.	1486.	72.	3.9	773.	91.0
8D9	245.	-61.6	1141.	1182.	41.	3.9	824.	102.4
8D10	235.	-61.6	897.	929.	31.	3.9	647.	71.1
8D11	236.	-62.6	719.	742.	23.	3.4	673.	15.3
8D12	231.	-61.6	572.	591.	19.	3.6	586.	4.3
8F0	264.	-62.6	516.	516.	0.	.2	514.	.8
8F0.5	331.	-61.6	732.	740.	9.	1.2	682.	5.1
8F1	334.	-61.6	760.	772.	12.	2.8	788.	7.4
8F1.5	719.	-62.6	771.	786.	15.	5.4	677.	133.4
8F2	416.	-61.6	1010.	1033.	22.	3.9	875.	16.7
8F3	493.	-61.6	1293.	1326.	32.	3.4	913.	27.2
8F4	541.	-61.6	1568.	1612.	45.	4.0	891.	42.4
8F6	475.	-61.6	1611.	1651.	39.	5.2	1188.	55.3
8G6	475.	-61.6	1608.	1635.	27.	19.6	1155.	59.1
8G6.5	559.	-62.6	1765.	1823.	57.	3.8	1221.	49.1
8G7	311.	-62.6	1674.	1723.	49.	3.6	913.	59.4
8G8	408.	-62.6	1526.	1582.	56.	4.0	949.	77.3
8G9	330.	-61.6	1198.	1242.	44.	3.8	670.	97.8
8G11	243.	-61.6	719.	743.	24.	3.8	672.	16.9
8G12	232.	-62.6	605.	708.	22.	4.2	571.	26.5
1G4	530.	-62.6	1466.	1498.	31.	3.4	945.	38.1
1G6	514.	-61.6	1708.	1748.	40.	3.6	869.	78.5
1G10	322.	-61.6	884.	911.	27.	4.0	539.	59.9
3H2	411.	-62.6	1038.	1062.	24.	3.8	879.	14.5
3H6	579.	-61.6	1800.	1862.	62.	4.8	1063.	62.9
3H8	518.	-61.6	1526.	1583.	57.	4.2	922.	76.8
3H10	340.	-61.6	971.	1008.	37.	4.8	654.	98.1
4G2	416.	-62.6	1054.	1080.	26.	3.0	884.	15.1
4G4	542.	-62.6	1623.	1667.	44.	3.4	884.	41.5
4G6	538.	-62.6	1883.	1963.	79.	3.8	1116.	56.6
4G8	509.	-62.6	1863.	1615.	52.	4.2	1132.	38.9
4G10	326.	-62.6	974.	1009.	34.	4.8	663.	78.2

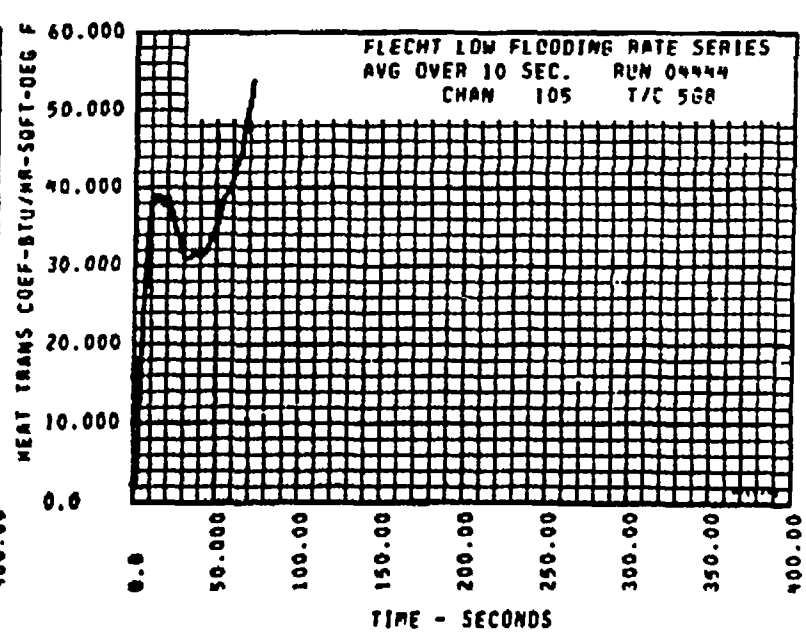

FLECHT LOW FLOODING RATE SERIES
RUN 04444
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04444
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04444
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04444
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

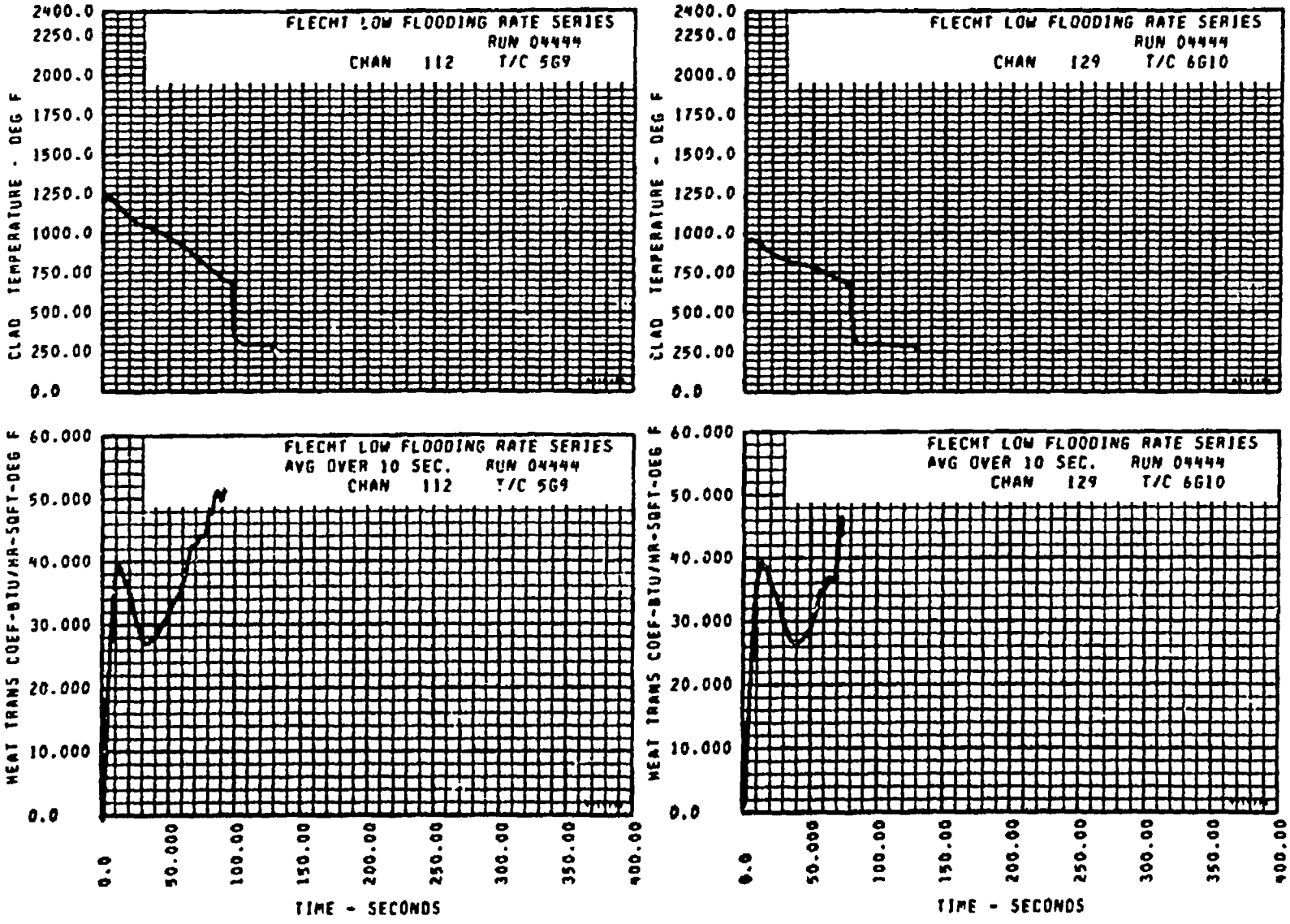

FLECHT LOW FLOODING RATE SERIES
RUN 04444
CHAN 83 T/C 566
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04444
CHAN 84 T/C 566.5
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04444
CHAN 83 T/C 566
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04444
CHAN 84 T/C 566.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

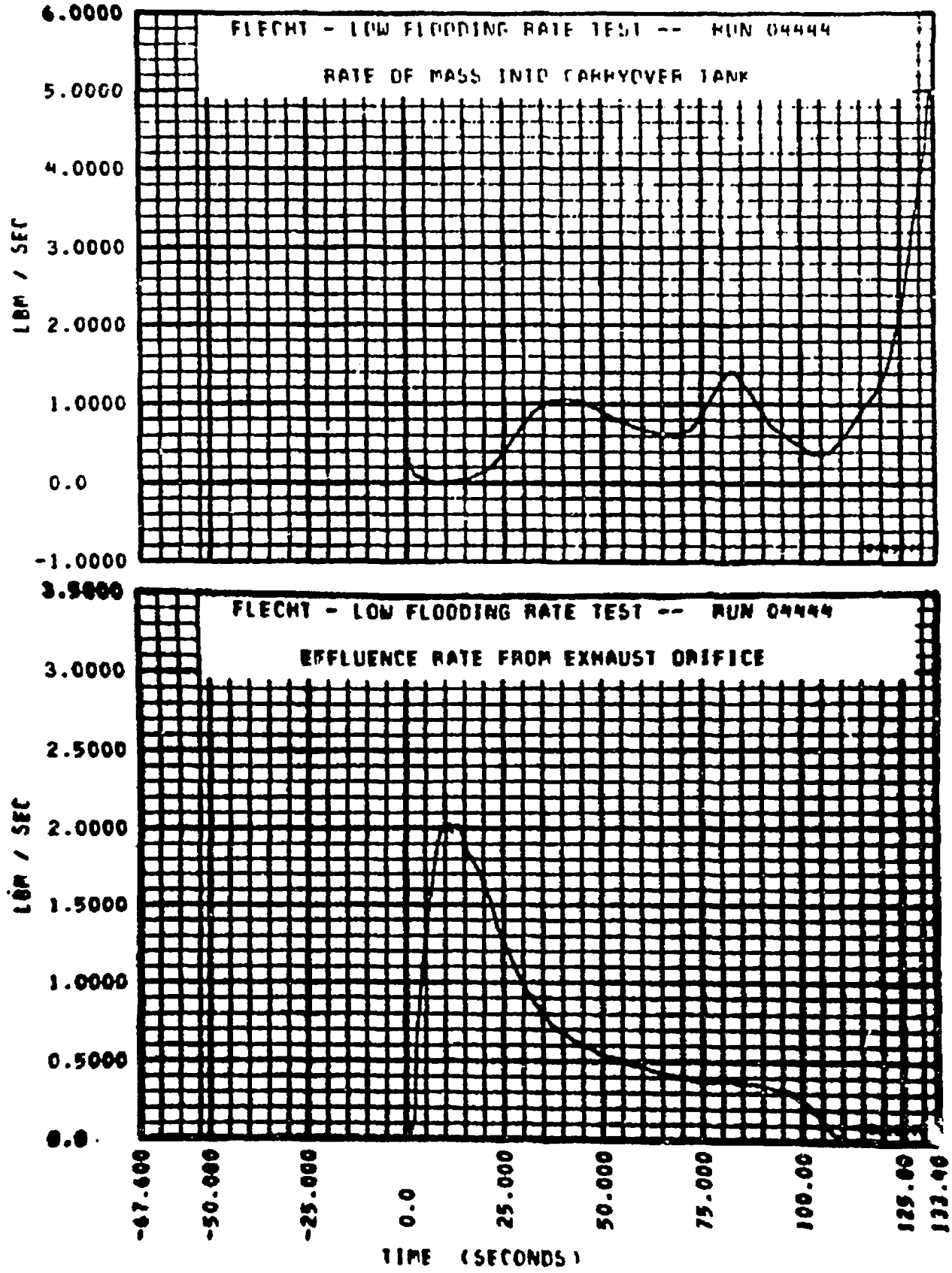

FLECHT LOW FLOODING RATE SERIES
RUN 04444
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

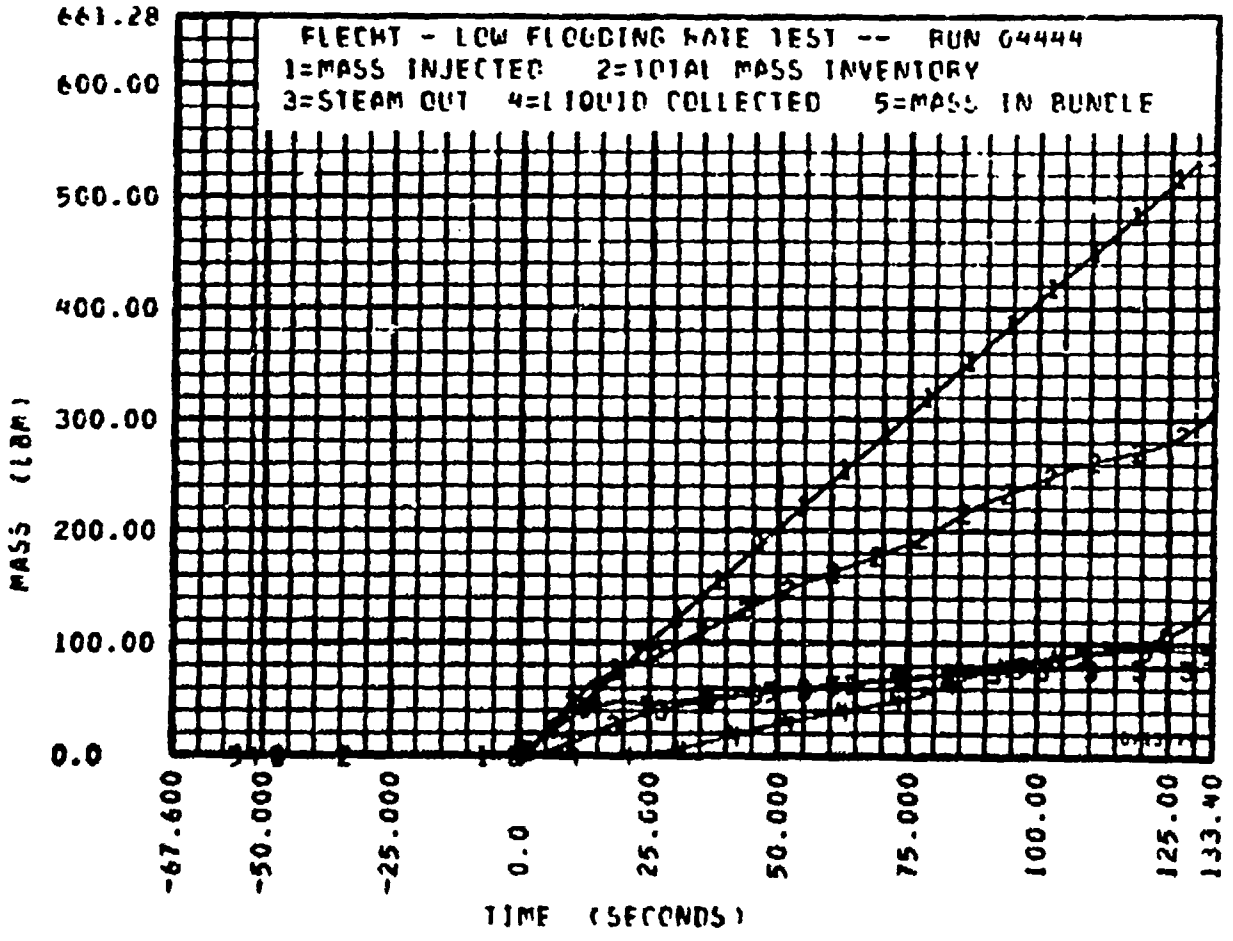

FLECHT LOW FLOODING RATE SERIES
RUN 04444
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

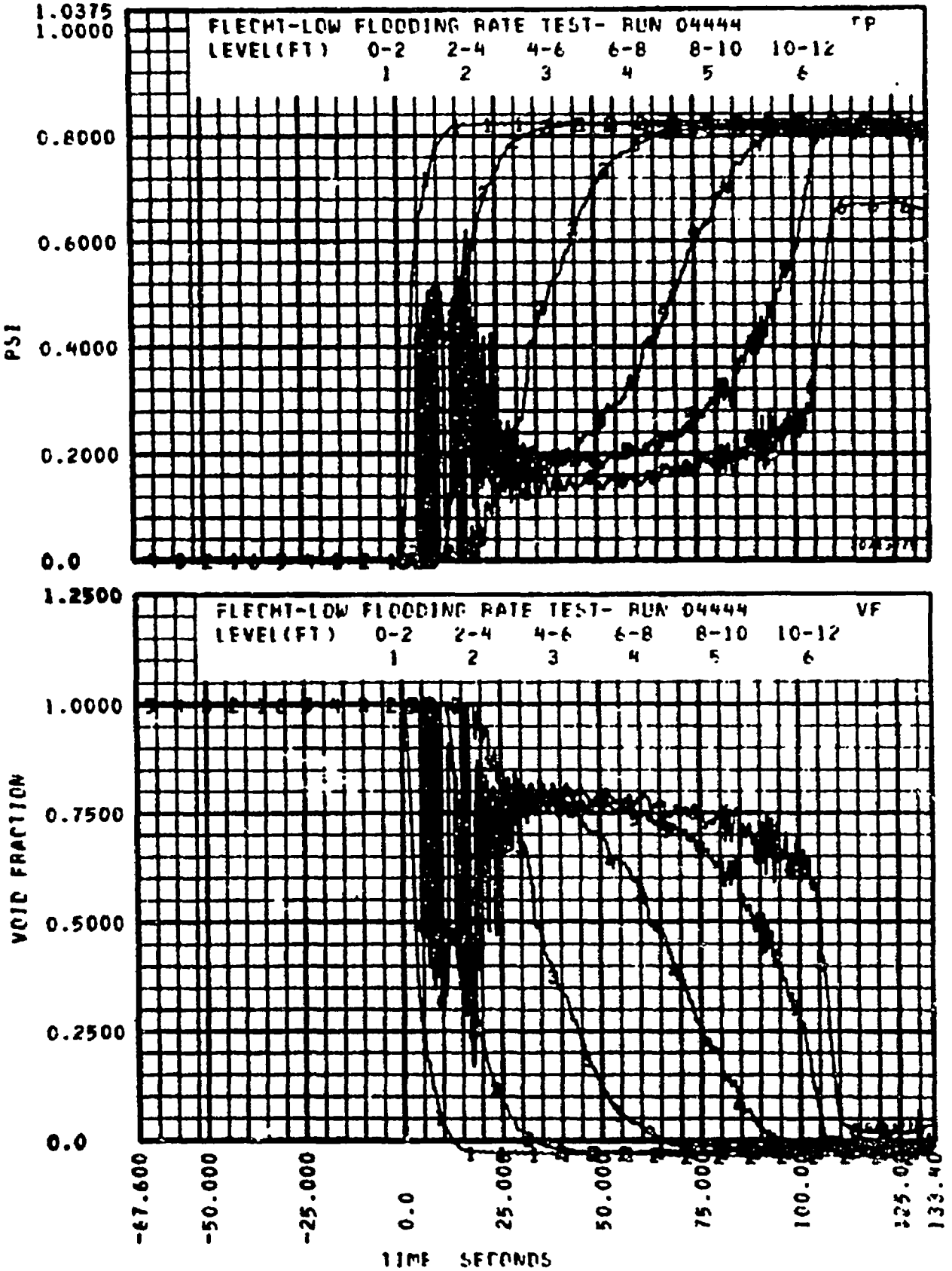

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04444
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

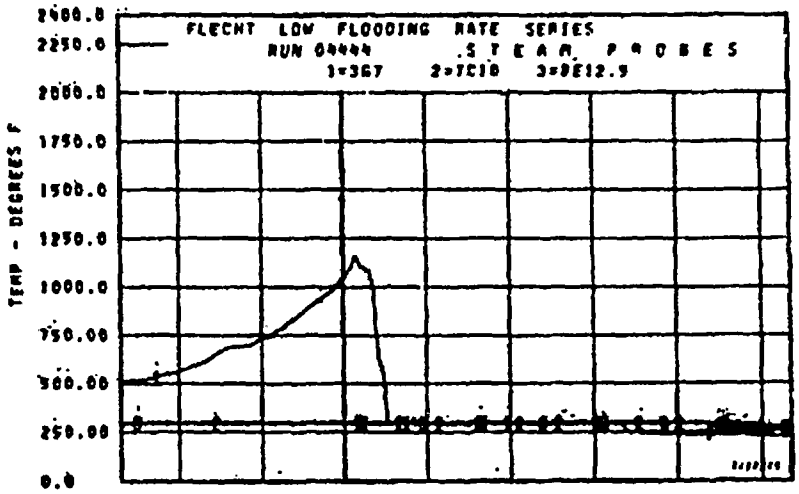

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04444
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

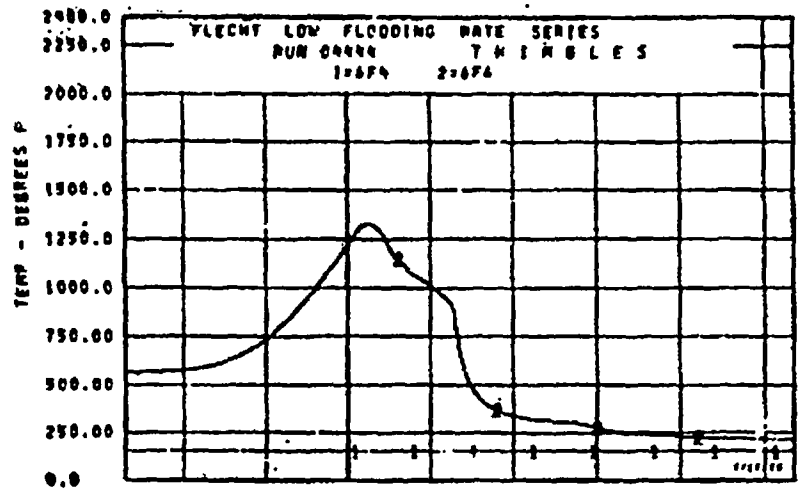

FLECHT LOW FLOODING RATE SERIES
RUN 04444
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04444
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04444
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04444
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

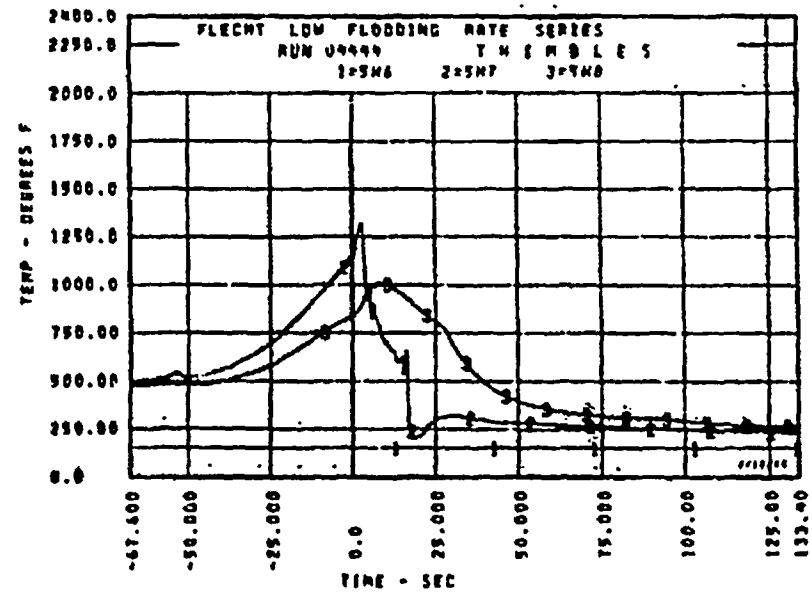

FLECHT - LOW FLOODING RATE TEST -- RUN 04444
RATE OF MASS INTO CARRYOVER TANK
6.0000
5.0000
4.0000
3.0000
2.0000
1.0000
0.0
-1.0000
LBM / SEC
FLECHT - LOW FLOODING RATE TEST -- RUN 04444
EFFLUENCE RATE FROM EXHAUST ORIFICE
3.5000
3.0000
2.5000
2.0000
1.5000
1.0000
0.5000
0.0
LBM / SEC
-47.000
-50.000
-25.000
0.0
25.000
50.000
75.000
100.00
125.00
133.40
TIME (SECONDS)

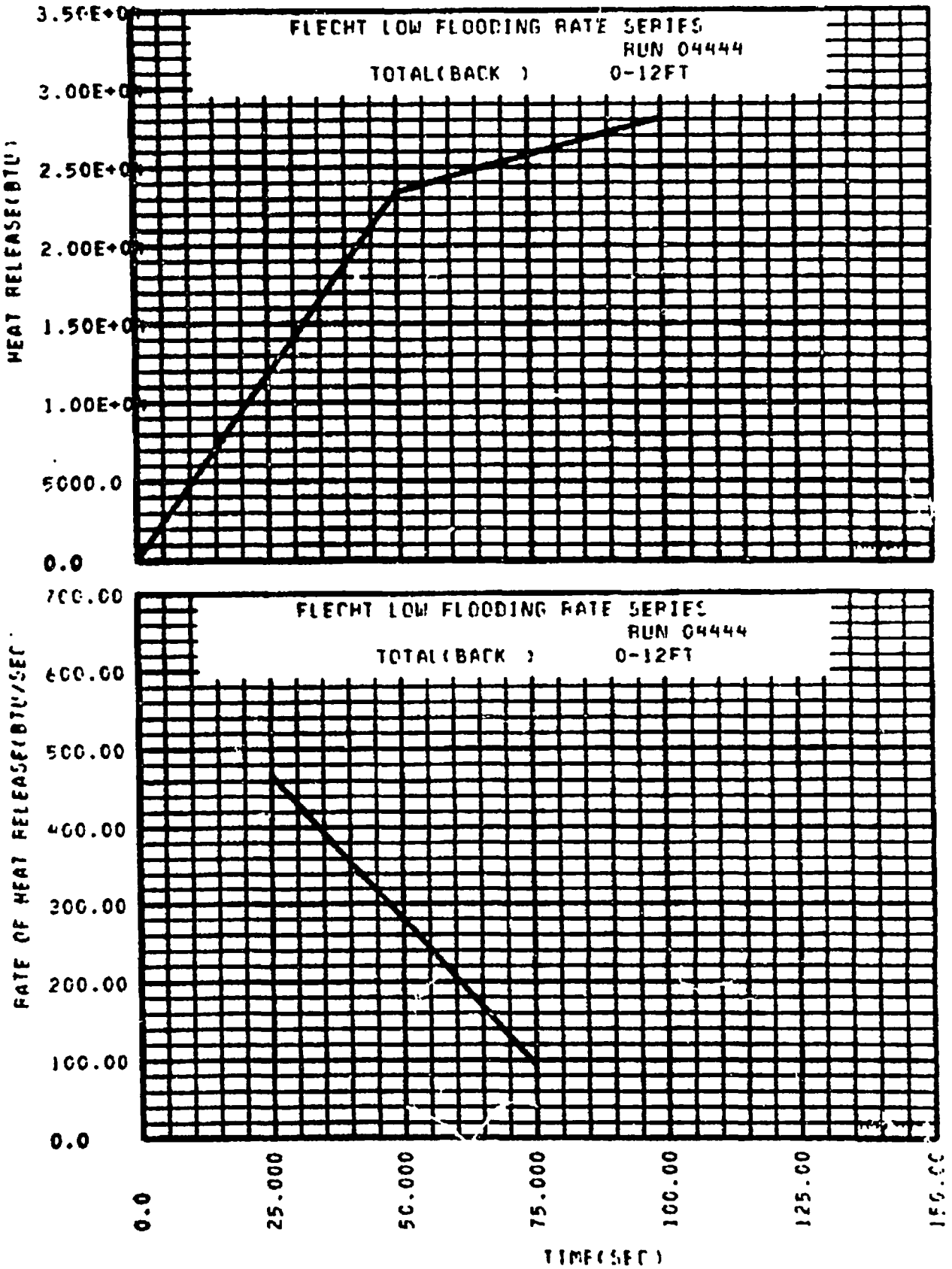

FLECHT - LOW FLOODING RATE TEST -- RUN 04444
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
661.28
600.00
500.00
400.00
300.00
200.00
100.00
0.0
MASS (LBM)
-67.600
-50.000
-25.000
0.0
25.000
50.000
75.000
100.00
125.00
133.40
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 04444
TP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.0375
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 04444
VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-67.600
-50.000
-25.000
0.0
25.000
50.000
75.000
100.0
125.0
133.40
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 04444
STEAM PROBES
1=3G7 2=7C18 3=9E12.9
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0


FLECHT LOW FLOODING RATE SERIES
RUN 04444
THIMBLES
1=6F4 2=6F6
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0


FLECHT LOW FLOODING RATE SERIES
RUN 04444
THERMOCOUPLES
1=5H6 2=5H7 3=7H8
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
-67.500
-50.000
-25.000
0.0
25.000
50.000
75.000
100.00
125.00
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 04444
TOTAL(BACK) 0-12FT
HEAT RELEASE(BTU)
3.50E+0
3.00E+0
2.50E+0
2.00E+0
1.50E+0
1.00E+0
5000.0
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04444
TOTAL(BACK) 0-12FT
RATE OF HEAT RELEASE(BTU/SEC
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.0
0.0
25.000
50.000
75.000
100.00
125.00
TIME(SEC)

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 04516

DATE: 5/5/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	39	
Initial Clad Temperature (6 Ft)°F At Flood	1,601	Rod T/C 4H6
Rod Peak Power, kw/ft	0.95	
Flooding Rate, in/sec	6 (5 sec)	
	0.8	

Coolant Temperature, °F	131	
Bundle Radial Power Profile	FLECHT	
Disconnected Rods	7F	

B. INITIAL HOUSING TEMPERATURE

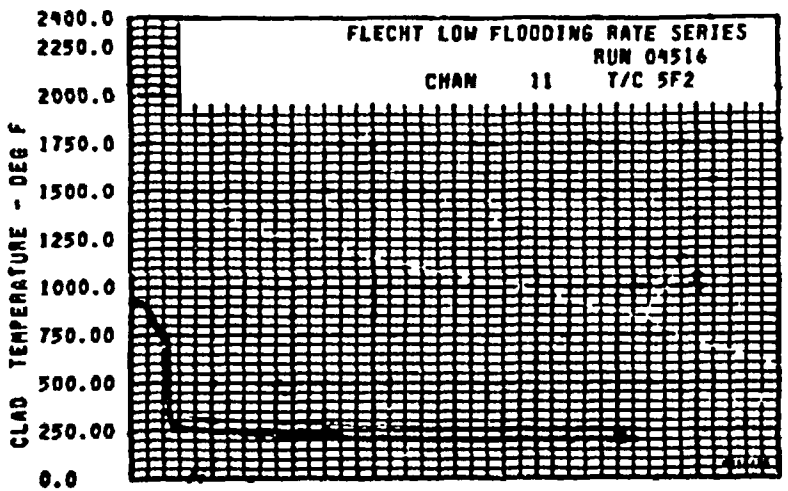
Back Side Elevation, Ft.	Temperature, °F
0	248
2	570
4	735
5.5	819
6	820
6.5	676
7	684
7.5	702
8	750
10	588
12	278
Average	625
Lower Plenum	124
Upper Plenum	366

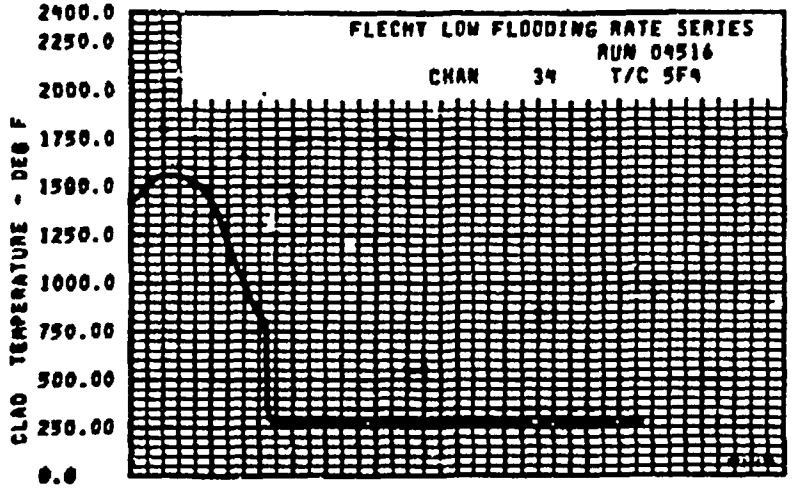
BLANK PAGE

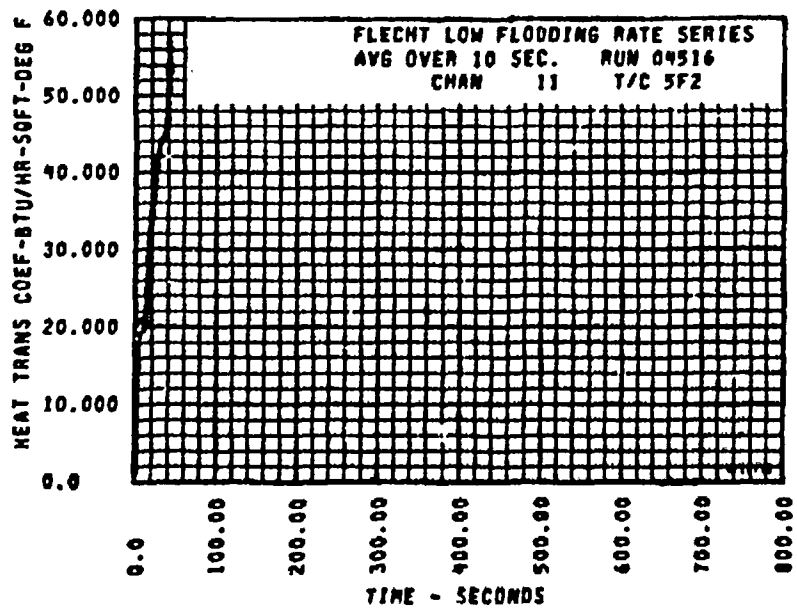
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

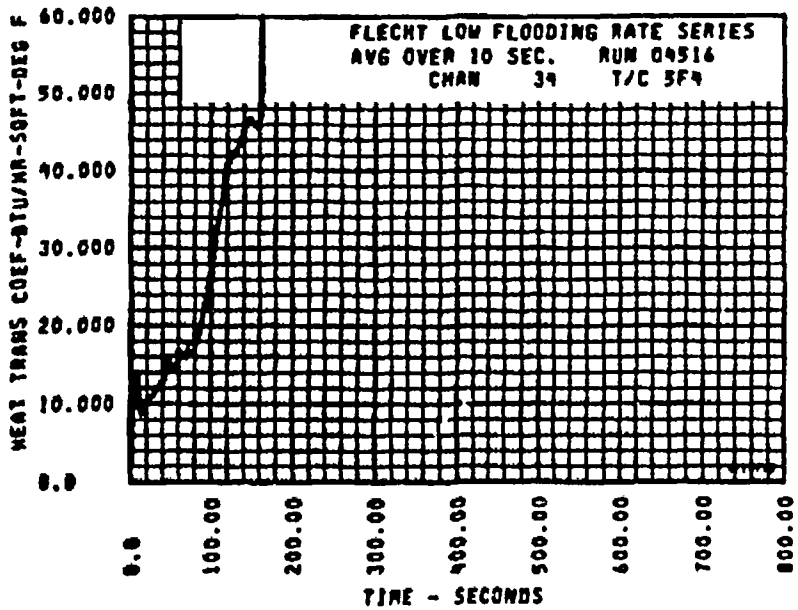
RUN NUMBER 04516

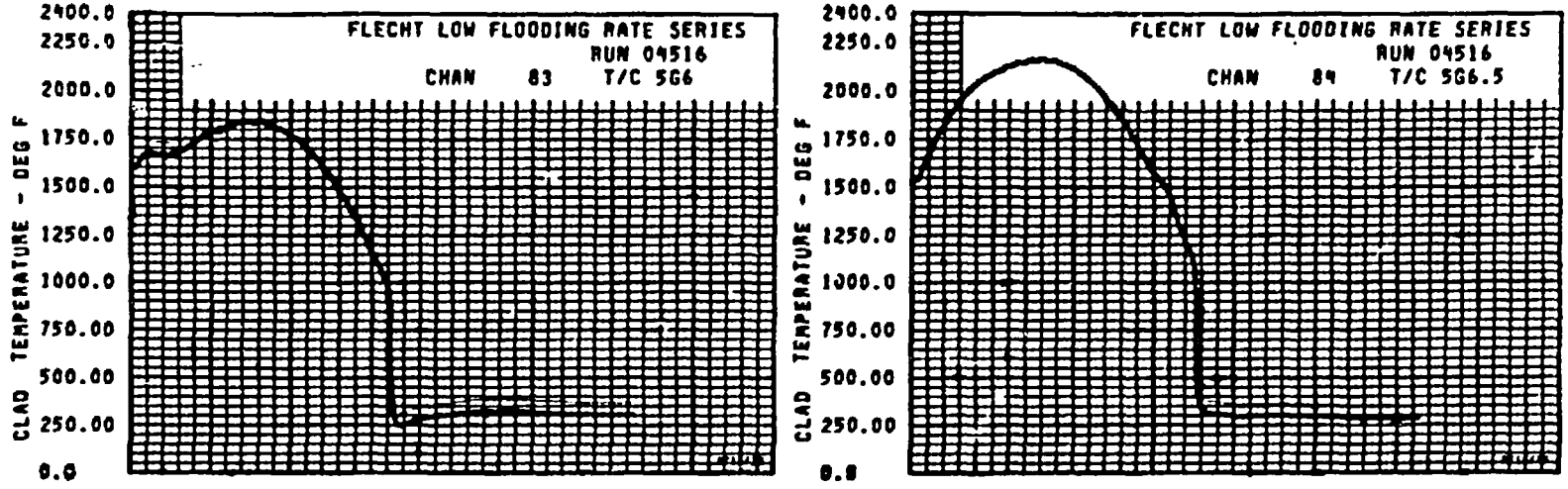
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	120.	-38.8	619.	625.	6.	1.2	587.	4.0
4H1	[illegible]	[illegible]	685.	693.	9.	1.6	618.	11.1
4H1.5	474.	-57.8	740.	749.	9.	2.0	649.	23.9
4H2	560.	[illegible]	965.	979.	14.	2.2	744.	43.9
4H4	717.	[illegible]	1429.	1594.	165.	55.9	871.	165.9
4H6	744.	[illegible]	1601.	2097.	496.	117.2	975.	333.5
8D6	667.	[illegible]	1510.	2011.	501.	119.5	981.	321.7
8D6.5	652.	[illegible]	1451.	2032.	581.	133.0	864.	390.8
8D7	644.	[illegible]	1424.	1897.	473.	145.0	787.	431.7
8D8	549.	[illegible]	1342.	1996.	654.	174.0	856.	514.9
8D9	497.	[illegible]	1048.	1706.	658.	201.9	840.	498.6
8D10	345.	[illegible]	769.	1483.	714.	233.0	956.	397.7
8D11	275.	[illegible]	578.	893.	315.	147.3	763.	165.6
8D12	[illegible]	[illegible]	459.	895.	437.	134.0	733.	262.8
5F0	213.	[illegible]	401.	402.	0.	.3	402.	.5
5F0.5	333.	[illegible]	609.	614.	6.	1.2	548.	4.0
5F1	374.	[illegible]	665.	672.	7.	1.6	594.	10.9
5F1.5	* * BAD THERMOCOUPLE DATA * *							
5F2	531.	[illegible]	932.	946.	14.	2.4	675.	46.8
5F3	652.	[illegible]	1193.	1243.	51.	19.4	728.	96.1
5F4	732.	[illegible]	1426.	1570.	144.	55.7	779.	169.7
5F6	724.	[illegible]	1557.	1932.	374.	160.0	1053.	316.3
5G6	739.	[illegible]	1592.	1855.	264.	161.0	938.	321.9
5G6.5	559.	-37.8	1520.	2176.	656.	151.0	1042.	353.9
5G7	671.	[illegible]	1464.	2062.	599.	161.0	865.	418.0
5G8	734.	[illegible]	1397.	2197.	790.	194.9	929.	588.9
5G9	[illegible]	[illegible]	1151.	1946.	796.	201.3	592.	557.4
5G11	[illegible]	[illegible]	673.	1170.	500.	191.3	508.	603.6
5G12	[illegible]	[illegible]	553.	1027.	473.	195.9	570.	603.9
1G4	754.	[illegible]	1341.	1384.	43.	77.4	903.	125.9
1G6	[illegible]	[illegible]	1551.	1774.	224.	94.4	965.	312.3
1G10	[illegible]	[illegible]	906.	1122.	217.	133.7	681.	646.0
3H2	[illegible]	[illegible]	967.	981.	14.	2.4	724.	38.9
3H6	[illegible]	[illegible]	1595.	2030.	435.	119.3	986.	325.6
3H8	[illegible]	[illegible]	1397.	2076.	679.	178.0	873.	502.9
3H10	[illegible]	[illegible]	967.	1581.	614.	179.0	1012.	439.7
4F2	544.	[illegible]	997.	1009.	12.	3.2	657.	42.9
4F4	732.	[illegible]	1364.	1503.	139.	55.4	825.	152.2
4F6	717.	[illegible]	1579.	2123.	551.	146.0	1039.	370.6
4F8	734.	[illegible]	1463.	2058.	595.	207.0	1265.	659.7
4F10	[illegible]	[illegible]	915.	1543.	629.	215.3	677.	584.9


FLECHT LOW FLOODING RATE SERIES
RUN 04516
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

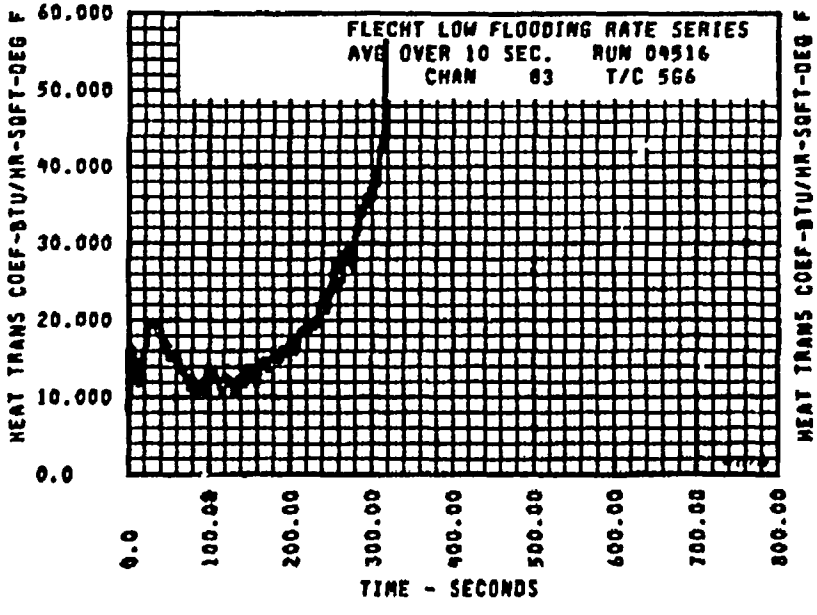

FLECHT LOW FLOODING RATE SERIES
RUN 04516
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

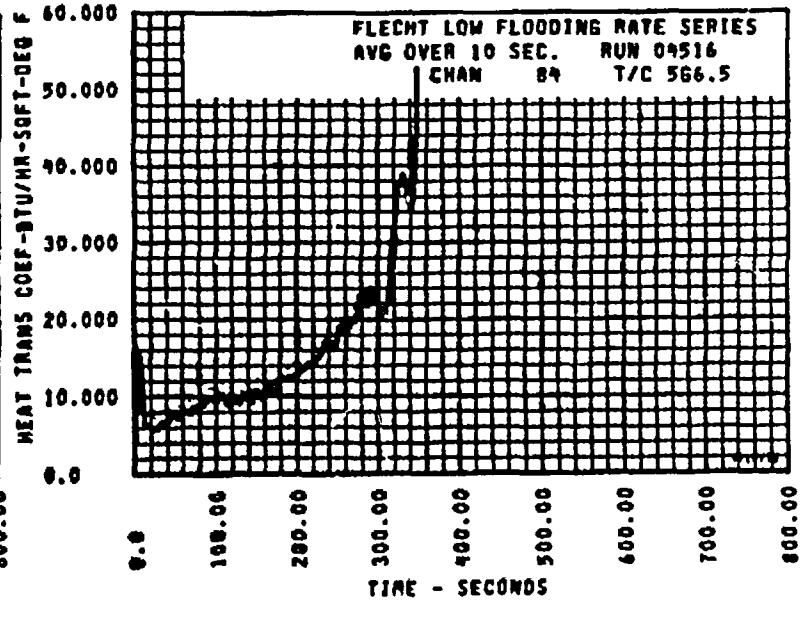

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04516
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

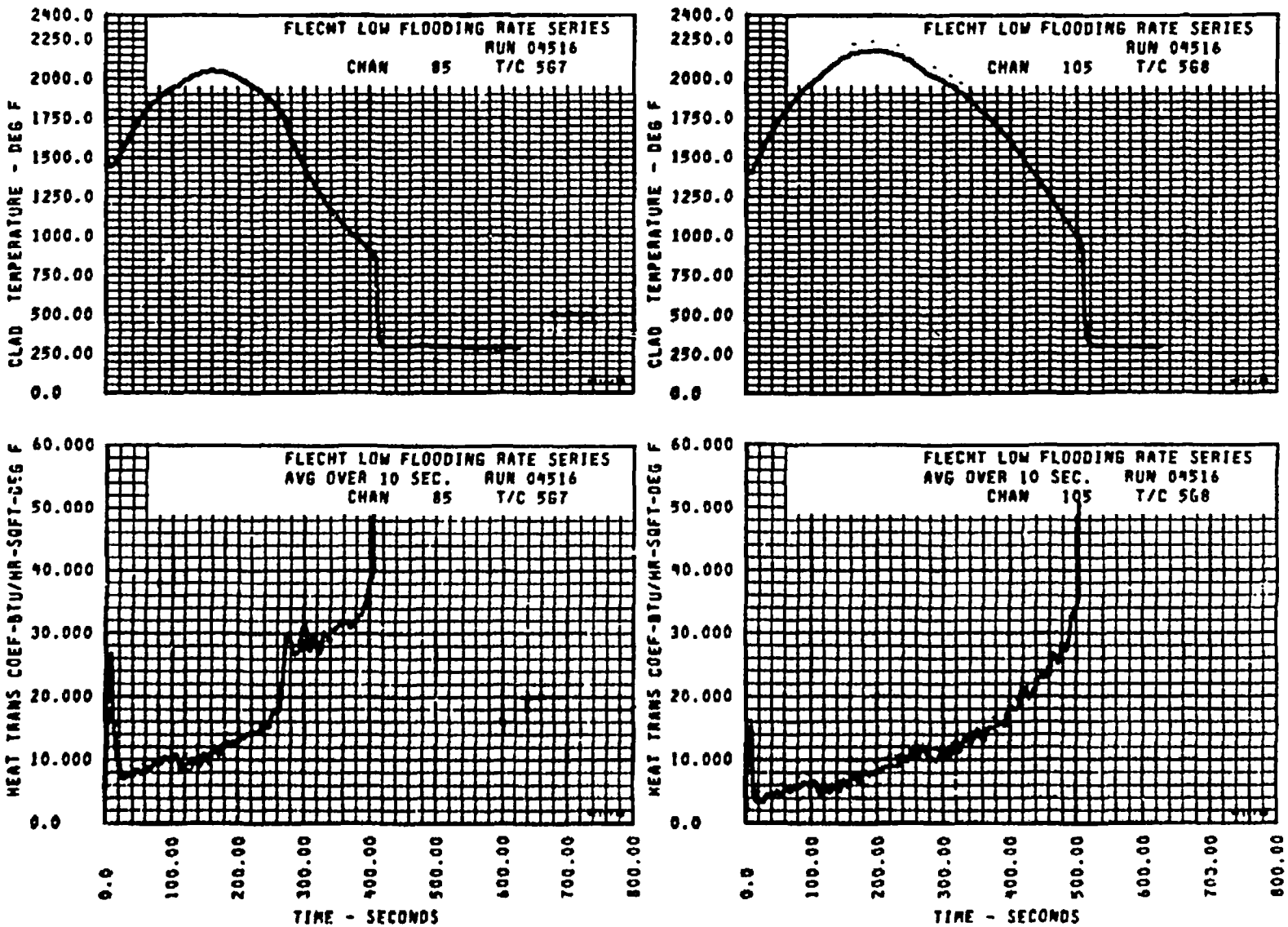

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04516
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

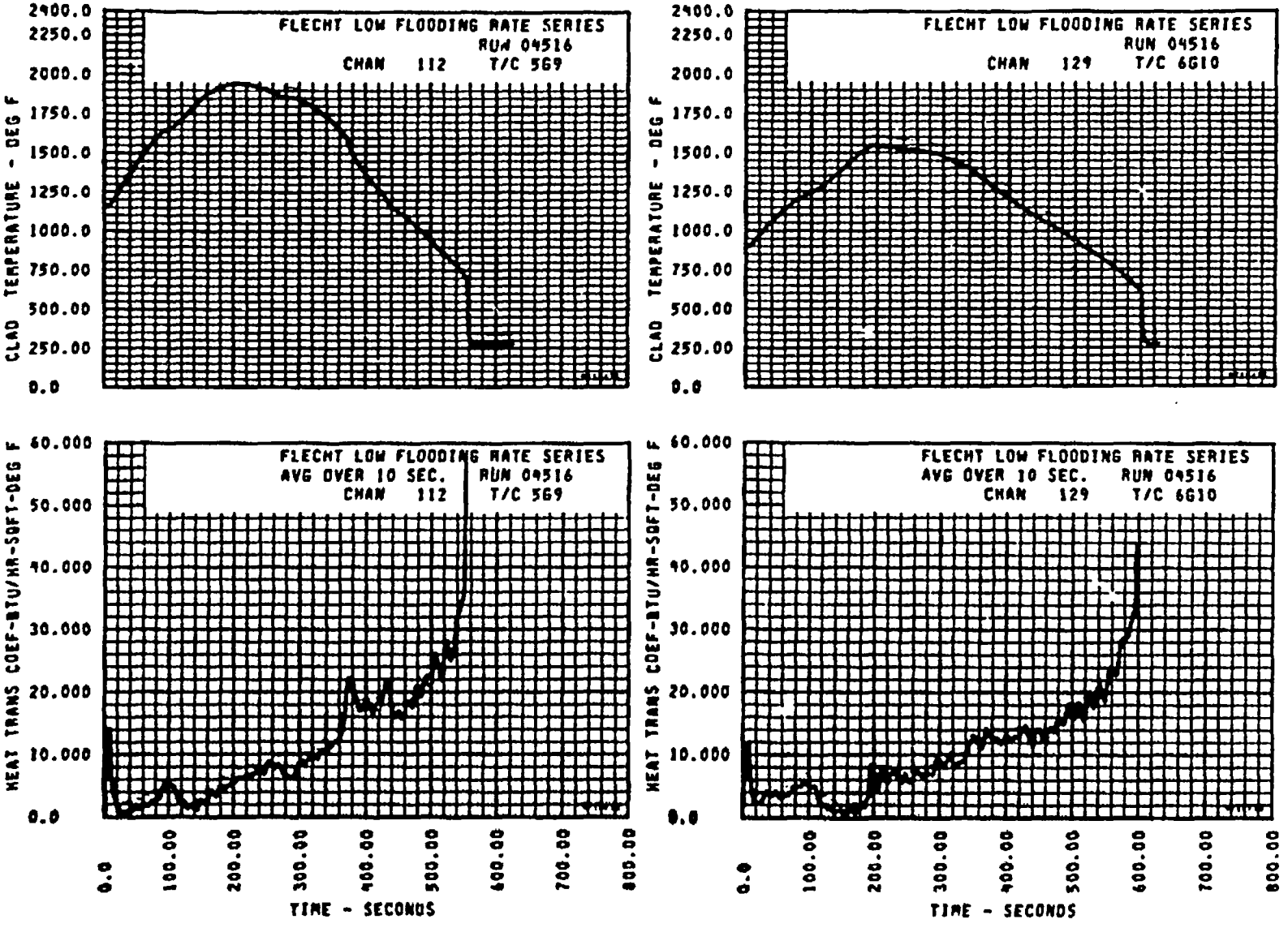

FLECHT LOW FLOODING RATE SERIES
RUN 04516
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

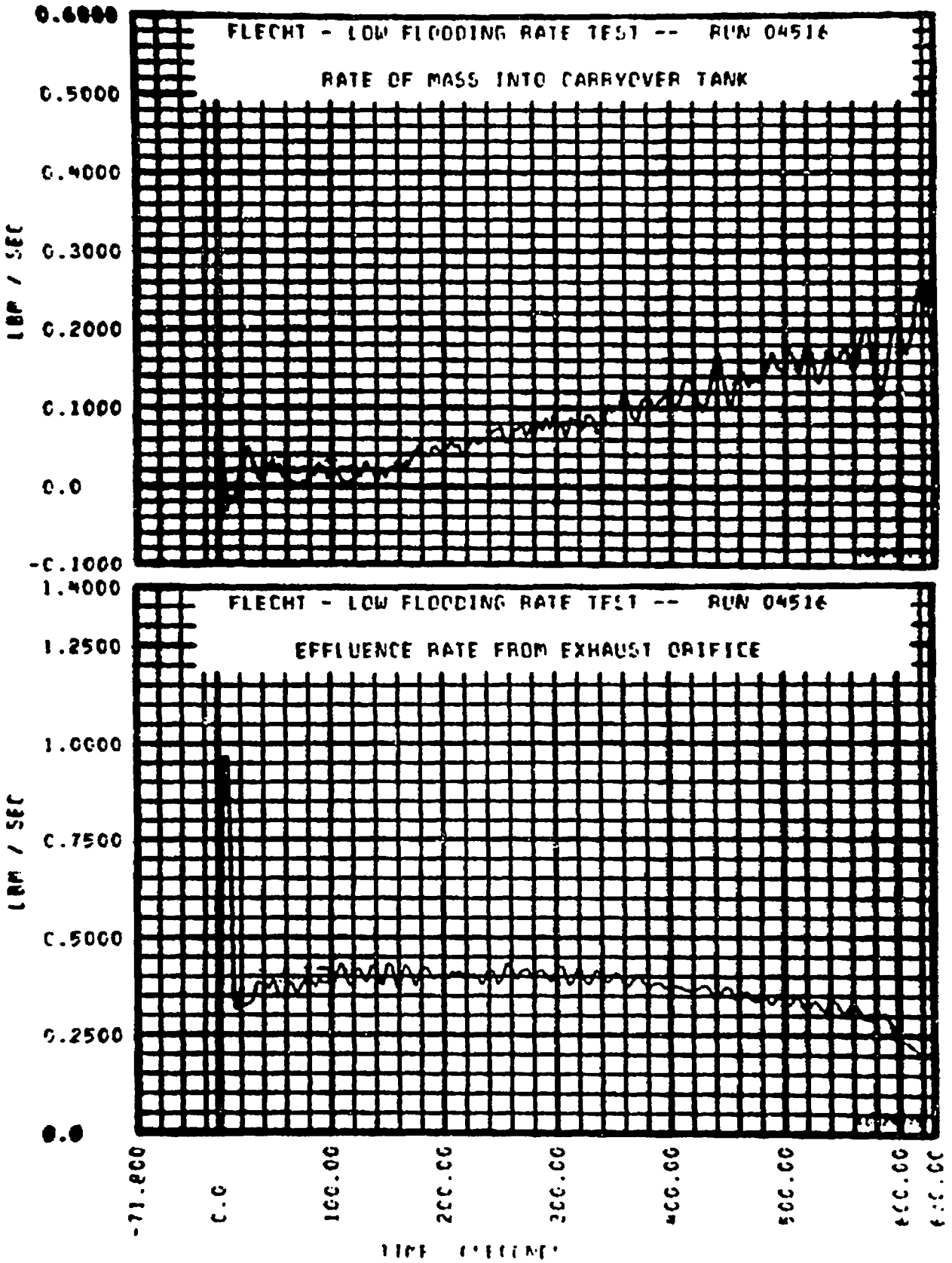
FLECHT LOW FLOODING RATE SERIES
RUN 04516
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

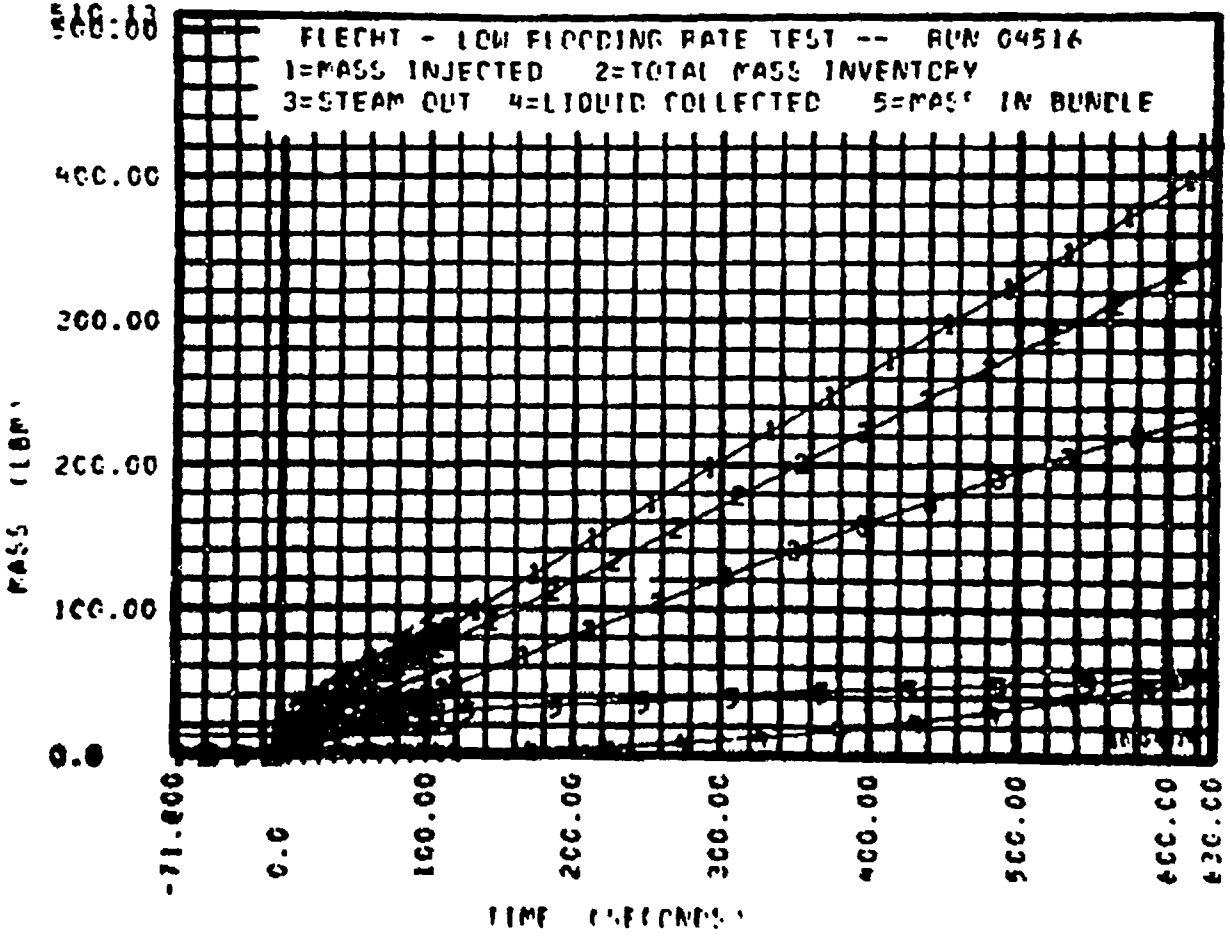

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04516
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

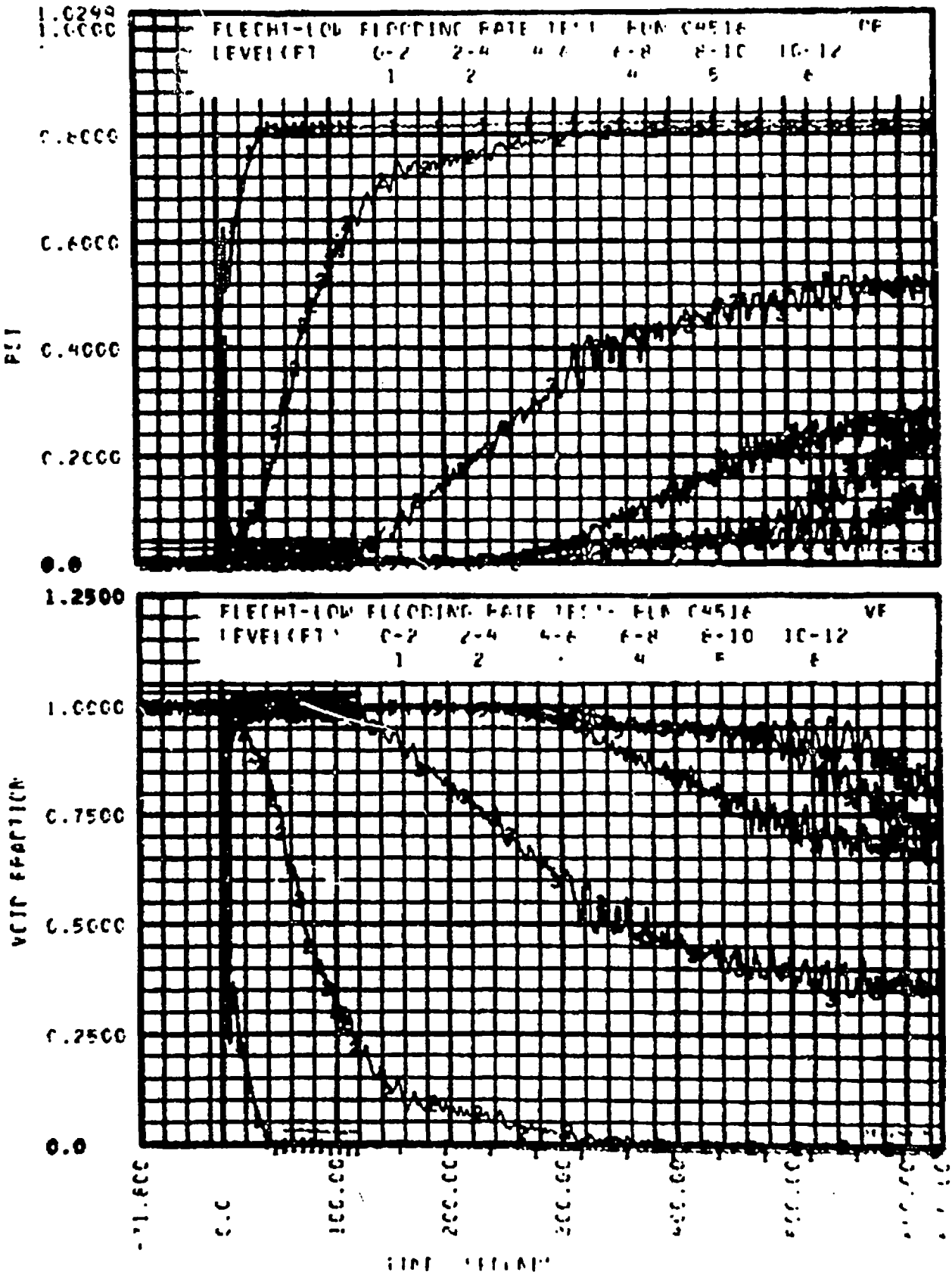

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04516
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

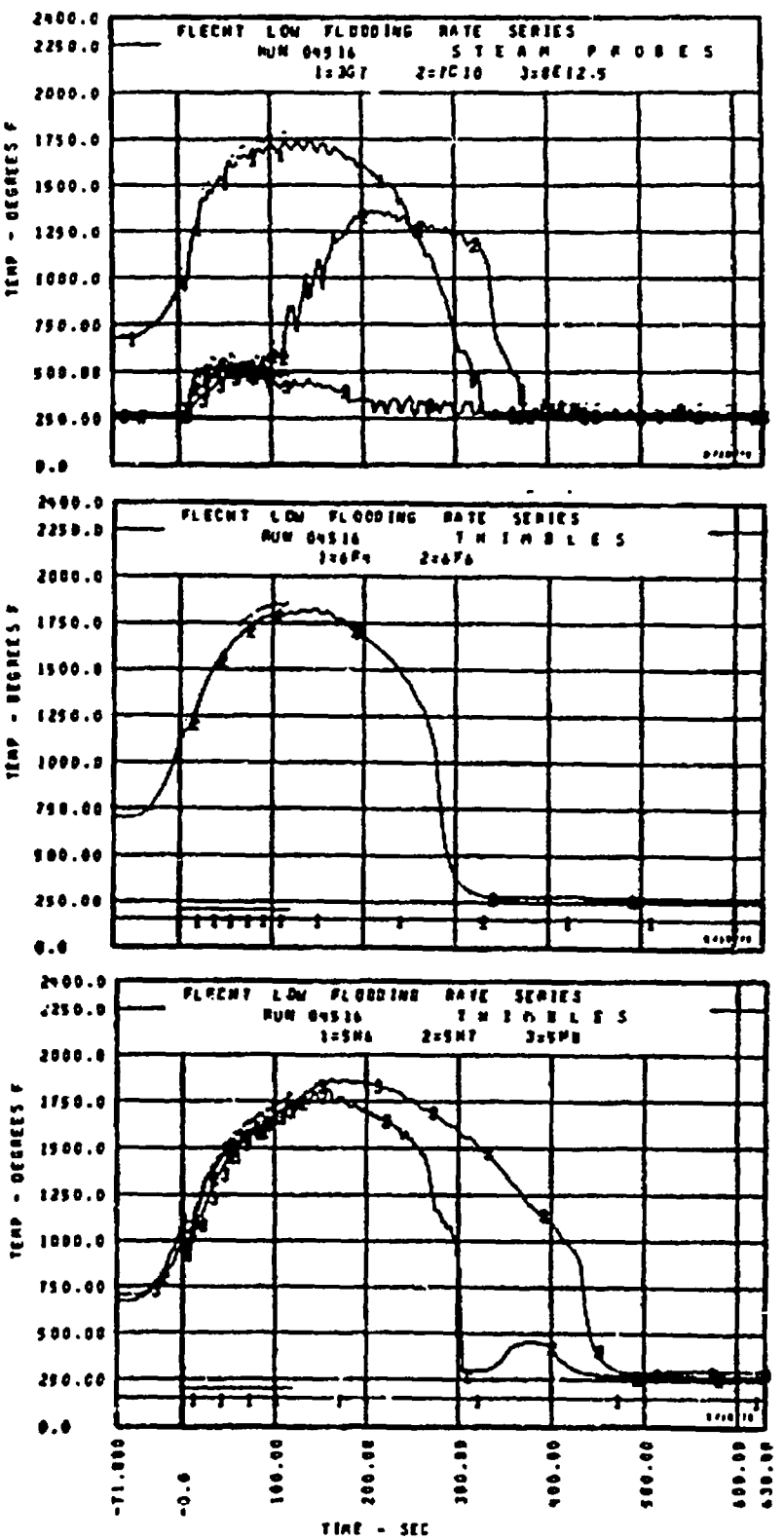

FLECHT LOW FLOODING RATE SERIES
RUN 04516
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04516
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04516
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04516
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

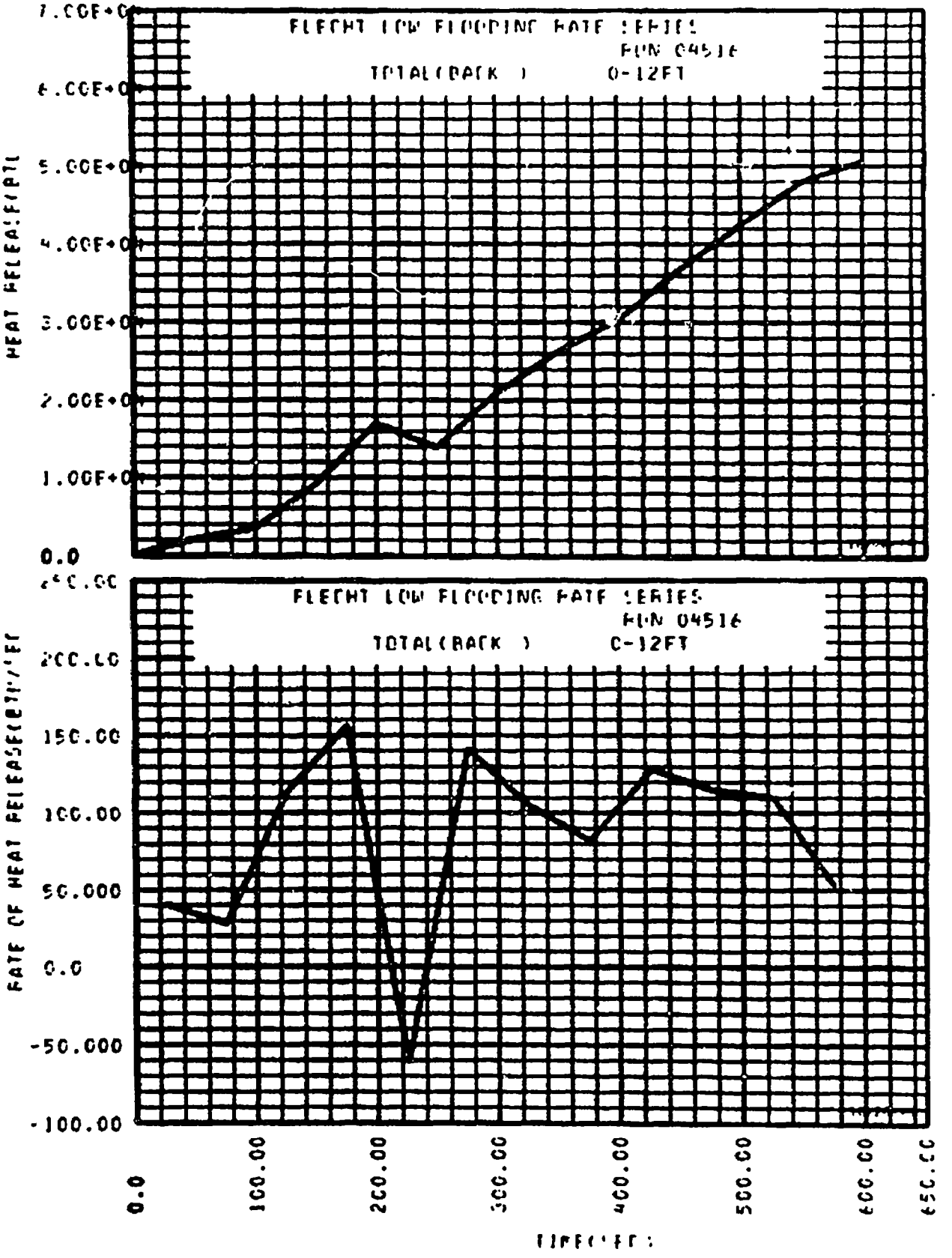

FLECHT LOW FLOODING RATE SERIES
RUN 04516
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04516
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04516
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04516
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
TIME - SECONDS

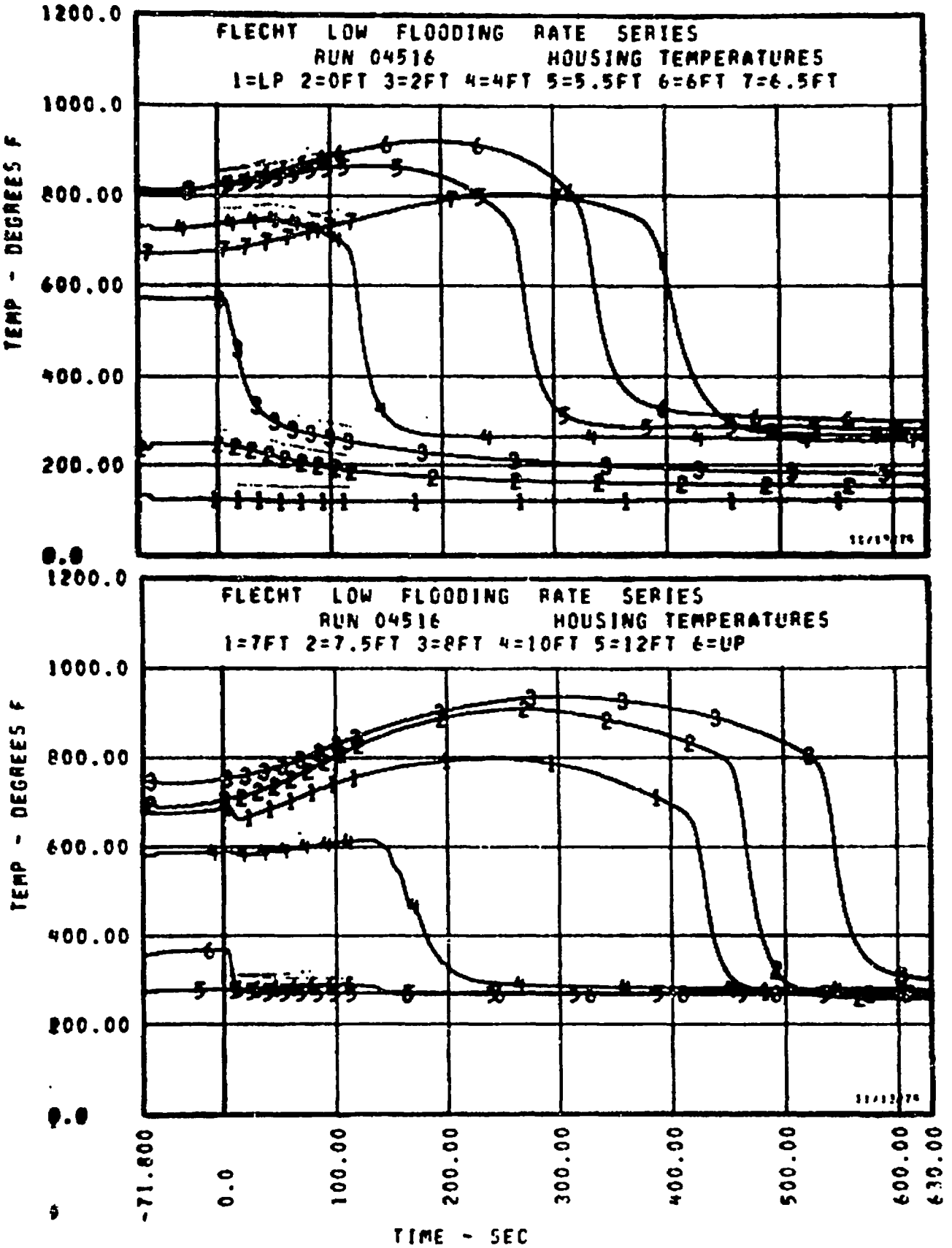

FLECHT - LOW FLOODING RATE TEST -- RUN 04516
RATE OF MASS INTO CARRYOVER TANK
LBP / SEC
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
-0.1000
FLECHT - LOW FLOODING RATE TEST -- RUN 04516
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
1.4000
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
-71.000
0.0
100.00
200.00
300.00
400.00
500.00

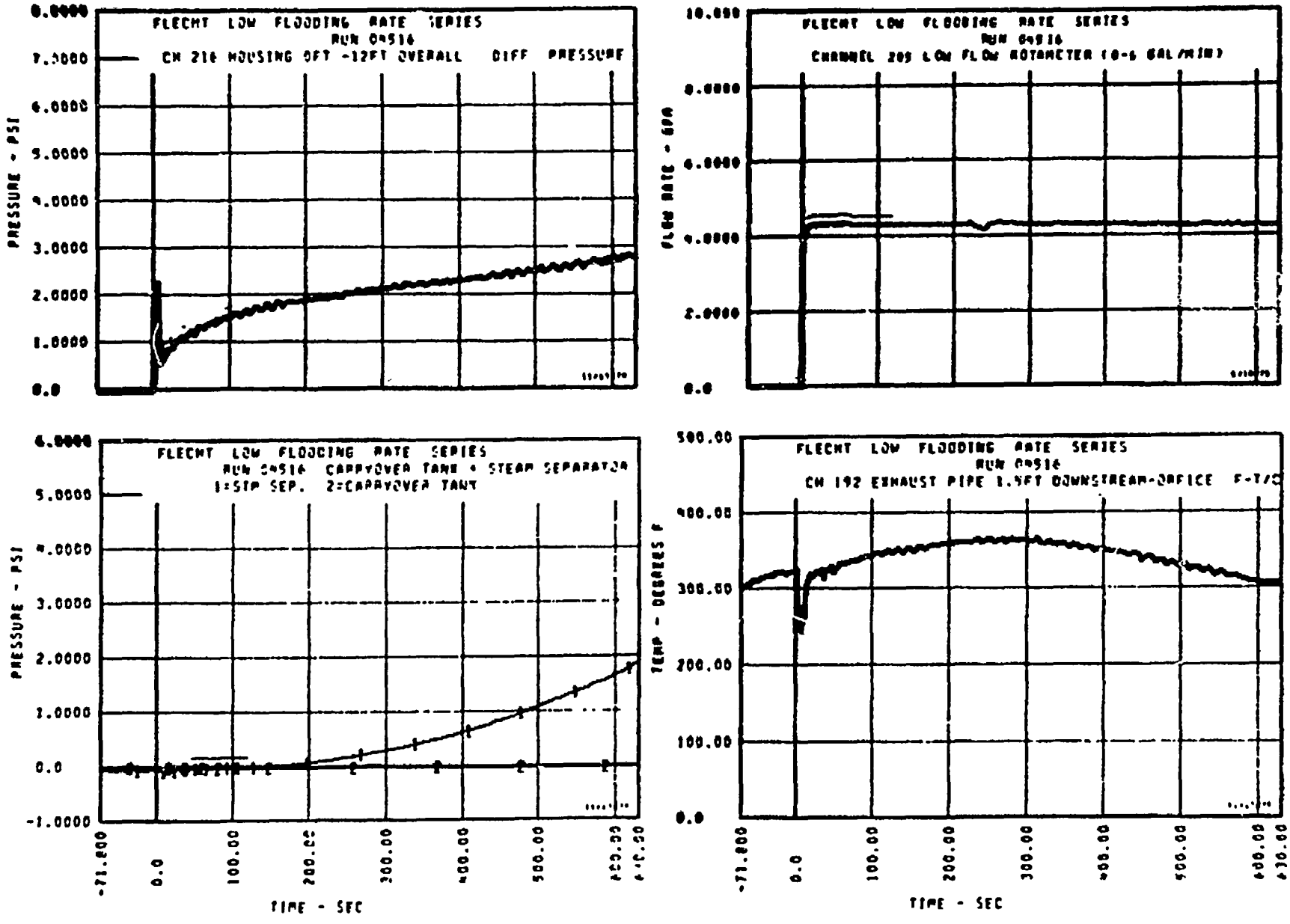

FLECHT - LOW FLOODING RATE TEST -- RUN 04516
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
400.00
300.00
200.00
100.00
0.0
-71.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
620.00

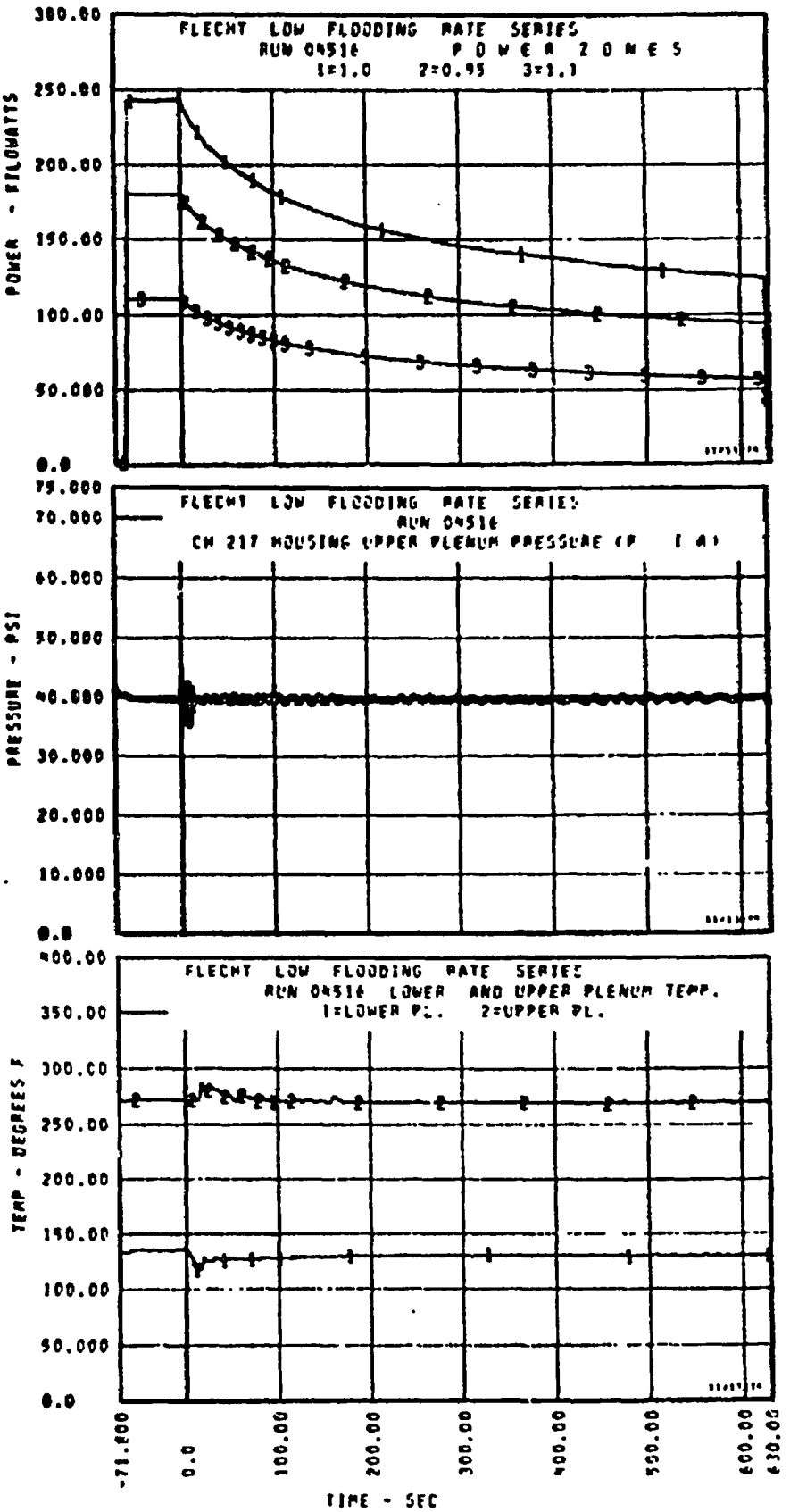

1.0299
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
FLIGHT-LOW FLOODING RATE TEST FOR CASE
LEVELS(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
FLIGHT-LOW FLOODING RATE TEST FOR CASE
LEVELS(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 4 5 6


FLECHT LOW FLOODING RATE SERIES
RUN 04516
STEAM PROBES
1=3G7 2=FC10 3=8E12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04516
THIMBLES
1=6F4 2=6F6
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 04516
THIMBLES
1=5N6 2=5N7 3=5P8
TEMP - DEGREES F
-71.000
-0.0
100.00
200.00
300.00
400.00
500.00
600.00
630.00
TIME - SEC


FLIGHT LOW FLOODING RATE SERIES
RUN 04516
TOTAL(BACK) 0-12FT
HEAT RELEASE(BTU)
1.00E+0
0.0
FLIGHT LOW FLOODING RATE SERIES
RUN 04516
TOTAL(BACK) 0-12FT
RATE OF HEAT RELEASE(BTU/SEC)
200.00
150.00
100.00
50.000
0.0
-50.000
-100.00
0.0
100.00
200.00
300.00
400.00
500.00
600.00
TIME(SEC)


FLECHT LOW FLOODING RATE SERIES
RUN 04516 HOUSING TEMPERATURES
1=LP 2=0FT 3=2FT 4=4FT 5=5.5FT 6=6FT 7=6.5FT
FLECHT LOW FLOODING RATE SERIES
RUN 04516 HOUSING TEMPERATURES
1=7FT 2=7.5FT 3=8FT 4=10FT 5=12FT 6=UP
TEMP - DEGREES F
1200.0
1000.0
800.00
600.00
400.00
200.00
0.0
-71.800
0.0
100.00
200.00
300.00
400.00
500.00
600.00
630.00
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 04516
CH 216 HOUSING OFT -12FT OVERALL DIFF PRESSURE
PRESSURE - PSI
FLECHT LOW FLOODING RATE SERIES
RUN 04516
CHANNEL 209 LOW FLOW ROTAMETER (0-6 GAL/MIN)
FLOW RATE - GPM
FLECHT LOW FLOODING RATE SERIES
RUN 04516 CARRYOVER TANK + STEAM SEPARATOR
1=STM SEP. 2=CARRYOVER TANK
PRESSURE - PSI
TIME - SEC
FLECHT LOW FLOODING RATE SERIES
RUN 04516
CH 192 EXHAUST PIPE 1.5FT DOWNSTREAM-ORFICE
TEMP - DEGREES F
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 04516
P O W E R Z O N E S
1=1.0 2=0.95 3=1.1
POWER - KILOWATTS
350.00
250.00
200.00
150.00
100.00
50.000
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04516
CH 217 HOUSING UPPER PLENUM PRESSURE (P [A)
PRESSURE - PSI
70.000
60.000
50.000
40.000
30.000
20.000
10.000
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04516 LOWER AND UPPER PLENUM TEMP.
1=LOWER PL. 2=UPPER PL.
TEMP - DEGREES F
350.00
300.00
250.00
200.00
150.00
100.00
50.000
0.0
-71.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
630.00
TIME - SEC

FLECHT LOW FLOODING RATE SERIES
RUN 04516
CHAN 57 T/C 4E6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

FLECHT LOW FLOODING RATE SERIES
RUN 04516
CHAN 64 T/C 4F6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04516
CHAN 57 T/C 4E6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04516
CHAN 64 T/C 4F6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 04641

DATE: 5/6/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	20		
Initial Clad Temperature (6 Ft)°F At Flood	1,601	Rod T/C	4H6
Rod Peak Power, kw/ft	0.95		
Flooding Rate, in/sec	1.0		

Coolant Temperature, °F	89		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

B. INITIAL HOUSING TEMPERATURE

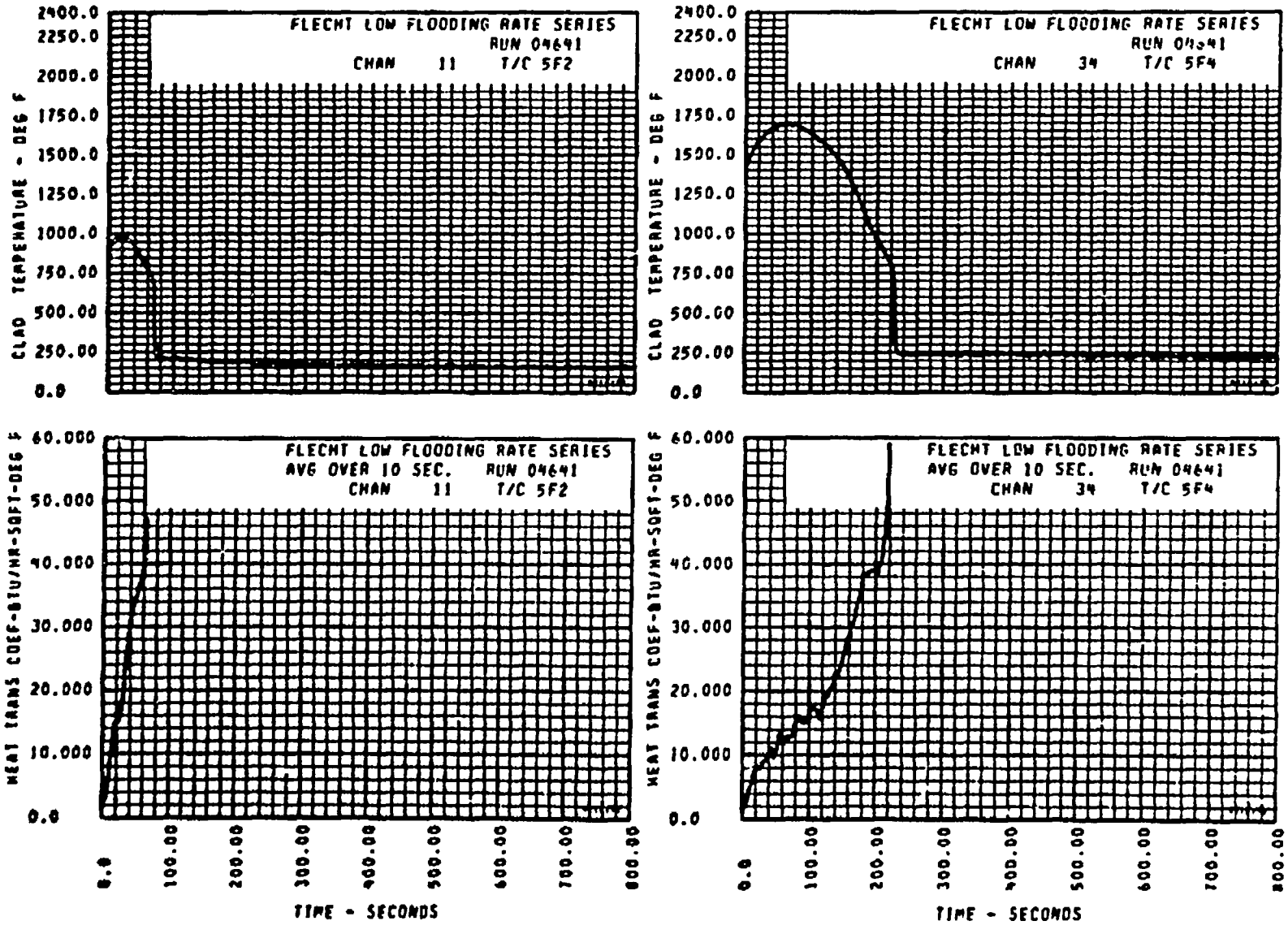
Back Side Elevation, Ft.	Temperature, °F
0	205
2	548
4	736
5.5	736
6	814
6.5	820
7	673
7.5	680
8	695
10	742
12	548
Average	610
Lower Plenum	86
Upper Plenum	238

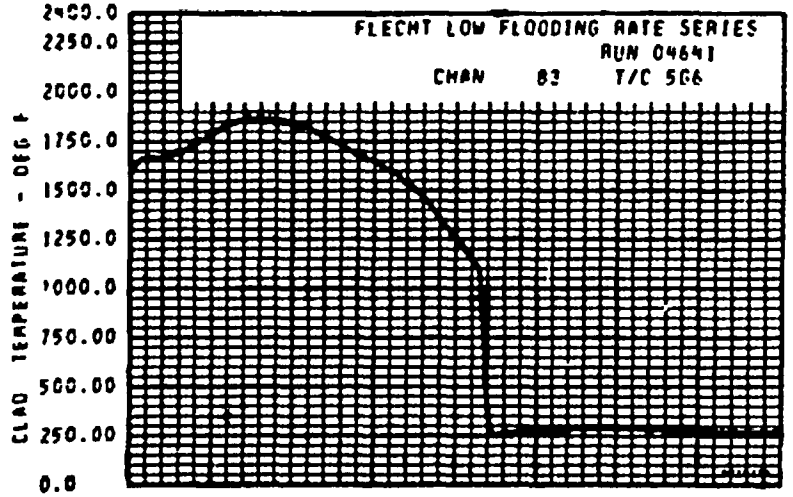
BLANK PAGE

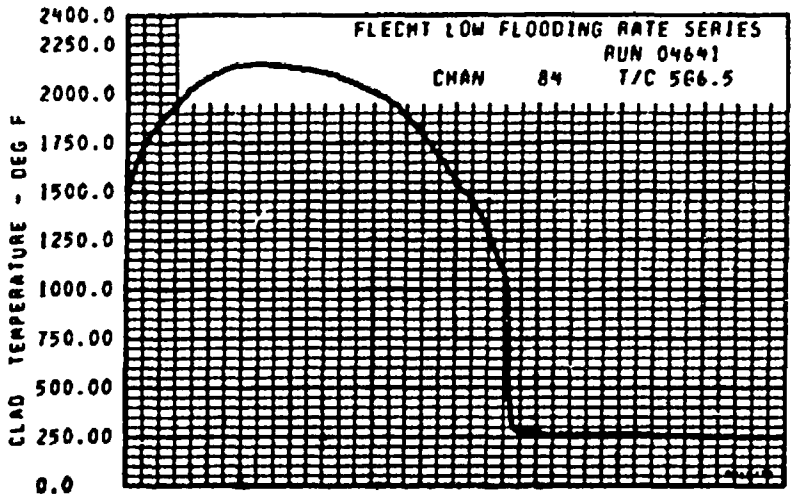
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

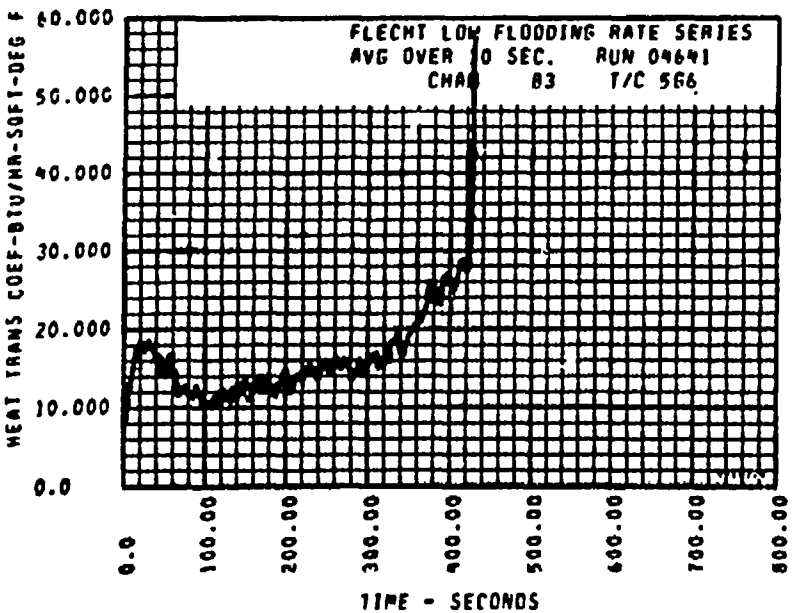
RUN NUMBER 04641

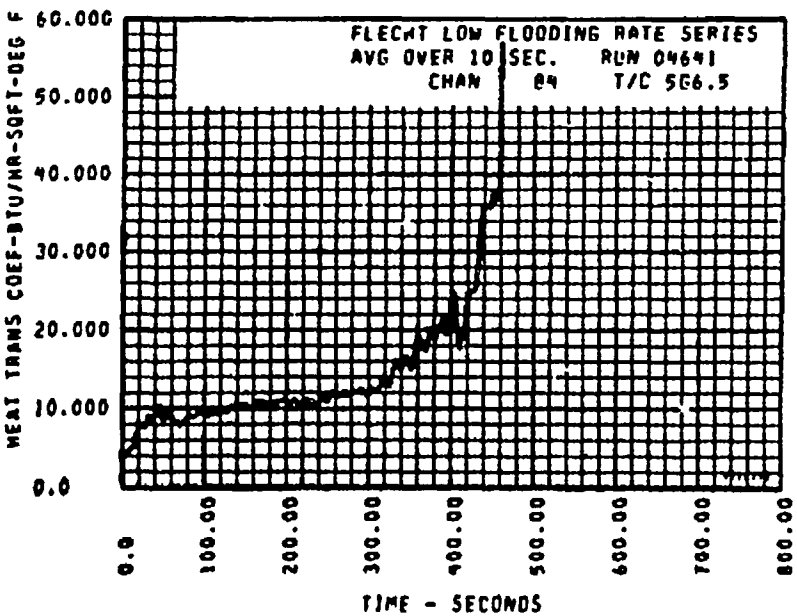
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	210.	[illegible]	643.	670.	27.	6.6	572.	14.5
4H1	374.	[illegible]	667.	704.	37.	[illegible]	627.	25.6
4H1.5	[illegible]	[illegible]	721.	759.	37.	9.6	632.	44.1
4H2	[illegible]	[illegible]	[illegible]	1372.	72.	17.9	723.	71.6
4H4	724.	[illegible]	1426.	1717.	291.	75.8	769.	227.7
4H6	[illegible]	[illegible]	1631.	2192.	560.	133.3	809.	452.2
8D6	[illegible]	[illegible]	1537.	2379.	373.	117.3	865.	438.6
8D6.5	[illegible]	[illegible]	1441.	2066.	625.	169.3	914.	588.4
8D7	314.	[illegible]	1467.	1896.	429.	259.3	751.	572.2
8D8	442.	[illegible]	1340.	1922.	582.	237.9	696.	668.7
8D9	[illegible]	[illegible]	1024.	1473.	445.	97.3	575.	739.0
8D10	[illegible]	[illegible]	779.	1352.	573.	262.3	572.	733.1
8D11	[illegible]	[illegible]	543.	940.	397.	315.9	546.	641.6
8D12	[illegible]	[illegible]	436.	712.	275.	329.3	248.	443.0
5F0	[illegible]	[illegible]	306.	307.	1.	.2	339.	.5
5F0.5	253.	[illegible]	578.	599.	21.	5.7	538.	14.2
5F1	[illegible]	[illegible]	645.	679.	34.	9.	684.	26.8
5F1.5	*** NO THERMOCOUPLE DATA ***							
5F2	333.	[illegible]	913.	977.	64.	17.3	650.	53.9
5F3	[illegible]	[illegible]	1188.	1339.	151.	38.4	712.	133.9
5F4	[illegible]	[illegible]	1414.	1702.	288.	65.9	786.	224.6
5F6	720.	[illegible]	1558.	1973.	415.	183.8	1010.	425.8
5G6	724.	[illegible]	1592.	1893.	301.	145.3	1763.	87.4
5G6.5	178.	[illegible]	1615.	2155.	540.	160.9	1000.	464.6
5G7	[illegible]	[illegible]	1424.	1859.	435.	241.3	849.	530.9
5G8	[illegible]	[illegible]	1376.	1998.	622.	302.3	904.	653.8
5G9	344.	[illegible]	1123.	1660.	537.	314.3	632.	728.9
5G11	267.	[illegible]	554.	1002.	461.	315.3	449.	766.1
5G12	[illegible]	[illegible]	525.	900.	375.	281.3	452.	749.0
1G4	[illegible]	[illegible]	1341.	1480.	139.	39.6	789.	192.3
1G6	[illegible]	[illegible]	1544.	1805.	261.	136.9	899.	426.7
1G10	[illegible]	[illegible]	911.	1180.	269.	208.0	515.	764.5
3H2	[illegible]	[illegible]	953.	1016.	63.	17.8	736.	63.0
3H6	850.	[illegible]	1573.	2102.	529.	127.3	901.	443.4
3H8	839.	[illegible]	1176.	1734.	559.	209.0	795.	654.2
3H10	[illegible]	[illegible]	903.	1417.	514.	219.0	911.	610.4
6E6	[illegible]	[illegible]	1636.	2184.	548.	171.3	974.	459.6
6E6.5	[illegible]	[illegible]	1608.	2179.	571.	168.3	924.	519.9
6E7	[illegible]	[illegible]	1399.	1990.	591.	190.0	943.	572.6
6E8	370.	[illegible]	1325.	1982.	657.	253.0	910.	681.1
6E9	[illegible]	[illegible]	972.	1615.	643.	329.0	624.	743.1
6E10	241.	[illegible]	702.	1440.	738.	310.3	654.	756.9
6E11	216.	[illegible]	573.	1088.	515.	325.0	653.	621.7

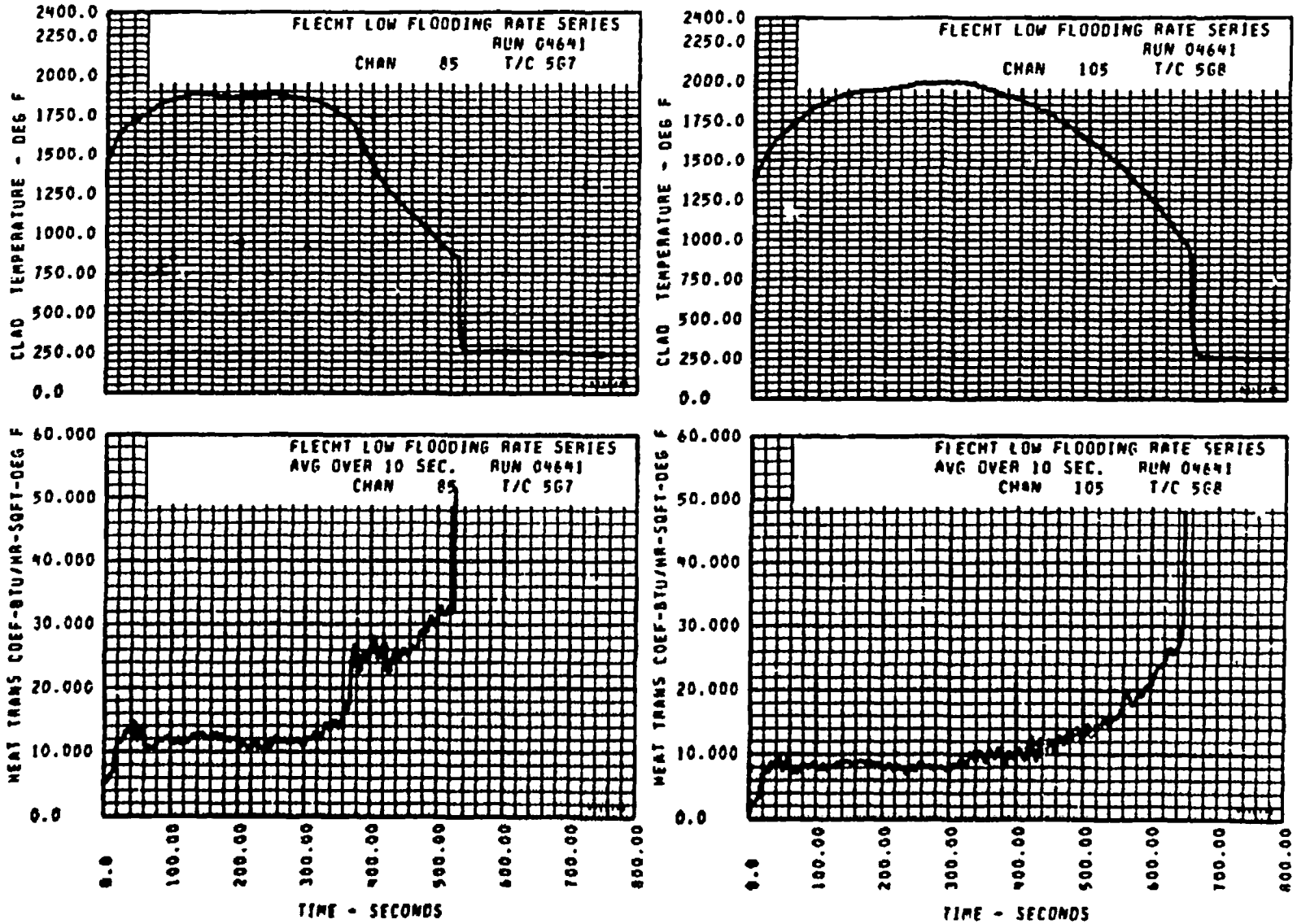

FLECHT LOW FLOODING RATE SERIES
RUN 04641
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04641
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04641
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04641
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

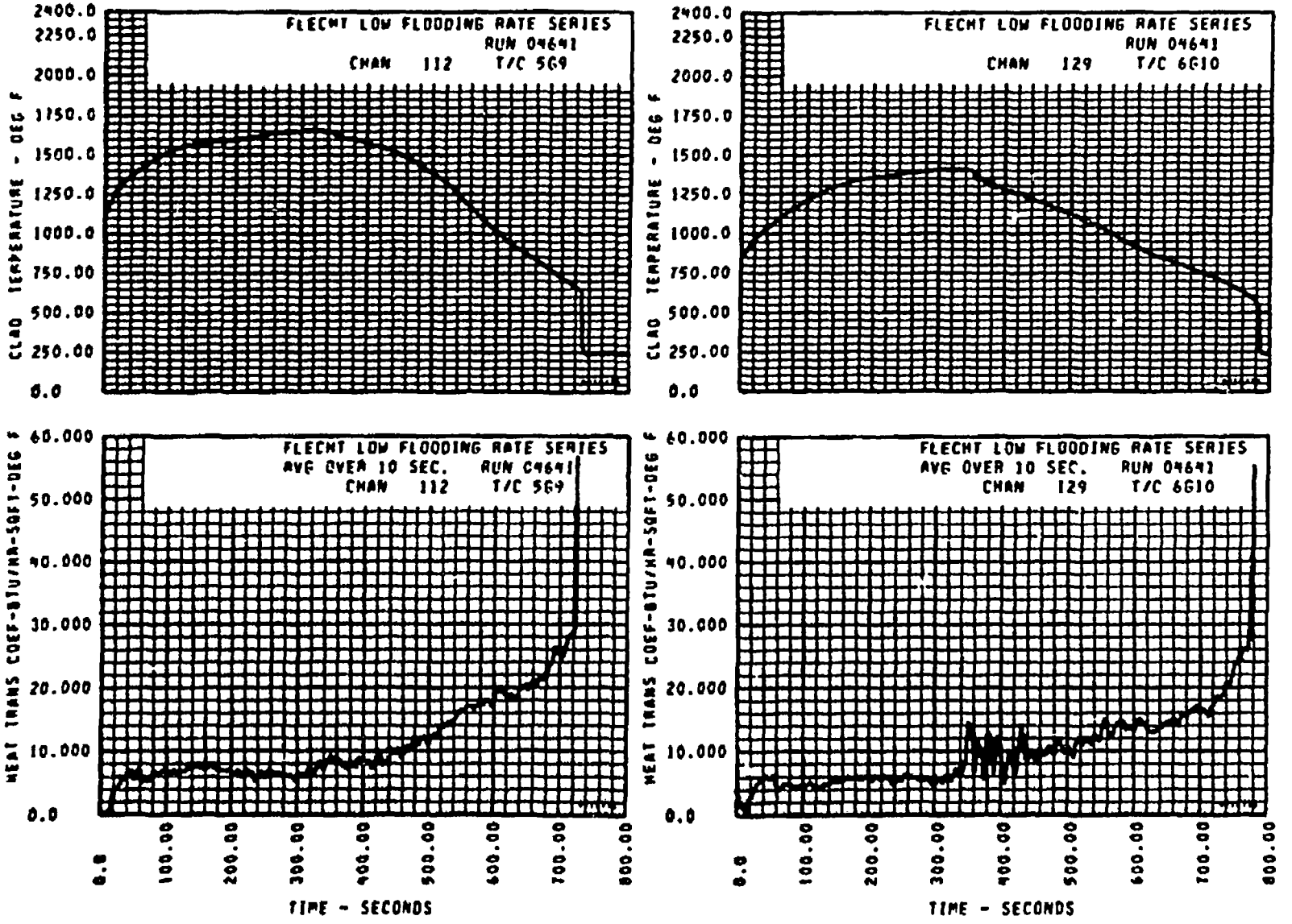

FLECHT LOW FLOODING RATE SERIES
RUN 04641
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

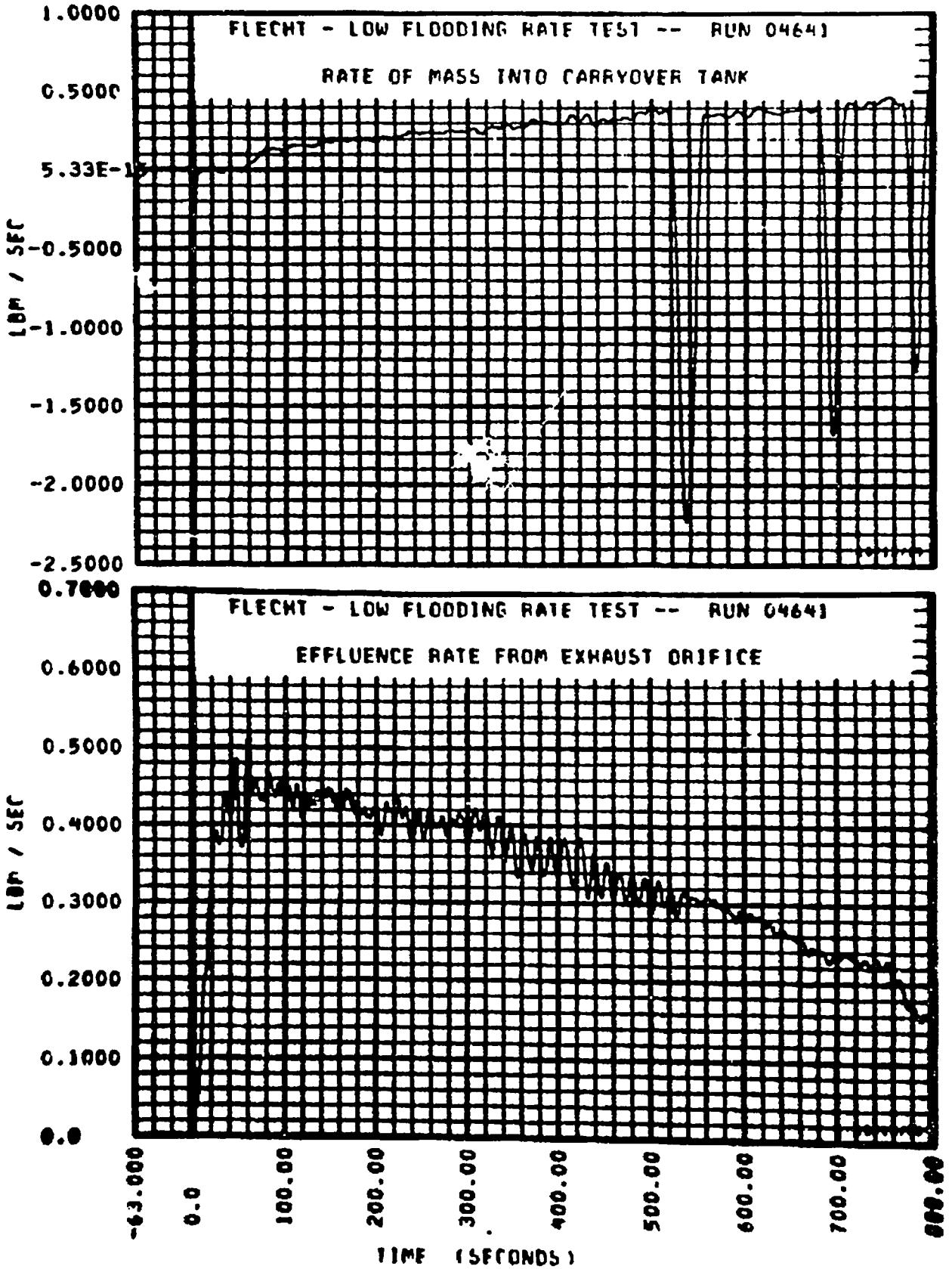

FLECHT LOW FLOODING RATE SERIES
RUN 04641
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

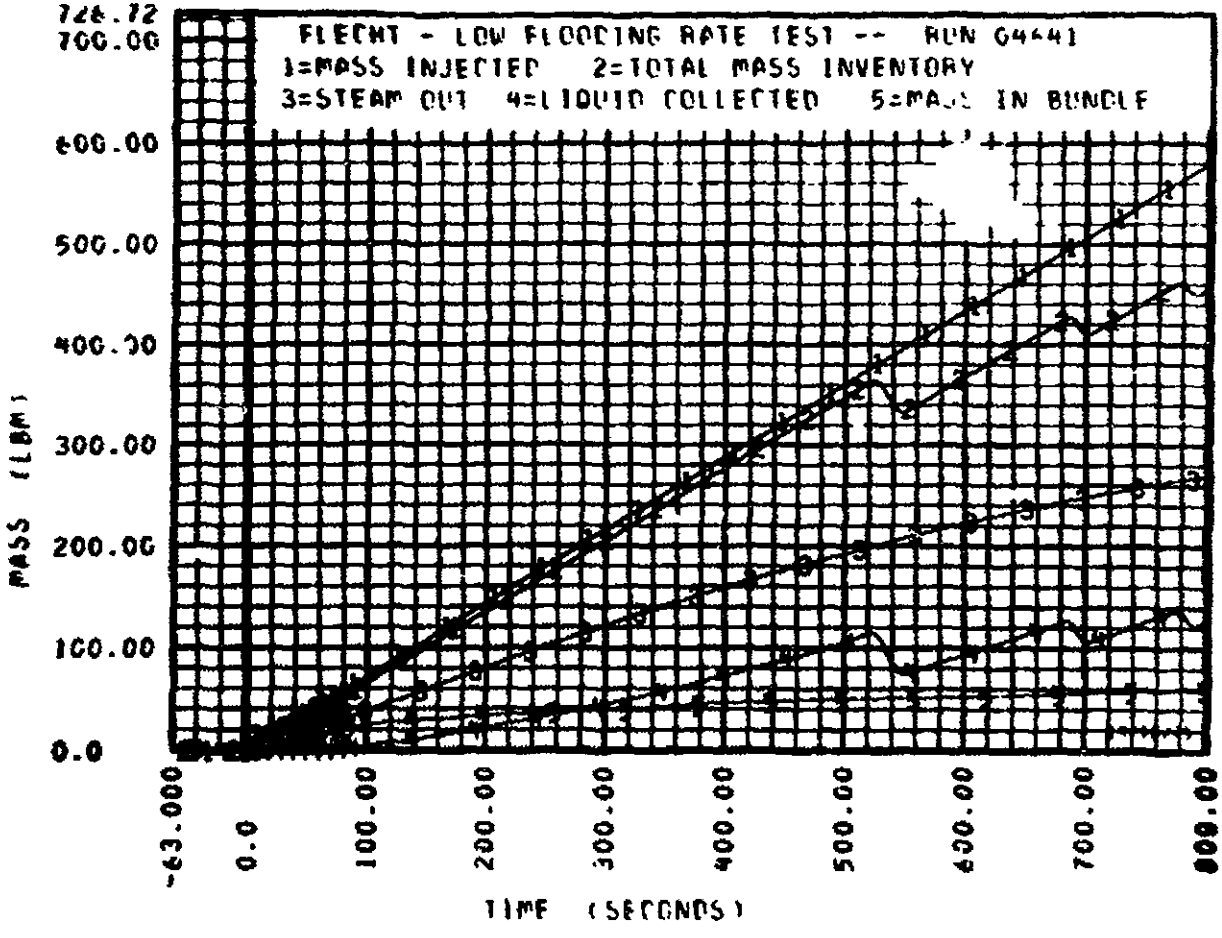

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04641
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

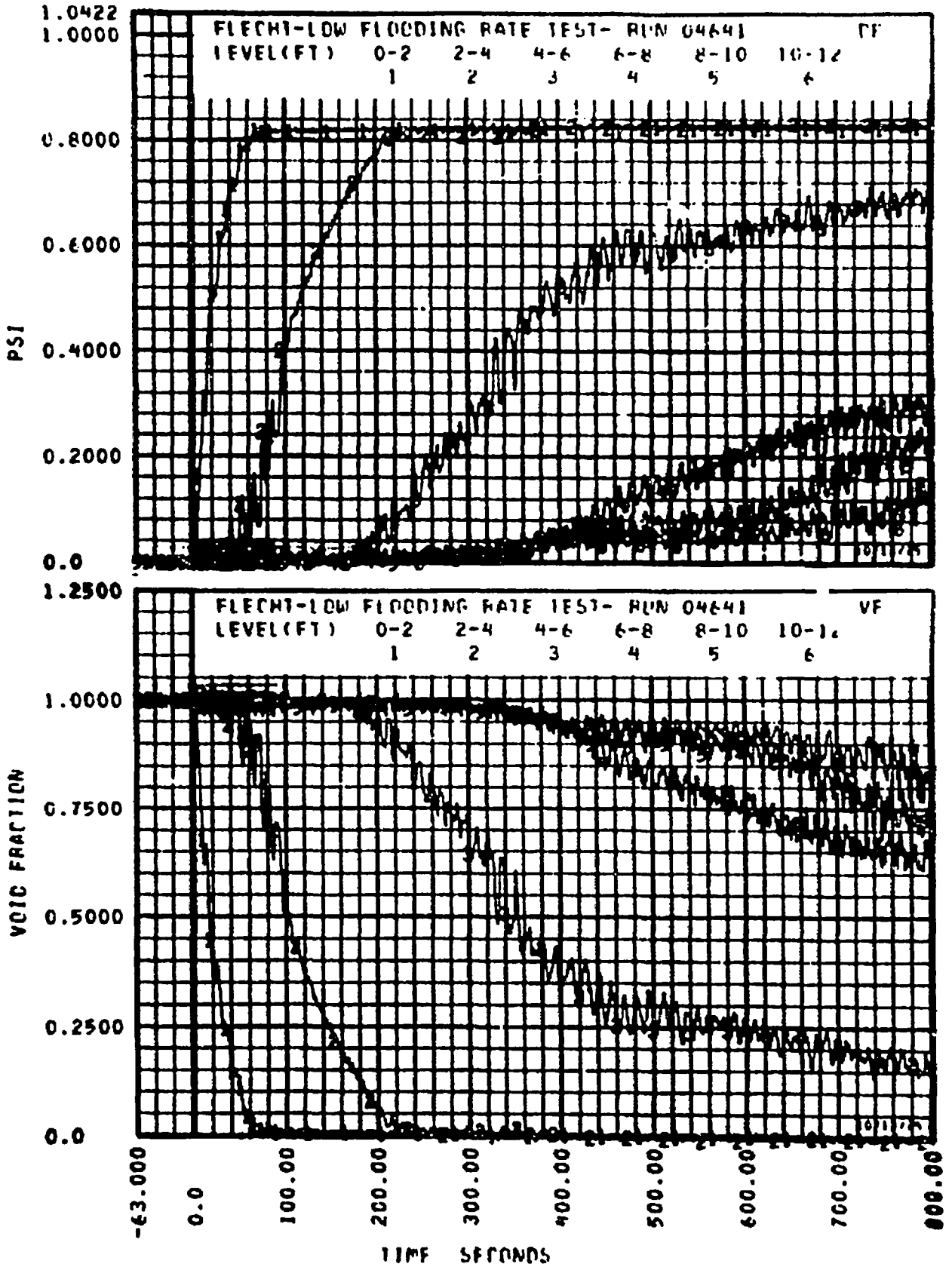

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04641
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

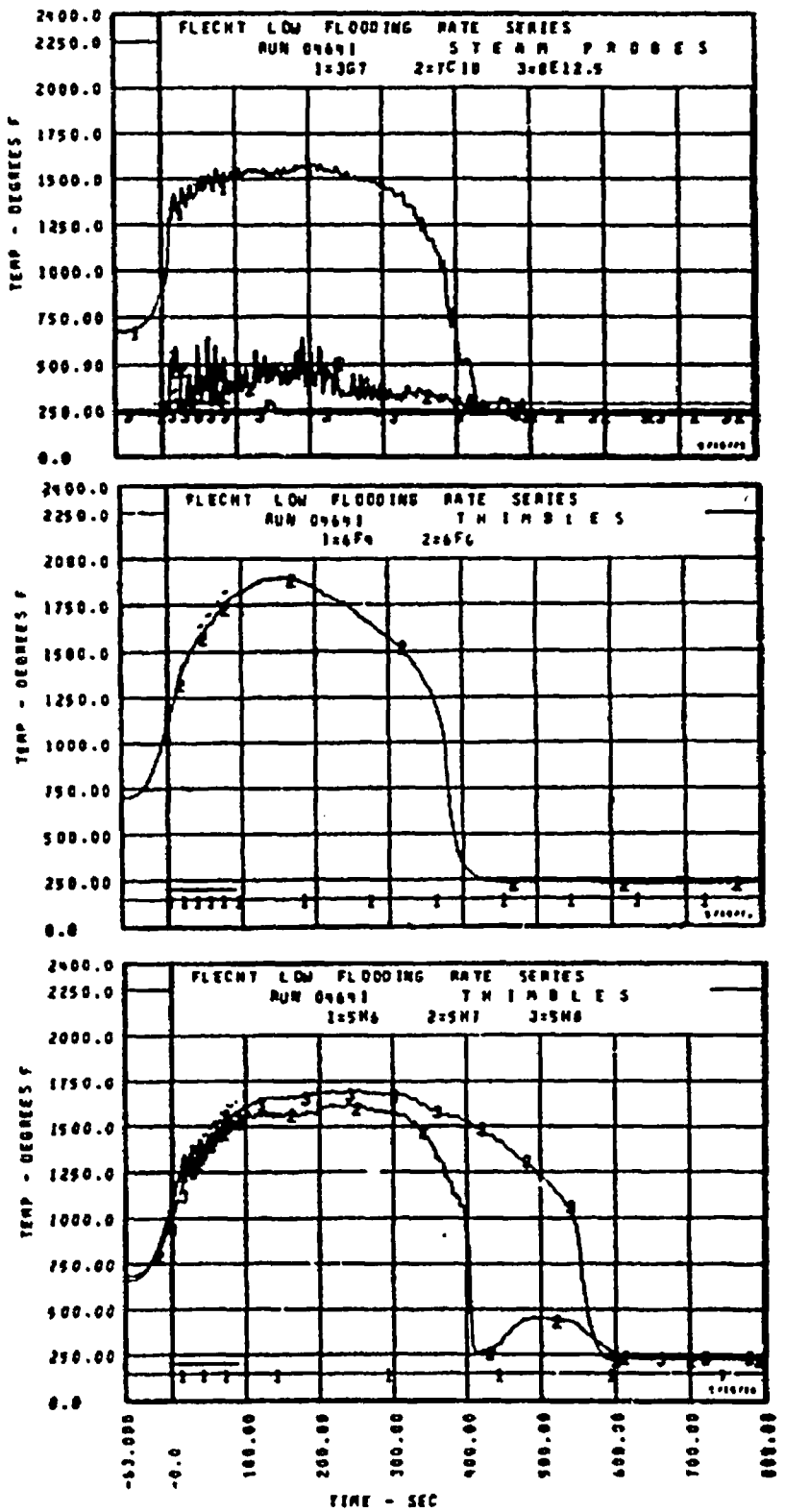

FLECHT LOW FLOODING RATE SERIES
RUN 04641
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04641
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04641
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04641
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

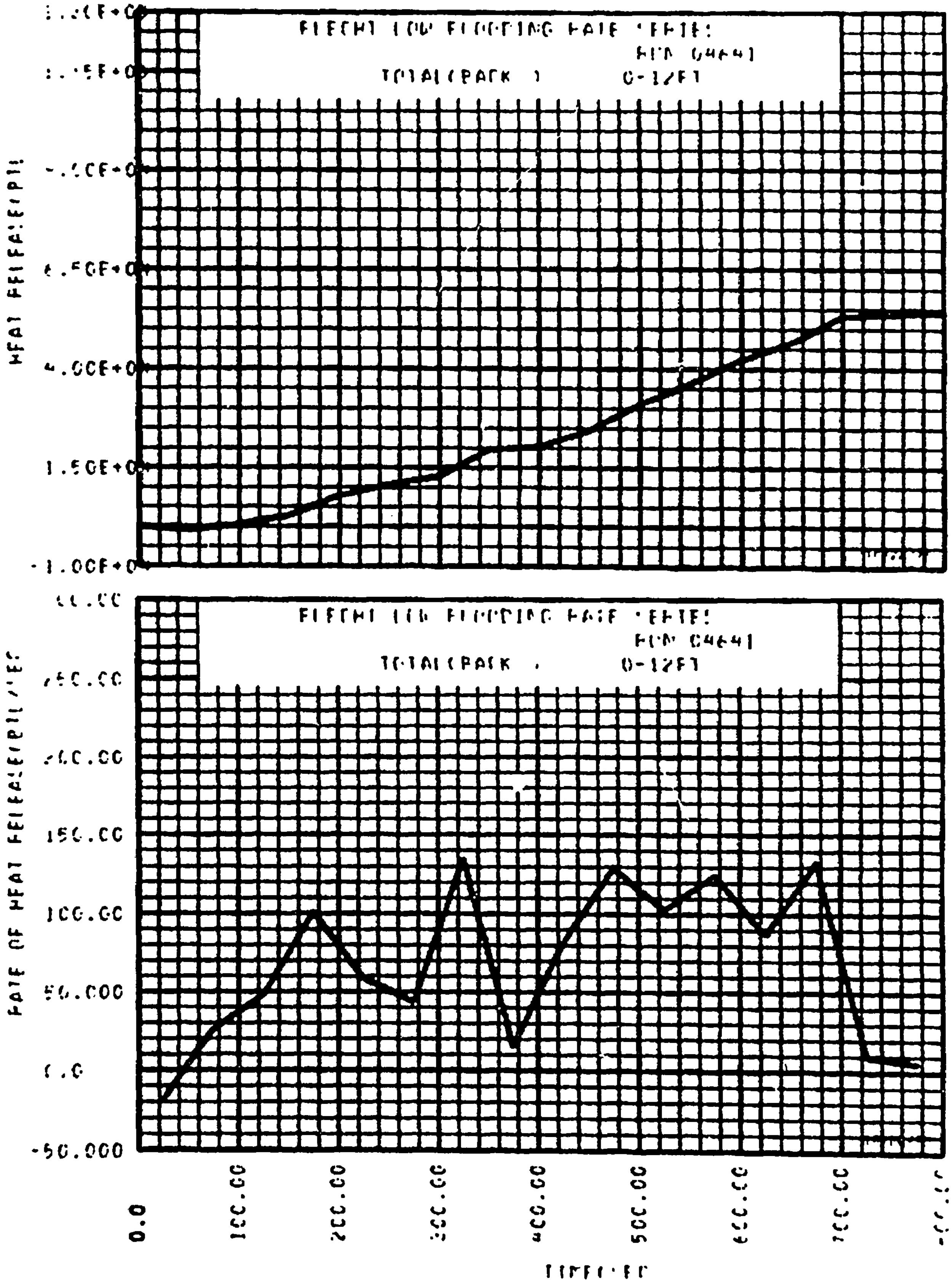

FLECHT LOW FLOODING RATE SERIES
RUN 04641
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04641
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04641
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04641
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 04641
RATE OF MASS INTO CARRYOVER TANK
1.0000
0.5000
5.33E-1
-0.5000
-1.0000
-1.5000
-2.0000
-2.5000
LBM / SEC
FLECHT - LOW FLOODING RATE TEST -- RUN 04641
EFFLUENCE RATE FROM EXHAUST ORIFICE
0.7000
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
LBM / SEC
-63.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 04441
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
726.72
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.0
MASS (LBM)
-63.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 04641
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.0422
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 04641
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-63.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 04691
STEAM PROBES
1:3G7 2:7C18 3:8E12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04691
THIMBLES
1:4F4 2:4F6
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04691
THIMBLES
1:5N6 2:5N7 3:5N8
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
-53.000
-0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SEC



FLECHT LOW FLOODING RATE SERIES
RUN 04641
0-12FT
HEAT RELEASE
4.00E+0
1.50E+0
-1.00E+0
RUN 04641
0-12FT
RATE OF HEAT RELEASE
250.00
200.00
150.00
100.00
50.000
0.0
-50.000
0.0
100.00
200.00
300.00
400.00
500.00

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 04748

DATE: 5/7/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40		
Initial Clad Temperature (6 Ft)°F At Flood	1,600	Rod T/C	4H6
Rod Peak Power, kw/ft	0.95		
Flooding Rate, in/sec	1.51		

Coolant Temperature, °F	131		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

B. INITIAL HOUSING TEMPERATURE

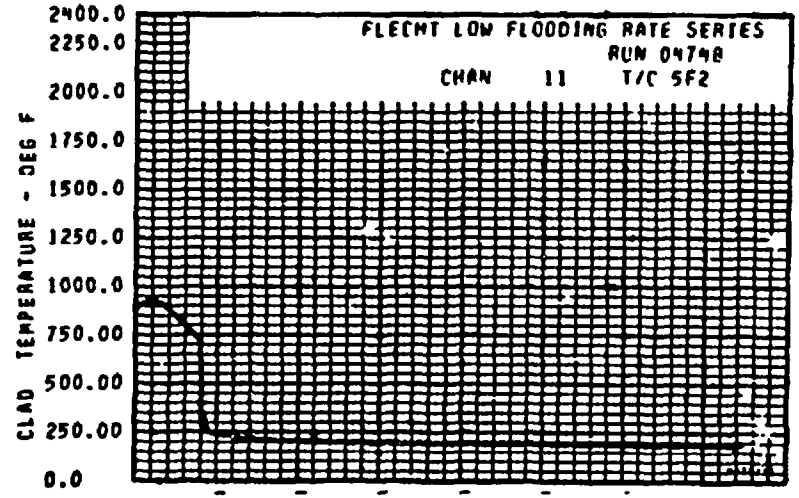
Back Side Elevation, Ft.	Temperature, °F
0	220
2	448
4	592
5.5	661
6	674
6.5	557
7	554
7.5	563
8	594
10	440
12	271
Average	507
Lower Plenum	120
Upper Plenum	271

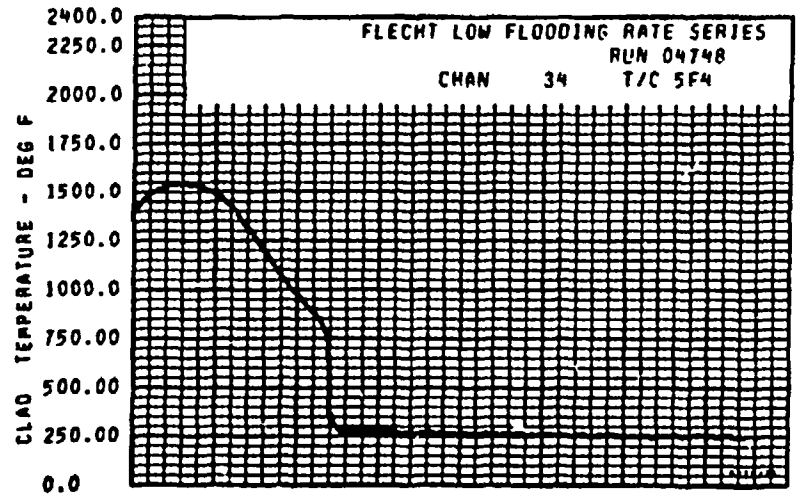
BLANK PAGE

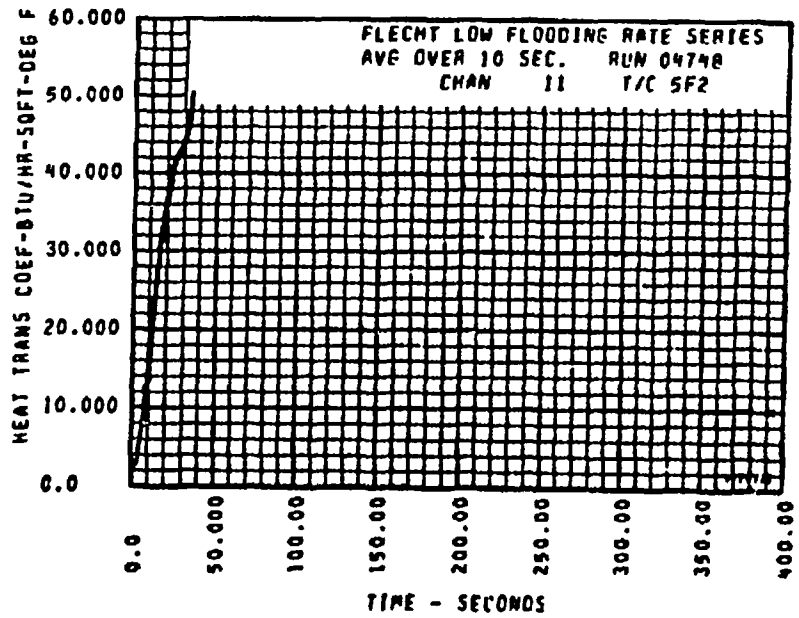
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

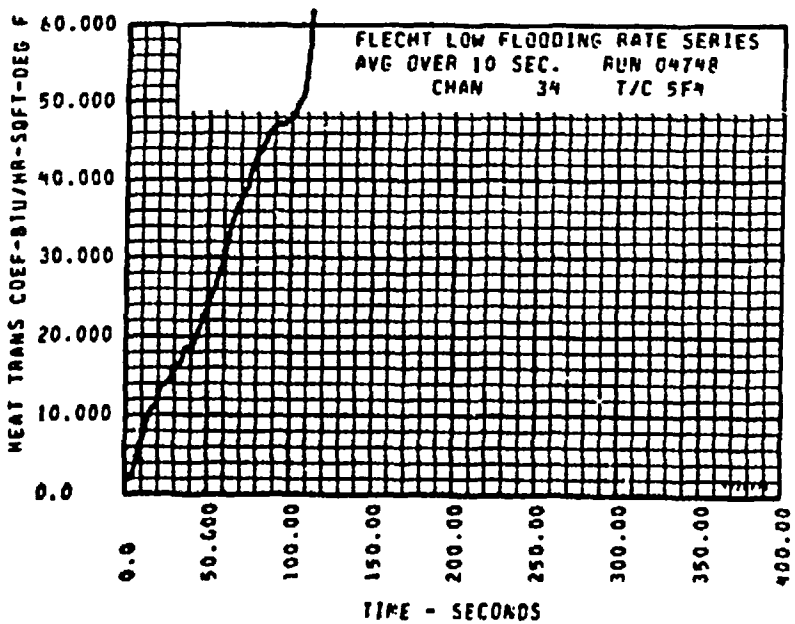
RUN NUMBER 04749

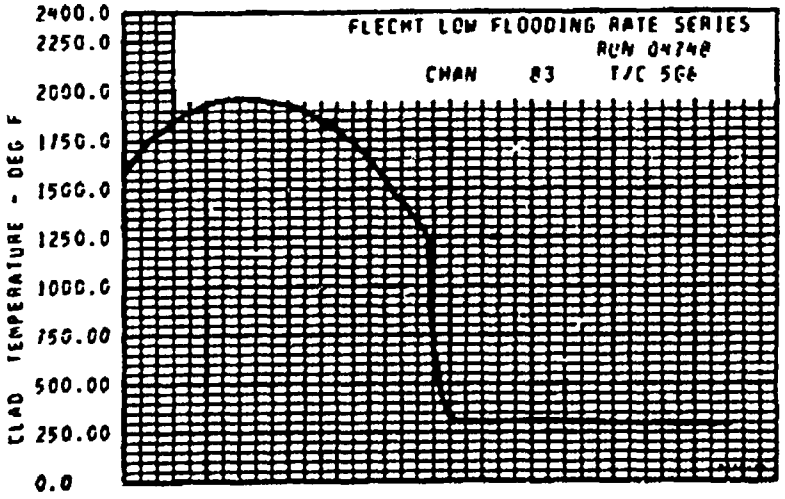
ROD/ELEV	TEMPERATURE AT PWR ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	274.	-67.2	618.	639.	21.	4.6	610.	8.9
4H1	337.	-67.2	651.	682.	31.	7.2	617.	18.3
4H1.5	404.	-67.2	692.	726.	34.	8.5	634.	27.6
4H2	434.	-68.2	911.	961.	51.	10.0	732.	41.5
4H4	793.	-67.2	1401.	1560.	159.	32.2	804.	119.1
4H6	539.	-66.2	1600.	1924.	323.	67.6	869.	213.9
8D6	512.	-67.2	1500.	1870.	370.	61.6	805.	219.9
8D6.5	478.	-66.2	1412.	1852.	439.	91.4	899.	233.0
8D7	423.	-67.2	1359.	1658.	299.	74.2	825.	261.4
8D8	433.	-67.2	1182.	1655.	473.	97.4	653.	295.7
8D9	334.	-67.2	975.	1265.	290.	74.0	589.	327.0
8D10	274.	-67.2	761.	1093.	333.	106.8	677.	311.9
8D11	269.	-67.2	610.	824.	214.	98.4	649.	277.0
8D12	269.	-67.2	447.	636.	190.	149.4	579.	206.1
5F0	293.	-67.2	346.	346.	0.	.2	346.	.8
5F0.5	382.	-67.2	613.	629.	16.	3.8	594.	8.3
5F1	293.	-68.2	617.	665.	28.	8.6	597.	17.6
5F1.5	* * B A D T H E R M O C O U P L E				D A T A * *			
5F2	410.	-67.2	882.	932.	50.	9.4	709.	39.8
5F3	520.	-67.2	1146.	1238.	82.	15.4	761.	72.7
5F4	584.	-67.2	1394.	1550.	156.	31.8	741.	116.9
5F6	574.	-68.2	1579.	1907.	329.	68.6	943.	198.7
5G6	578.	-67.2	1591.	1365.	384.	69.0	1238.	187.4
5G6.5	548.	-67.2	1521.	1910.	389.	73.8	1174.	188.6
5G7	498.	-67.2	1429.	1724.	296.	68.4	897.	227.9
5G8	520.	-66.2	1322.	1731.	409.	108.0	979.	274.7
5G9	409.	-67.2	1052.	1448.	397.	116.8	651.	326.9
5G11	273.	-67.2	616.	866.	250.	107.4	485.	342.9
5G12	270.	-67.2	580.	799.	219.	109.0	278.	328.0
1G4	599.	-67.2	1316.	1396.	80.	15.6	820.	186.2
1G6	645.	-68.2	1530.	1671.	141.	43.9	882.	214.8
1G10	399.	-67.2	826.	974.	148.	73.8	564.	342.9
3H2	425.	-67.2	922.	972.	50.	9.2	744.	38.8
3H6	618.	-67.2	1580.	1881.	301.	67.2	894.	215.8
3H8	547.	-67.2	1333.	1710.	376.	79.8	1027.	248.8
3H10	415.	-67.2	894.	1251.	356.	116.8	749.	386.8

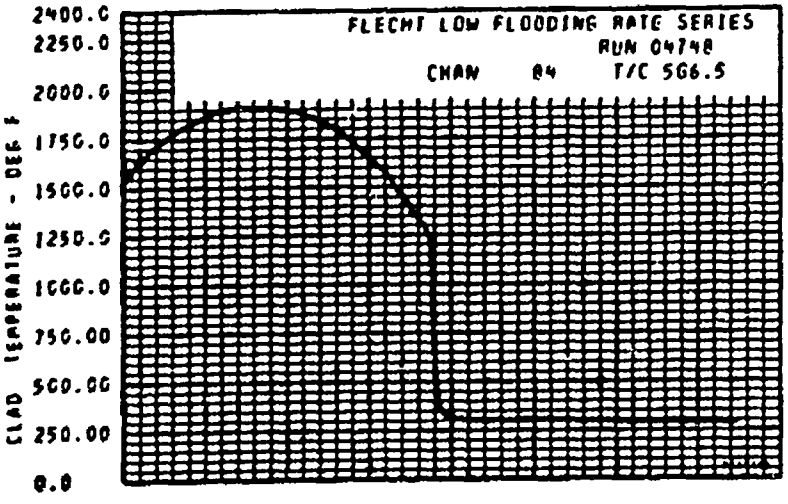

FLECHT LOW FLOODING RATE SERIES
RUN 04748
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

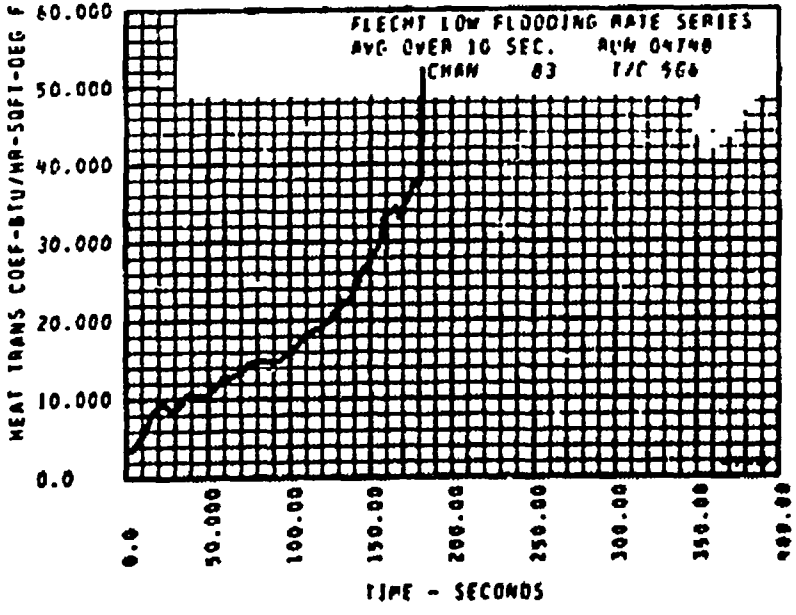

FLECHT LOW FLOODING RATE SERIES
RUN 04748
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

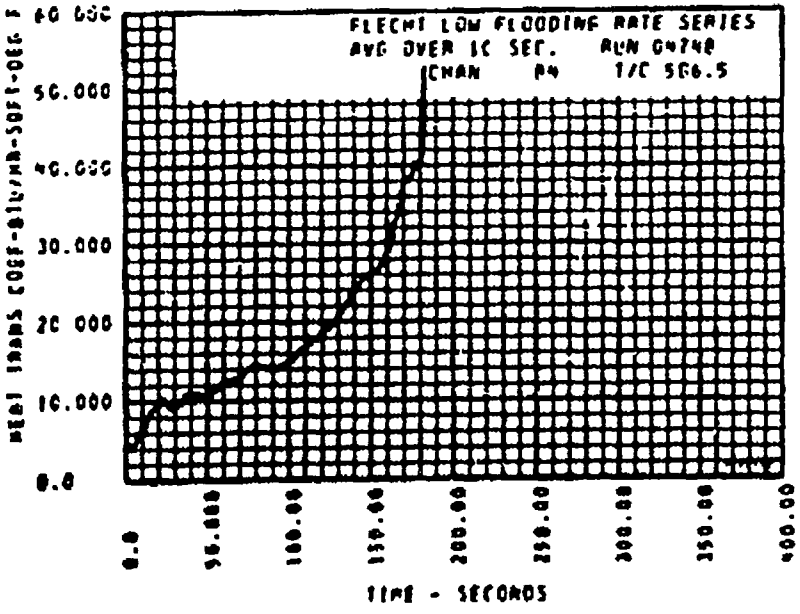

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04748
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

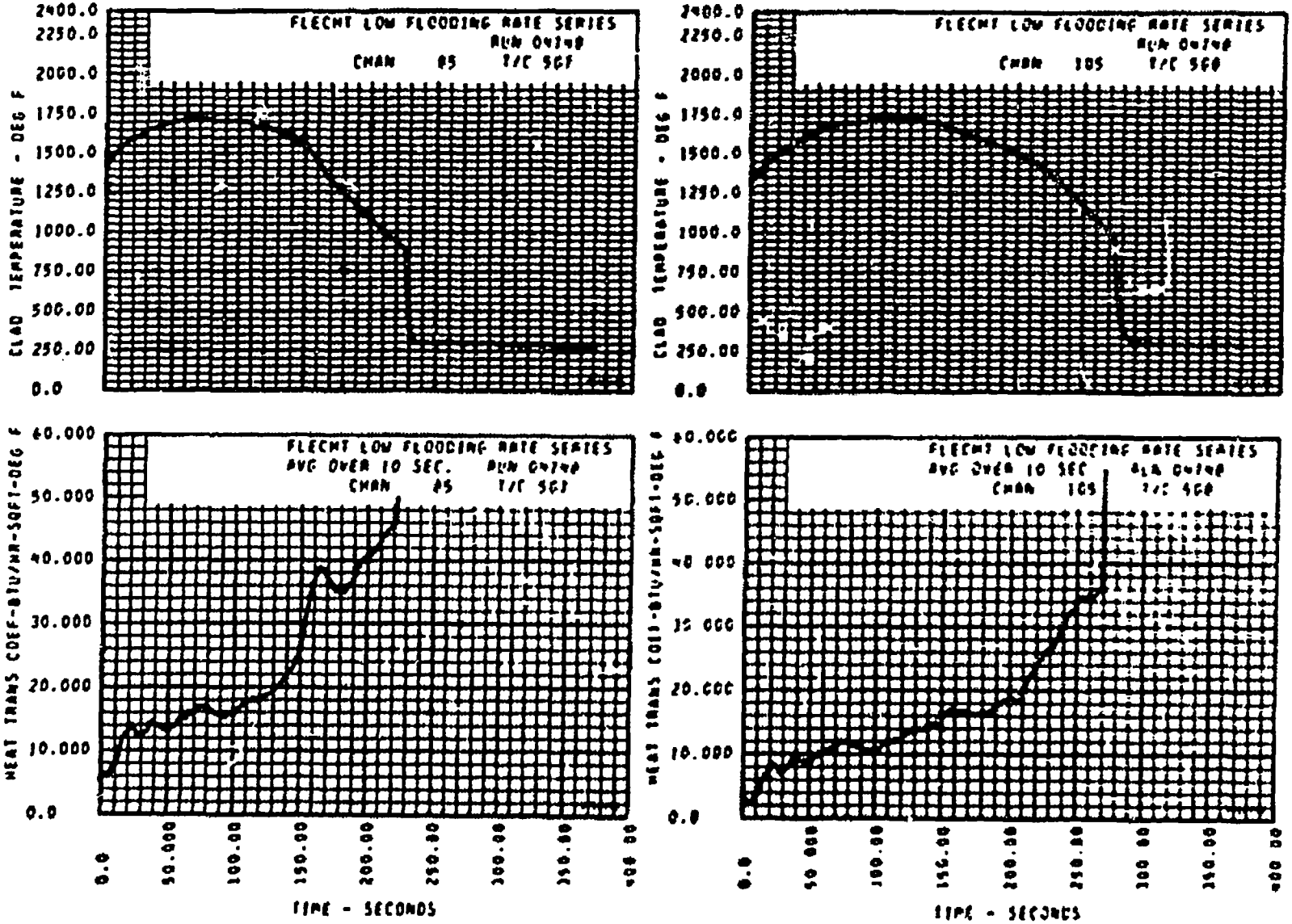

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04748
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

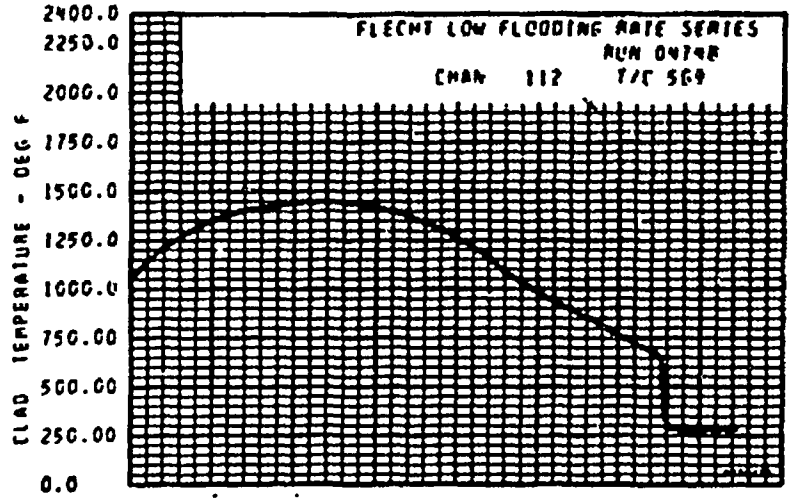

FLECHT LOW FLOODING RATE SERIES
RUN 04748
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

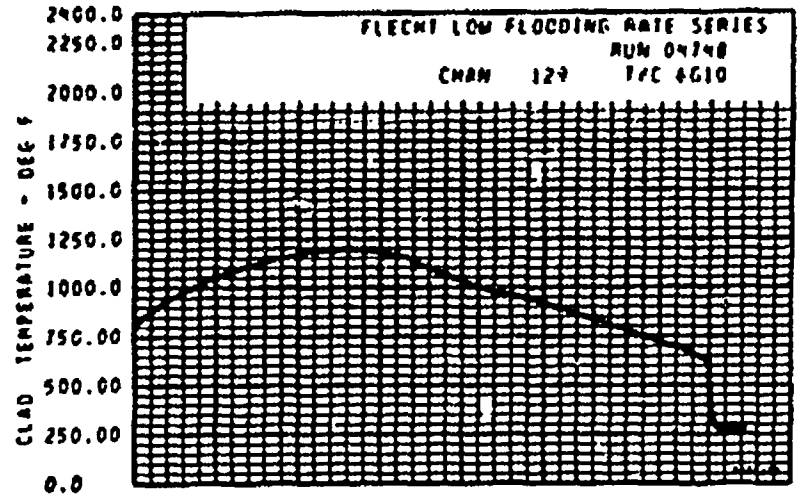

FLECHT LOW FLOODING RATE SERIES
RUN 04748
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

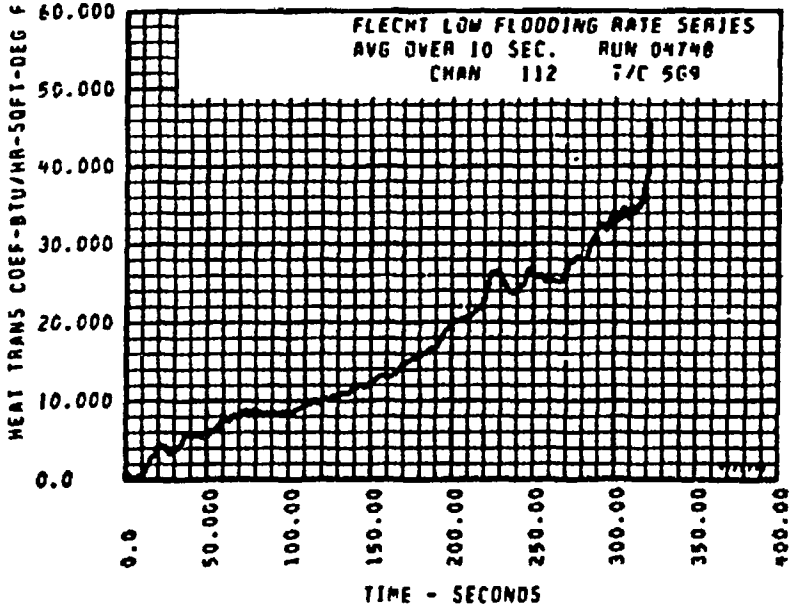

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04748
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

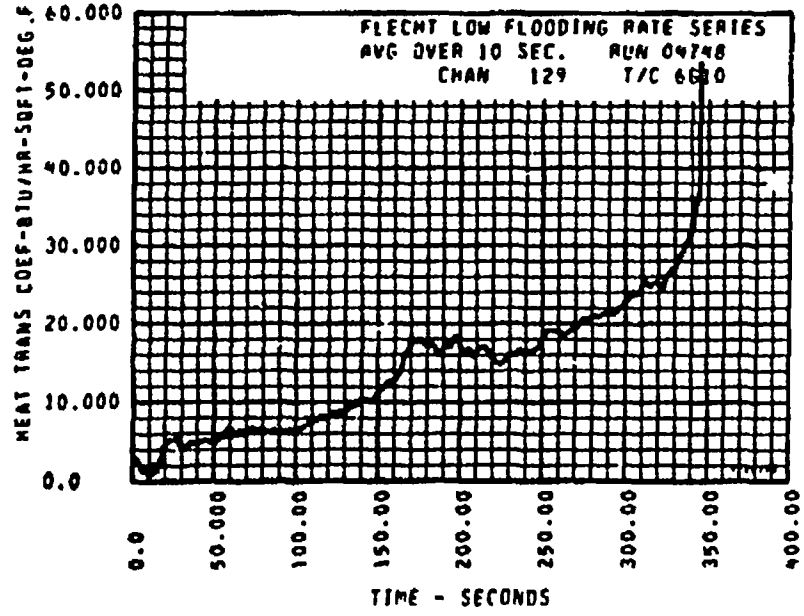

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04748
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

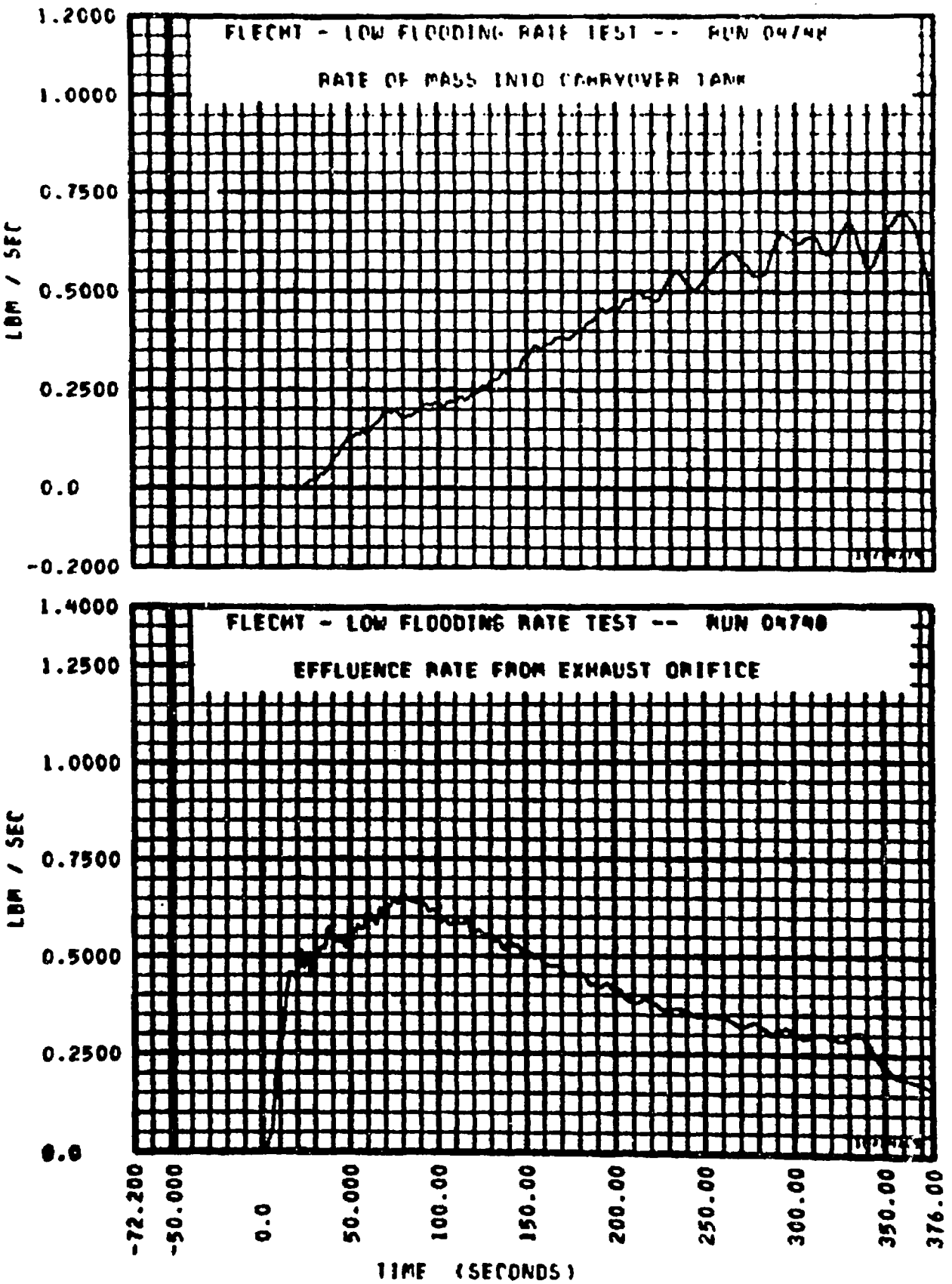

FLECHT LOW FLOODING RATE SERIES
RUN 04708
CHAN 85 T/C 5GF
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04708
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04708
CHAN 85 T/C 5GF
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC RUN 04708
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

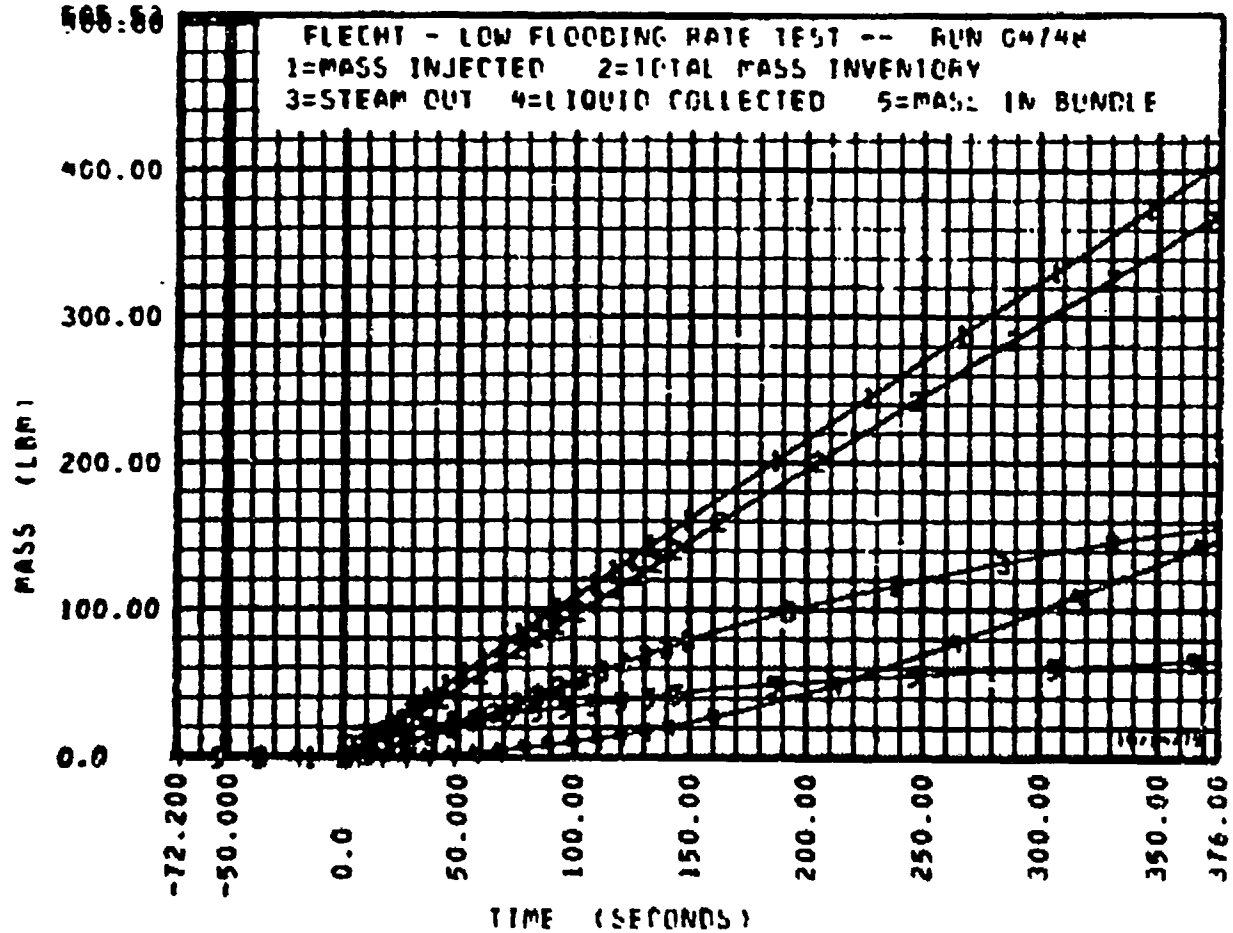

FLECHT LOW FLOODING RATE SERIES
RUN 04748
CHAN 112 T/C 569
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

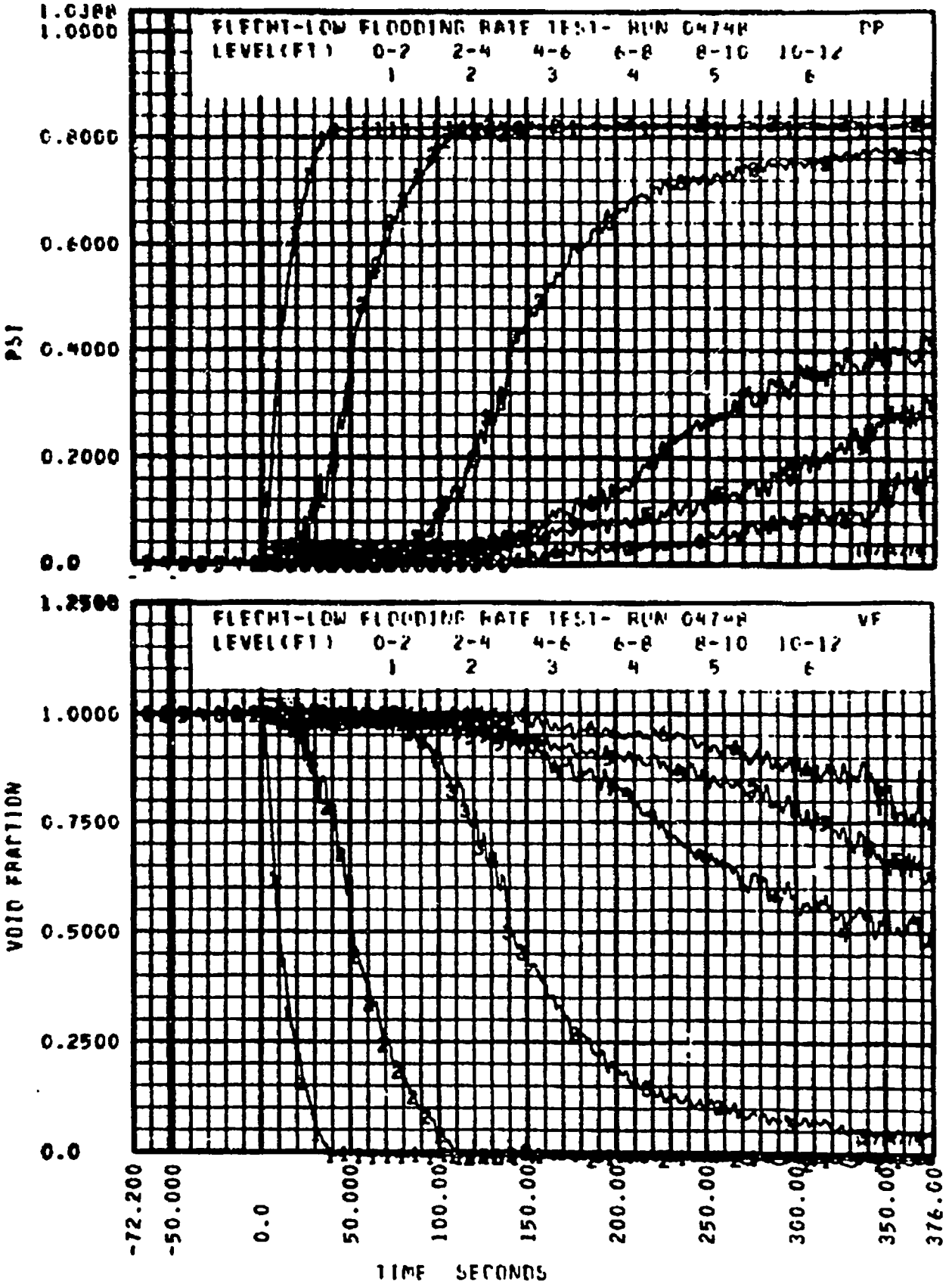

FLECHT LOW FLOODING RATE SERIES
RUN 04748
CHAN 129 T/C 6610
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

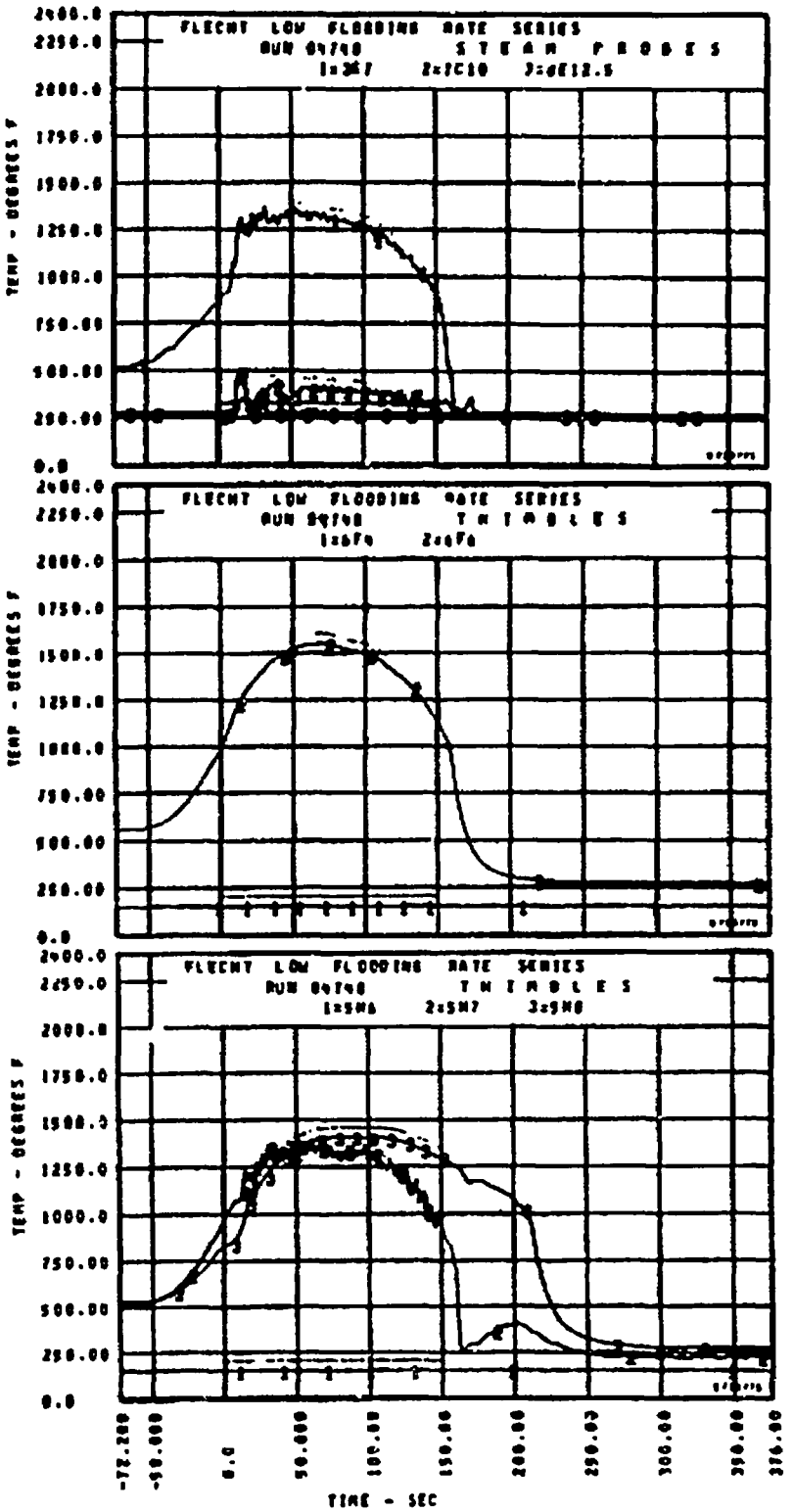

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04748
CHAN 112 T/C 569
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

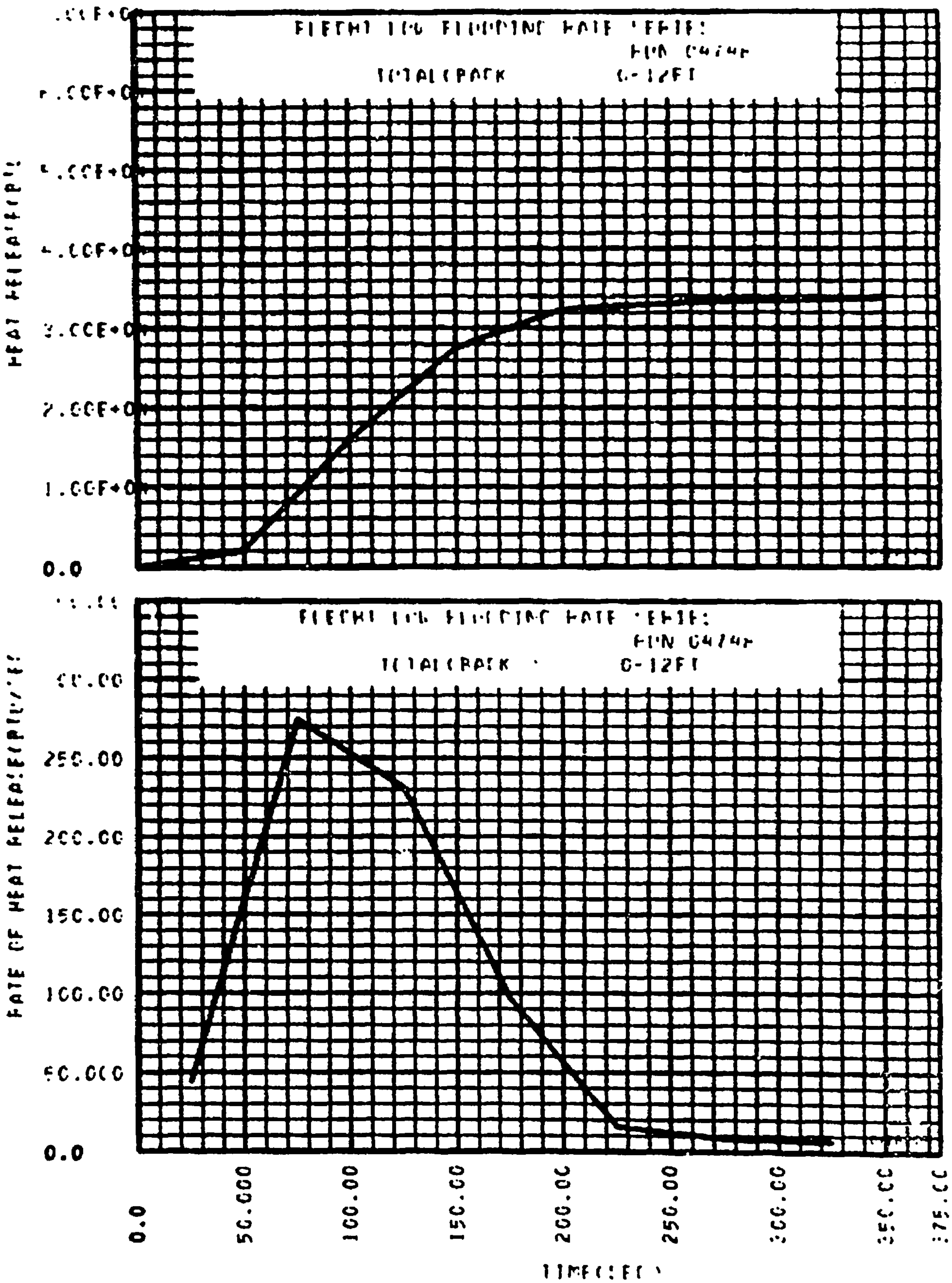

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04748
CHAN 129 T/C 6610
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 04748
RATE OF MASS INTO CARRYOVER TANK
1.2000
1.0000
0.7500
0.5000
0.2500
0.0
-0.2000
LBM / SEC
FLECHT - LOW FLOODING RATE TEST -- RUN 04748
EFFLUENCE RATE FROM EXHAUST ORIFICE
1.4000
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
LBM / SEC
-72.200
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
376.00
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 04/4A
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
400.00
300.00
200.00
100.00
0.0
MASS (LBM)
-72.200
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
376.00
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 0474B
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
PP
PSI
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
FLECHT-LOW FLOODING RATE TEST- RUN 0474B
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
VF
VOID FRACTION
1.0000
0.7500
0.5000
0.2500
0.0
-72.200
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
376.00
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
STEAM PROBES
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
THIMBLES
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
THIMBLES
TEMP - DEGREES F
TIME - SEC



1.00E+0
2.00E+0
3.00E+0
4.00E+0
0.0
250.00
200.00
150.00
100.00
50.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00

BLANK PAGE

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 04831

DATE: 5/8/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40		
Initial Clad Temperature (6 Ft)°F At Flood	1,600	Rod T/C	4H6
Rod Peak Power, kw/ft	0.95		
Flooding Rate, in/sec	1.50		

Coolant Temperature, °F	125		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

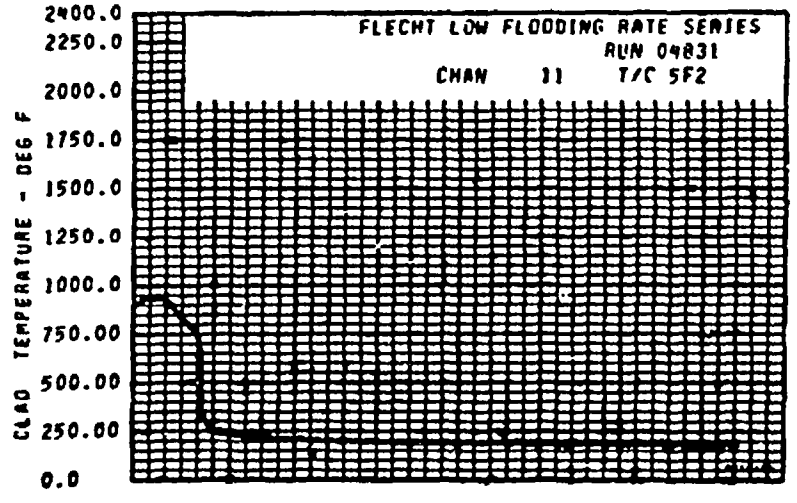
B. INITIAL HOUSING TEMPERATURE

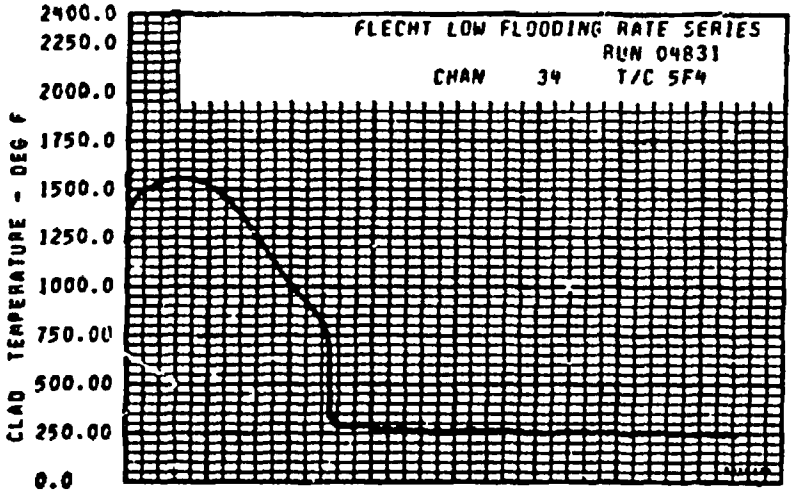
Back Side Elevation, Ft.	Temperature, °F
0	233
2	451
4	600
5.5	650
6	668
6.5	555
7	549
7.5	550
8	564
10	429
12	271
Average	502
Lower Plenum	122
Upper Plenum	358

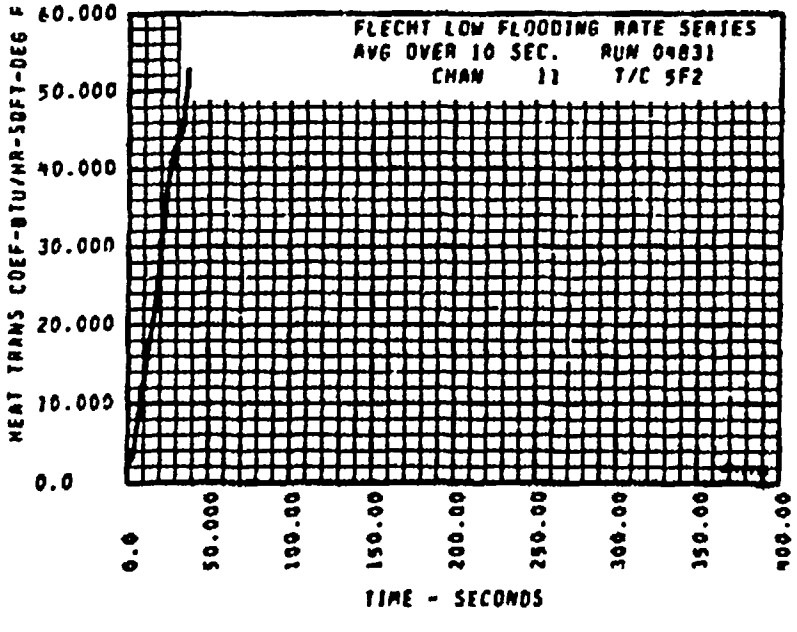
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

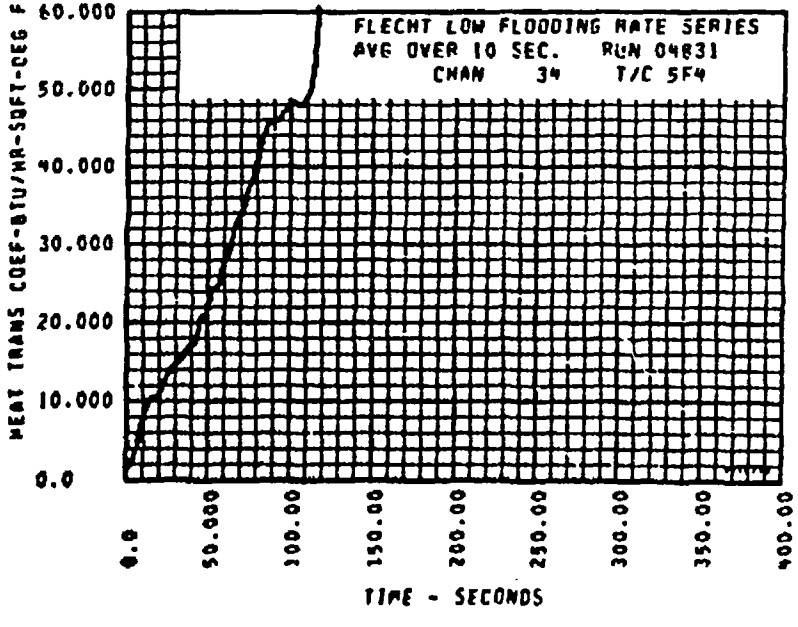
RUN NUMBER 04331

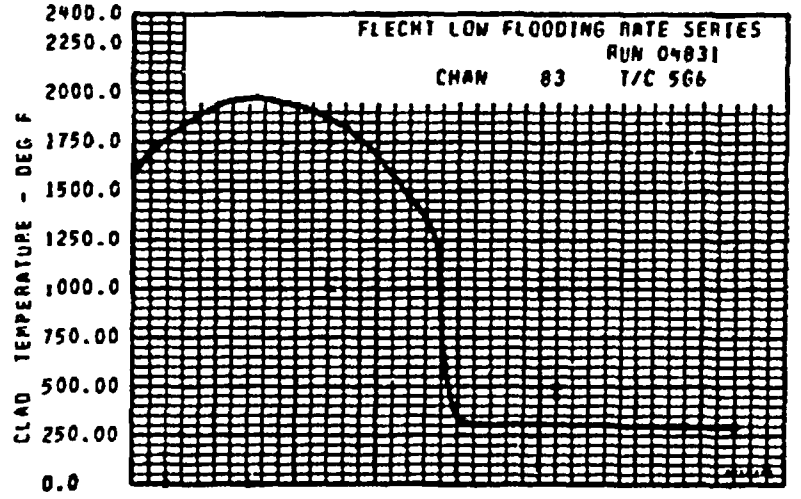
ROD/ELEV	TEMPERATURE AT TIME ZERO (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	278.	-49.5	627.	648.	21.	4.5	616.	9.9
4H1	314.	-49.8	656.	687.	31.	7.4	633.	17.2
4H1.5	350.	-49.9	685.	719.	35.	8.3	634.	28.0
4H2	437.	-43.8	925.	975.	50.	9.6	766.	42.2
4H4	547.	-43.9	1416.	1582.	165.	31.0	803.	123.3
4H6	543.	-44.8	1601.	1940.	339.	74.4	854.	219.0
8D5	445.	-41.8	1511.	1881.	370.	63.0	758.	217.7
8D6.5	440.	-49.8	1431.	1880.	449.	93.2	910.	234.0
8D7	414.	-45.8	1377.	1683.	306.	75.2	833.	262.9
8D8	430.	-63.[illegible]	1226.	1685.	459.	91.9	755.	277.1
8D9	336.	-43.8	1019.	1313.	294.	73.2	604.	316.0
8D10	315.	-53.9	803.	1114.	311.	133.9	495.	302.9
8D11	273.	-54.9	673.	949.	276.	110.7	470.	269.3
8D12	270.	-54.9	497.	693.	196.	131.5	392.	296.0
5F0	227.	-43.8	326.	328.	2.	.6	320.	.7
5F0.5	272.	-49.9	621.	637.	17.	4.3	655.	9.5
5F1	317.	-43.8	640.	667.	27.	5.5	656.	17.4
5F1.5	* * * B A D T H	E R M O C O U P L E			D A T A * *			
5F2	438.	-44.9	891.	937.	46.	8.9	716.	41.8
5F3	516.	-44.8	1159.	1214.	55.	21.2	741.	76.6
5F4	574.	-44.8	1416.	1571.	155.	32.5	743.	123.9
5F6	516.	-43.8	1536.	1890.	354.	72.5	939.	233.5
5G6	459.	-49.8	1575.	1979.	404.	75.2	1233.	192.6
5G6.5	319.	-43.8	1516.	1912.	396.	76.2	1188.	195.7
5G7	446.	-34.8	1417.	1730.	313.	75.3	895.	232.0
5G8	314.	-44.8	1142.	1737.	595.	104.7	1022.	267.9
5G9	437.	-44.8	1084.	1472.	388.	179.2	651.	323.0
5G11	370.	-49.8	636.	876.	250.	119.2	532.	326.0
5G12	372.	-54.8	596.	893.	297.	193.5	767.	301.0
1G4	318.	-33.9	1331.	1416.	84.	20.4	818.	135.8
1G5	413.	-43.8	1536.	1677.	141.	31.2	859.	216.9
1G10	331.	-44.8	798.	944.	146.	70.4	282.	345.0
3H2	432.	-34.8	933.	978.	45.	8.8	769.	34.5
3H6	304.	-49.8	1594.	1886.	292.	60.7	383.	219.0
3H8	340.	-43.9	1349.	1722.	373.	93.6	1032.	250.6
3H10	432.	-49.8	1441.	1798.	357.	113.2	784.	308.7

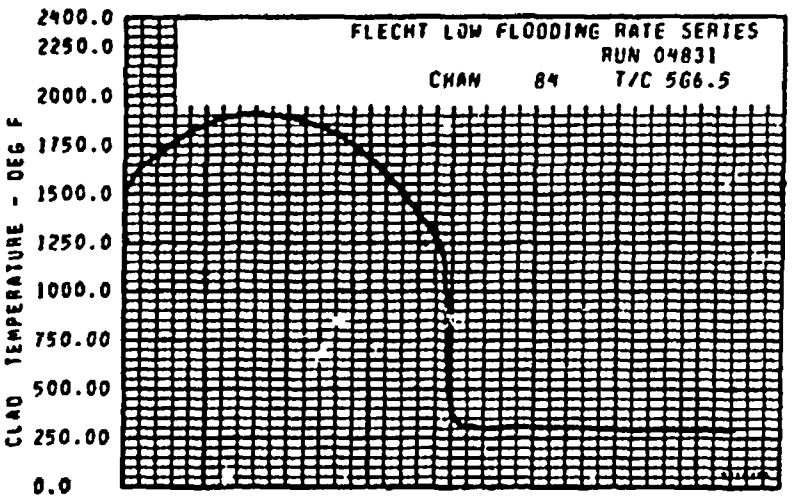

FLECHT LOW FLOODING RATE SERIES
RUN 04831
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

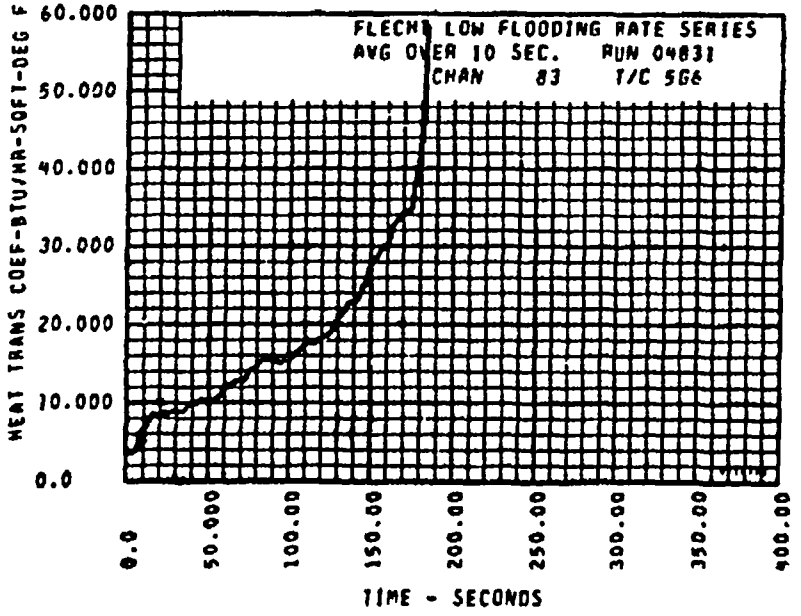

FLECHT LOW FLOODING RATE SERIES
RUN 04831
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

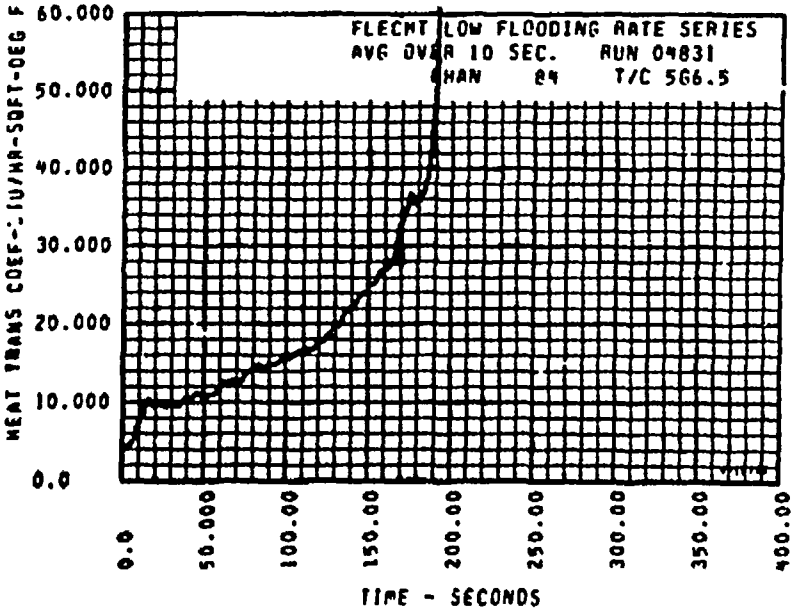

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04831
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

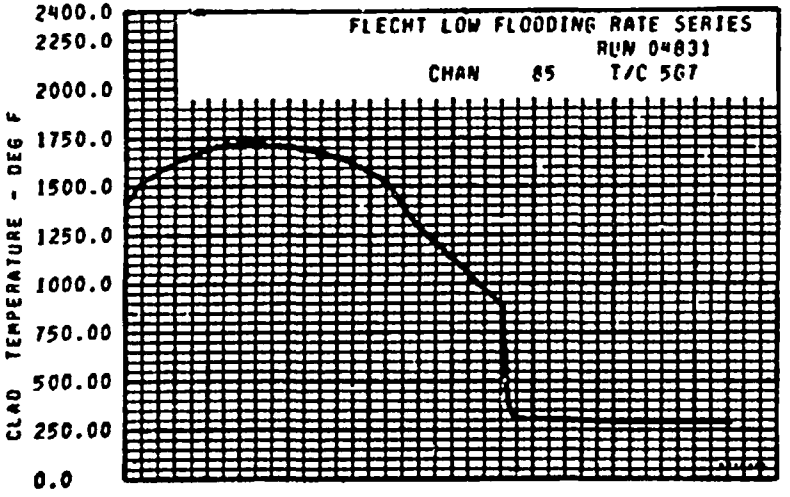

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04831
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

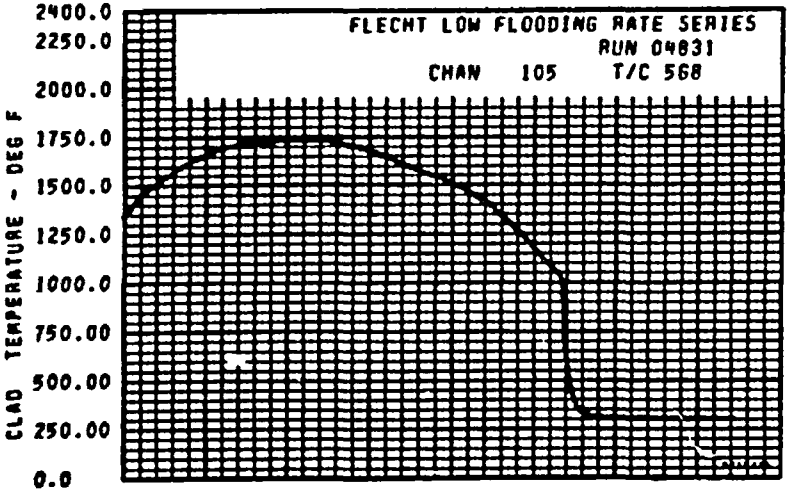

FLECHT LOW FLOODING RATE SERIES
RUN 04831
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

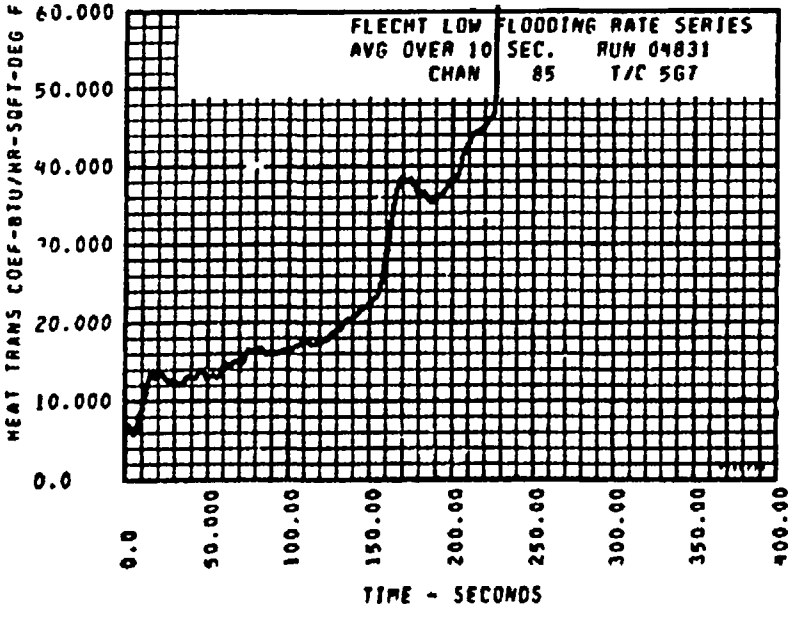

FLECHT LOW FLOODING RATE SERIES
RUN 04831
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

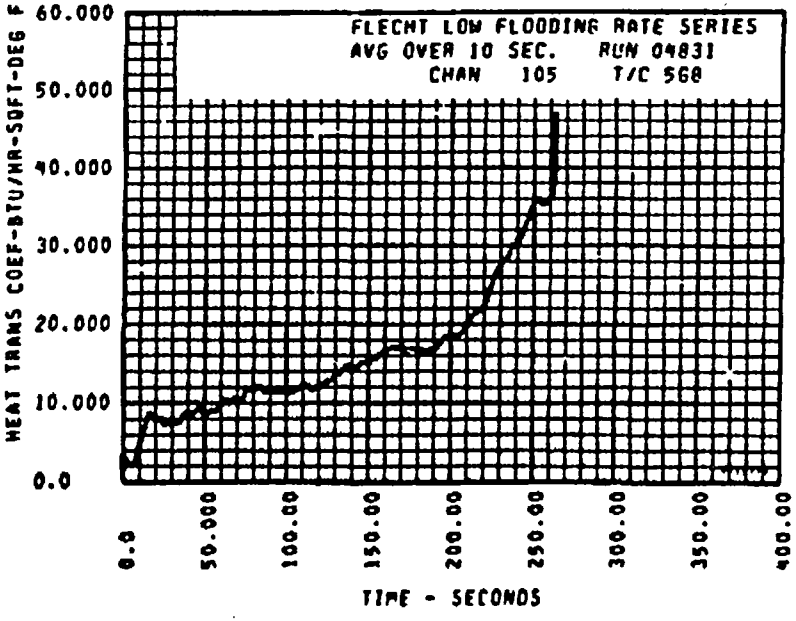

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04831
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

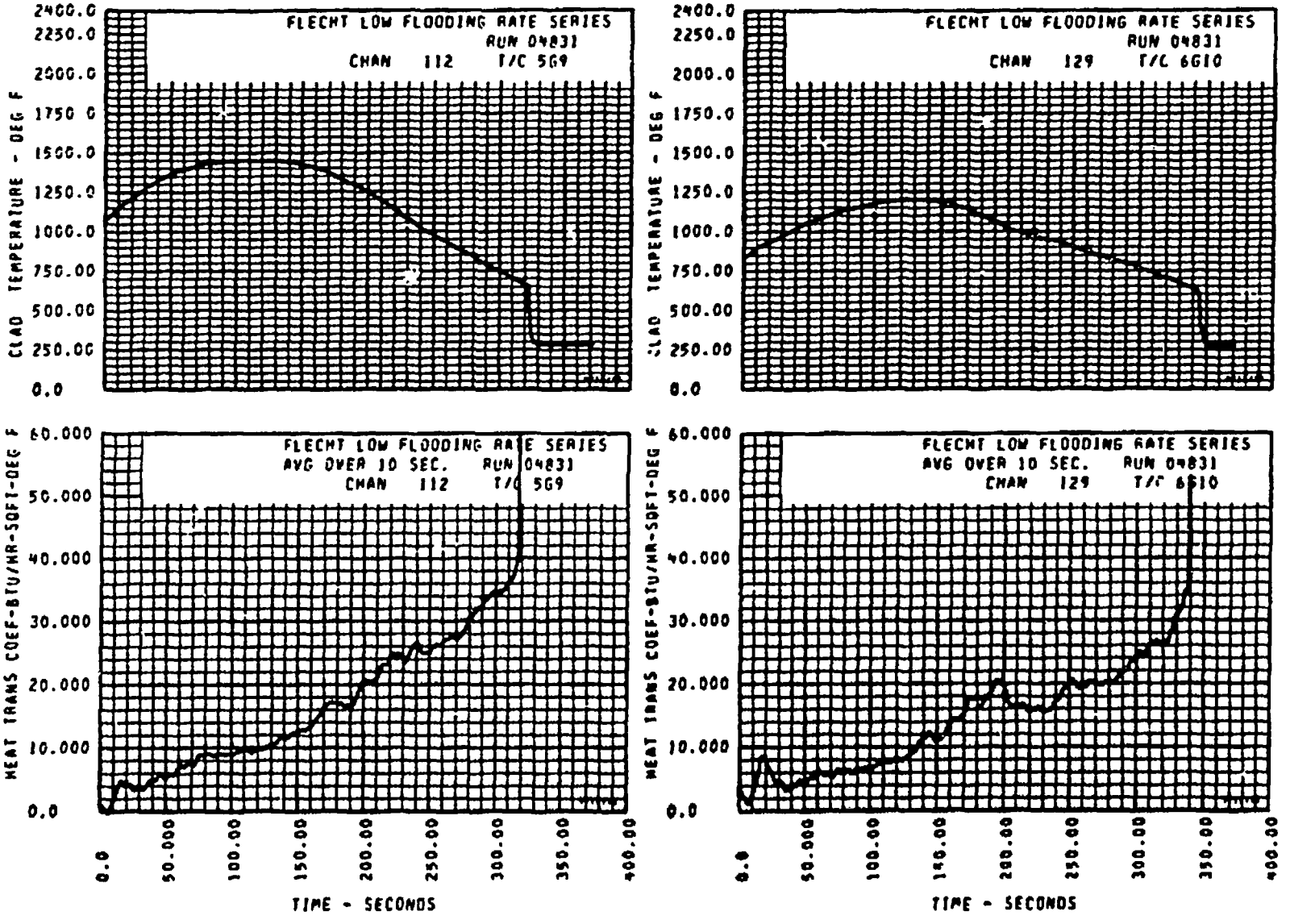

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04831
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

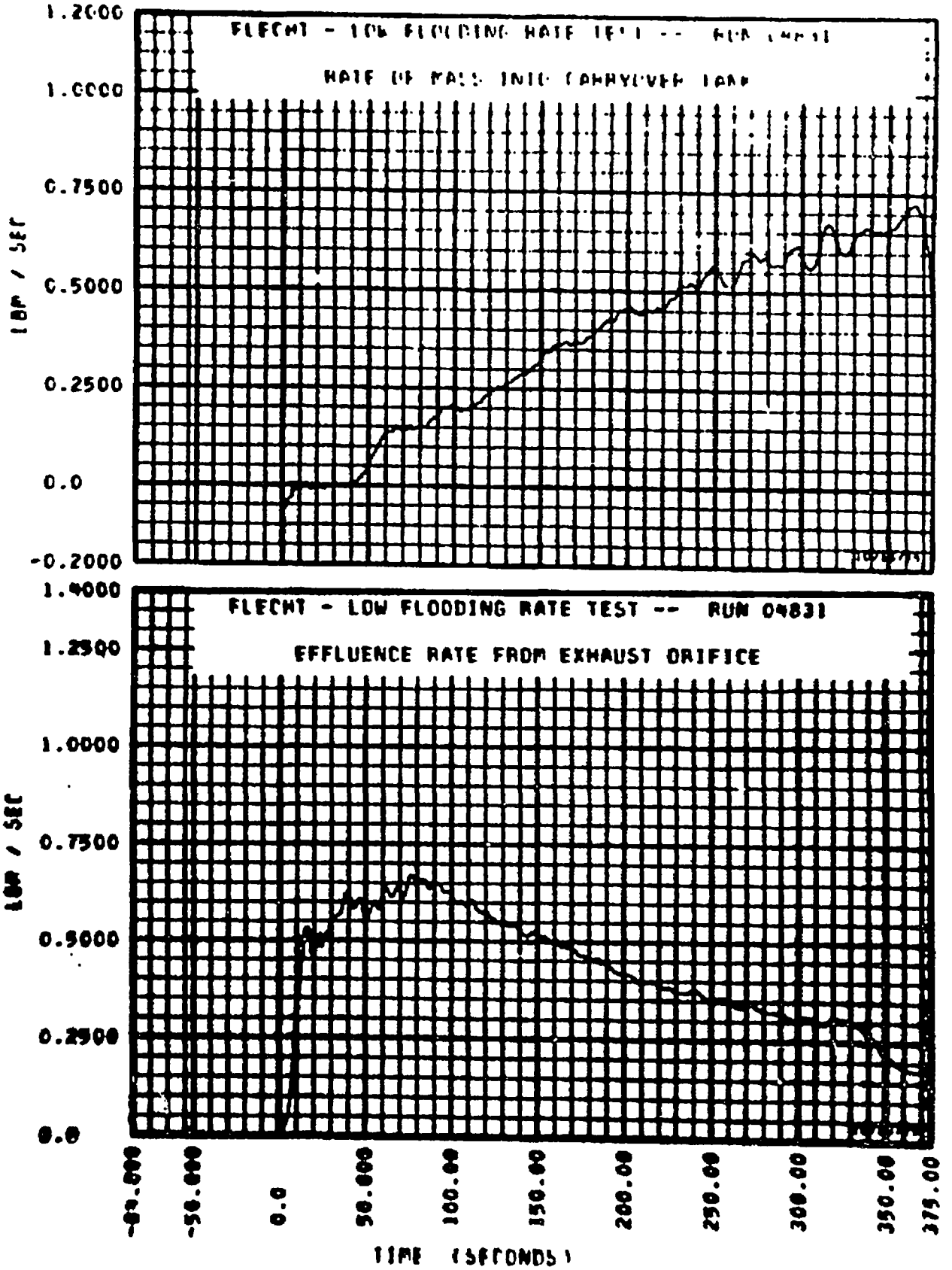

FLECHT LOW FLOODING RATE SERIES
RUN 04831
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

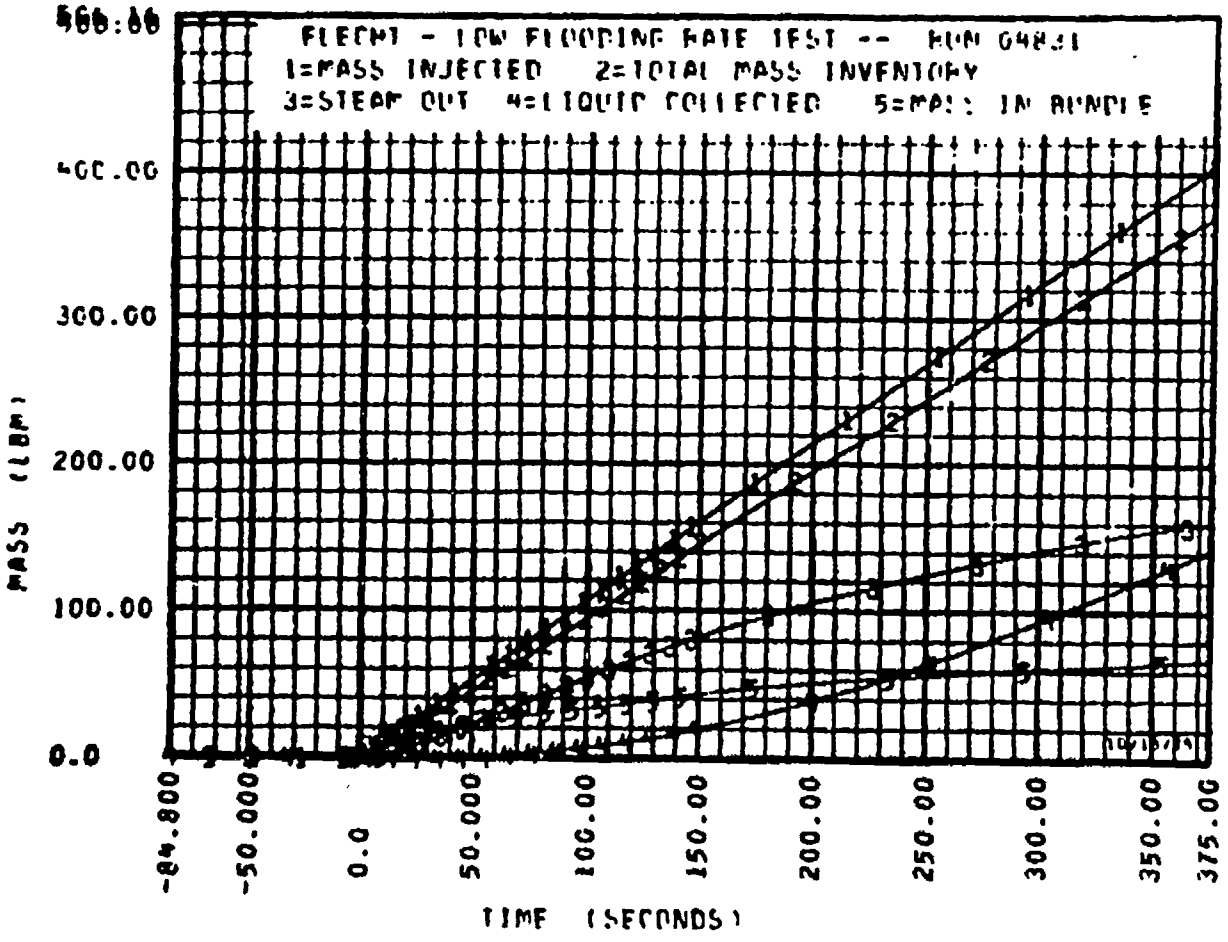

FLECHT LOW FLOODING RATE SERIES
RUN 04831
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

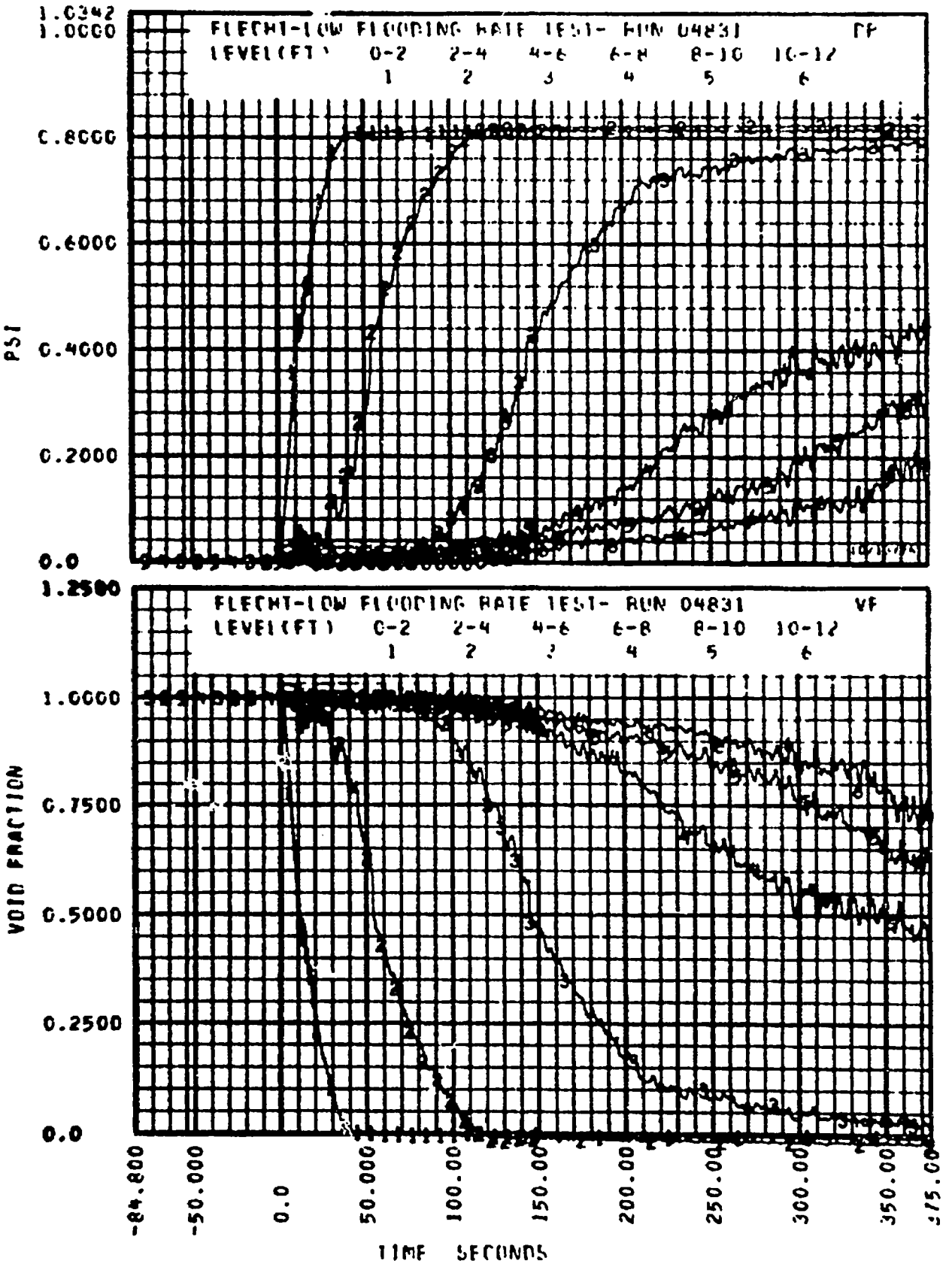

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04831
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

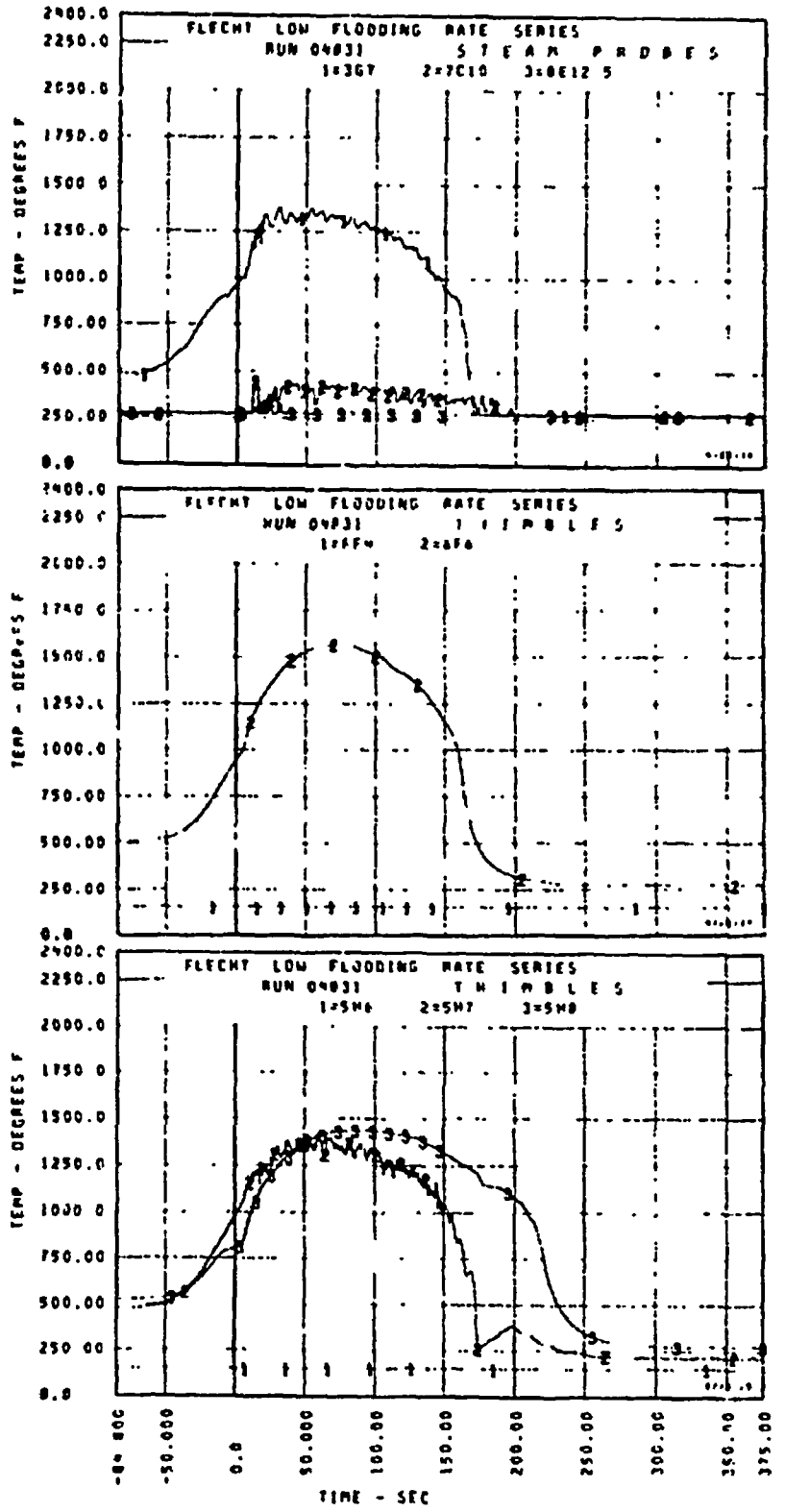

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04831
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

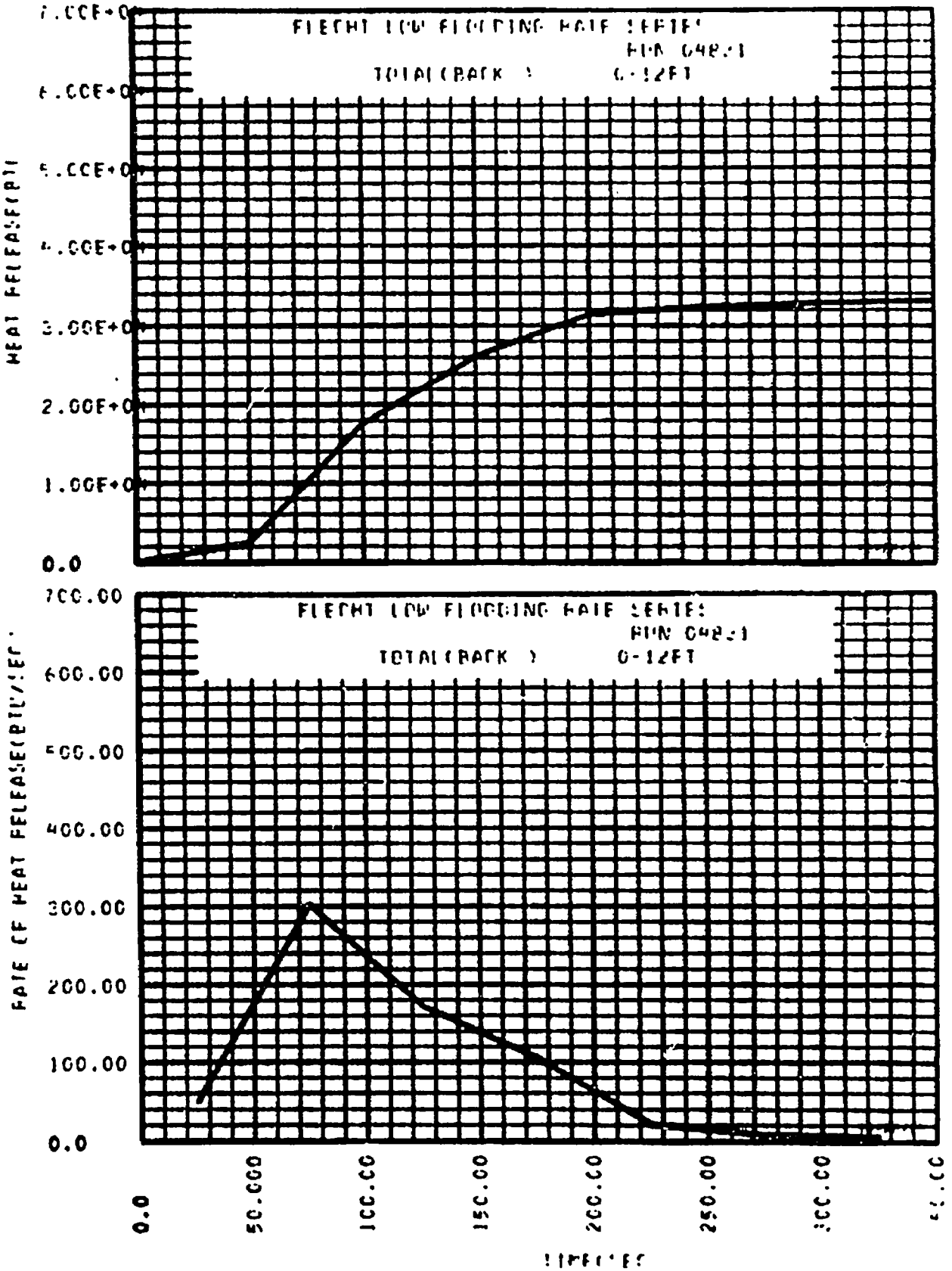

FLECHT LOW FLOODING RATE SERIES
RUN 04831
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04831
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04831
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04831
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

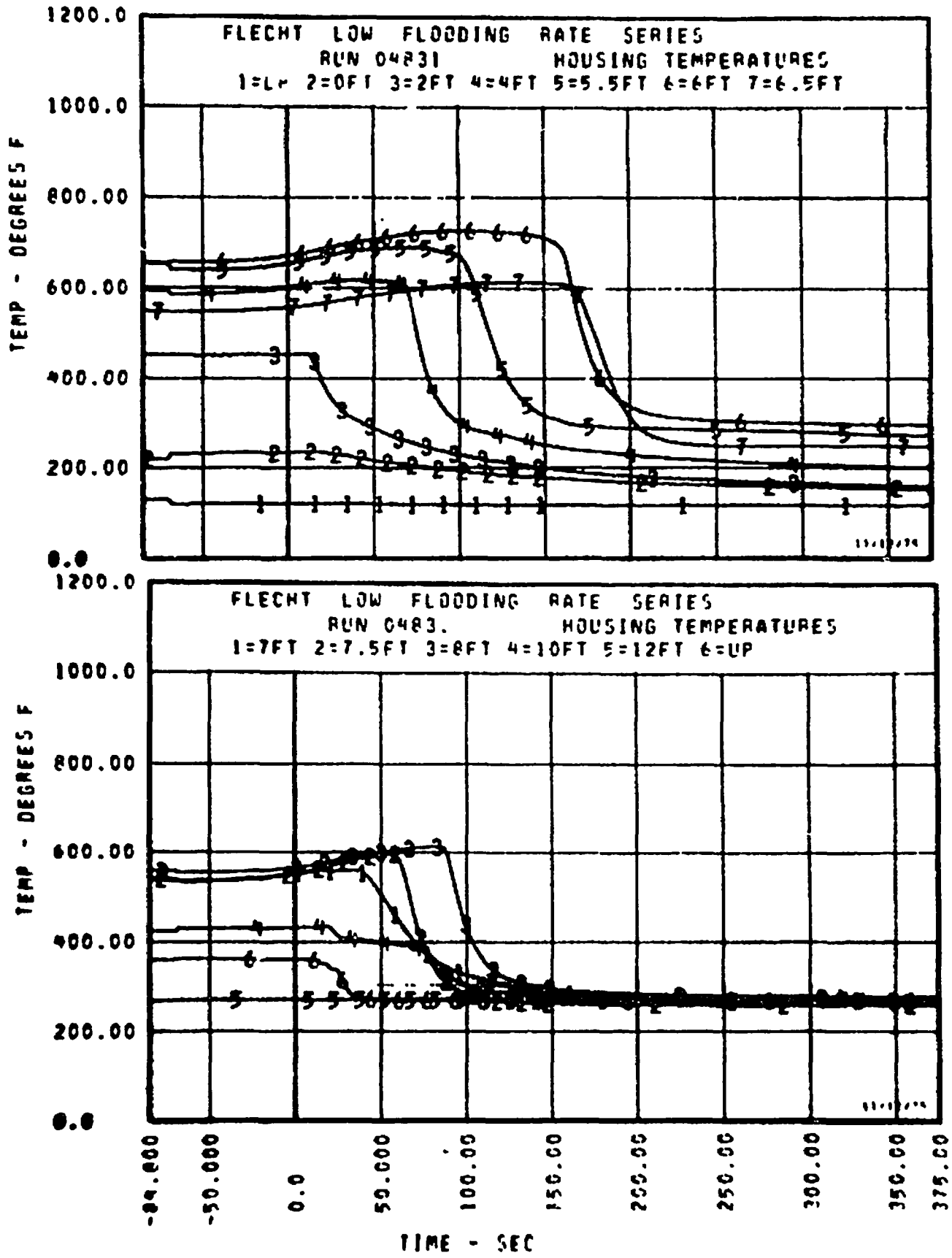

FLECHT - LOW FLOODING RATE TEST -- RUN 04831
RATE OF MASS INTO CARRYOVER TANK
LBM / SEC
1.2000
1.0000
0.7500
0.5000
0.2500
0.0
-0.2000
FLECHT - LOW FLOODING RATE TEST -- RUN 04831
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
1.4000
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
375.00
TIME (SECONDS)

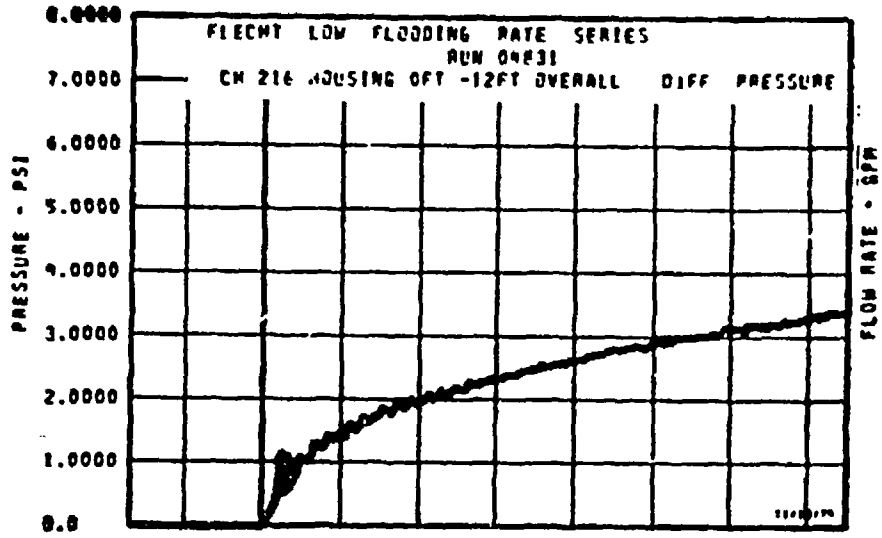

FLECHT - LOW FLOODING RATE TEST -- RUN 04821
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
400.00
300.00
200.00
100.00
0.0
MASS (LBM)
-84.800
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
375.00
TIME (SECONDS)

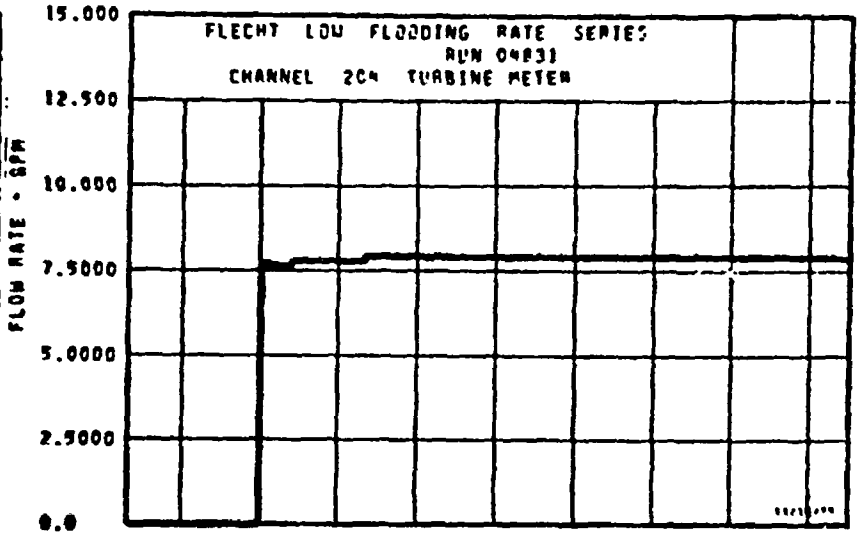

FLECHT-LOW FLOODING RATE TEST- RUN 04831
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
PF
1.0342
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 04831
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
VF
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-84.000
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
TIME SECONDS

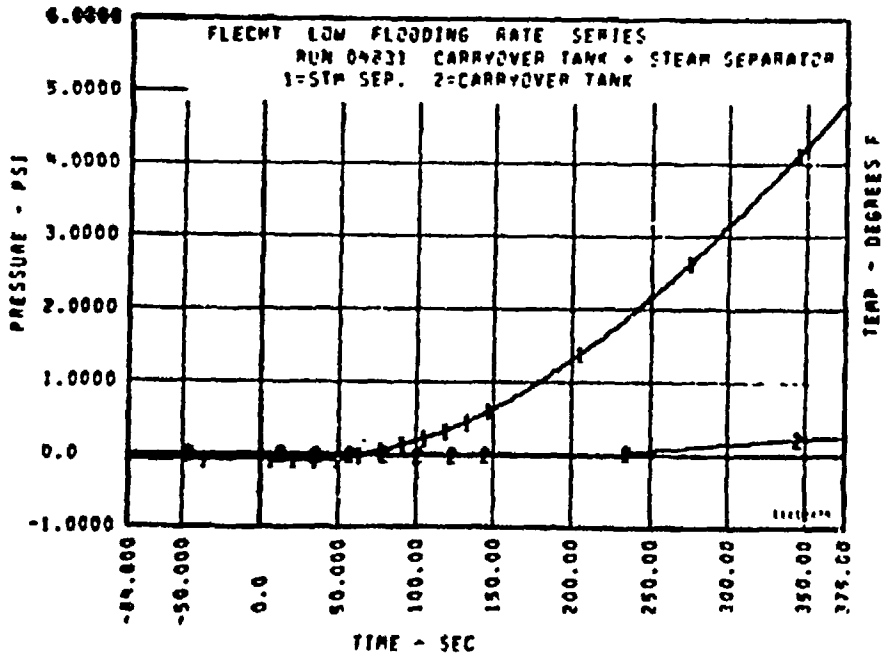

FLECHT LOW FLOODING RATE SERIES
RUN 04831
STEAM PROBES
1=3G7 2=7C10 3=8E12 5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04831
THIMBLES
1=5F4 2=5F6
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04831
THIMBLES
1=5H6 2=5H7 3=5H8
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
375.00
TIME - SEC

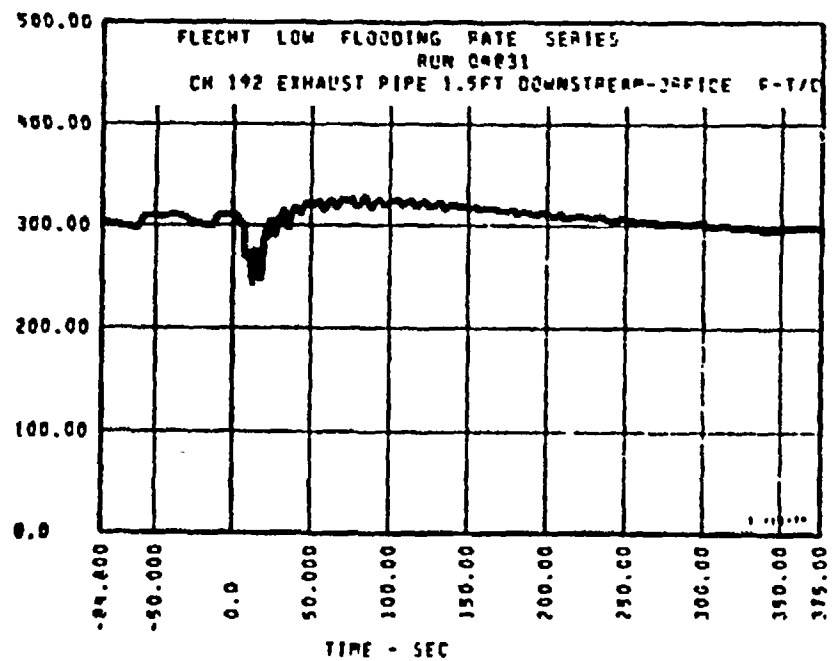

FLIGHT LOW FLOODING RATE SERIES
RUN 048.1
TOTAL(BACK) 0-12FT
HEAT RELEASE(BTU)
0.0
1.00E+0
2.00E+0
3.00E+0
4.00E+0
5.00E+0
6.00E+0
FLIGHT LOW FLOODING RATE SERIES
RUN 048.1
TOTAL(BACK) 0-12FT
RATE OF HEAT RELEASE(BTU/SEC)
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
0.0
50.000
100.00
150.00
200.00
250.00
300.00

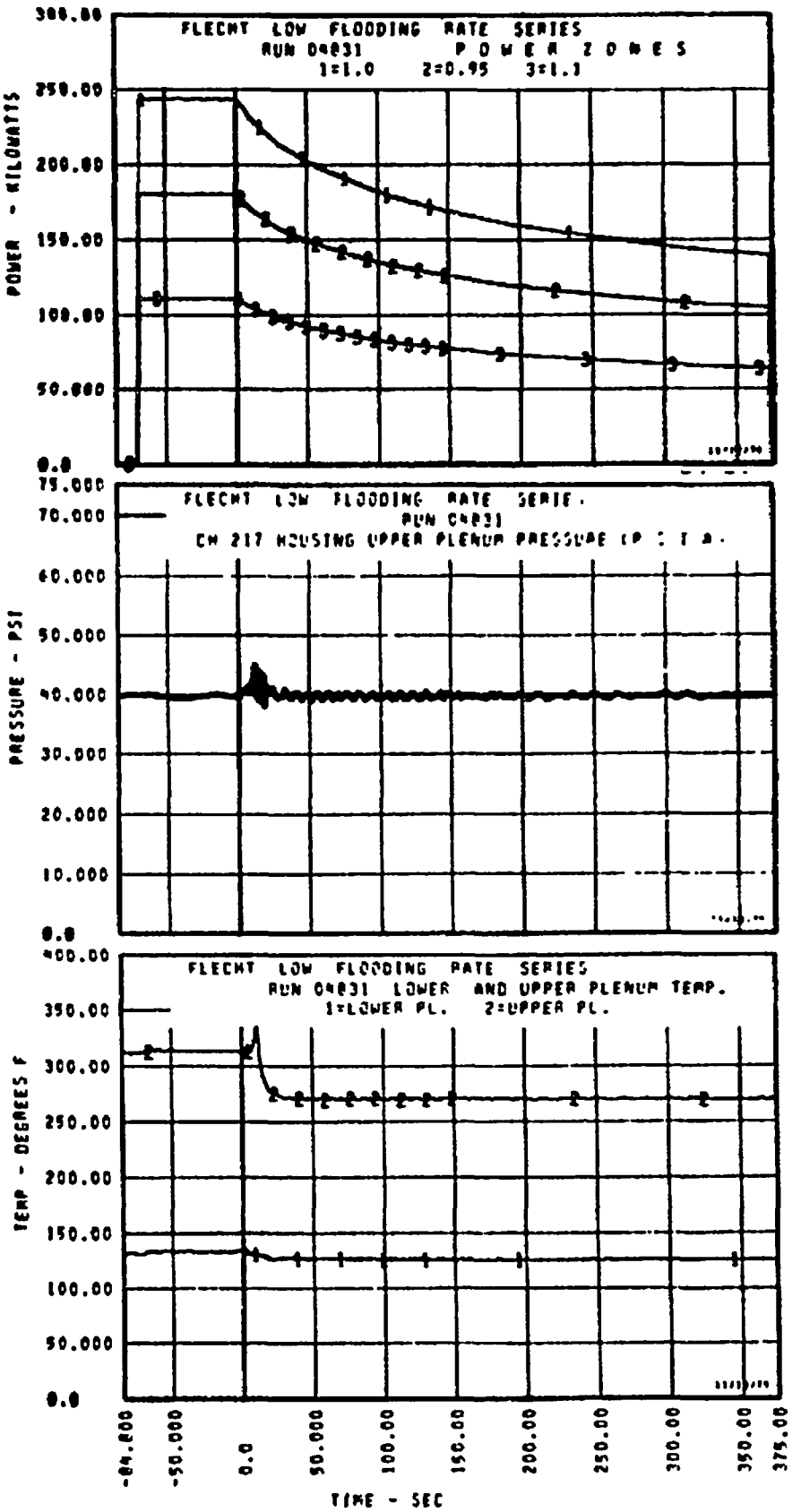

FLECHT LOW FLOODING RATE SERIES
RUN 04831 HOUSING TEMPERATURES
1=LP 2=0FT 3=2FT 4=4FT 5=5.5FT 6=6FT 7=6.5FT
TEMP - DEGREES F
1200.0
1000.0
800.00
600.00
400.00
200.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 0483. HOUSING TEMPERATURES
1=7FT 2=7.5FT 3=8FT 4=10FT 5=12FT 6=UP
TEMP - DEGREES F
1200.0
1000.0
800.00
600.00
400.00
200.00
0.0
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
375.00
TIME - SEC

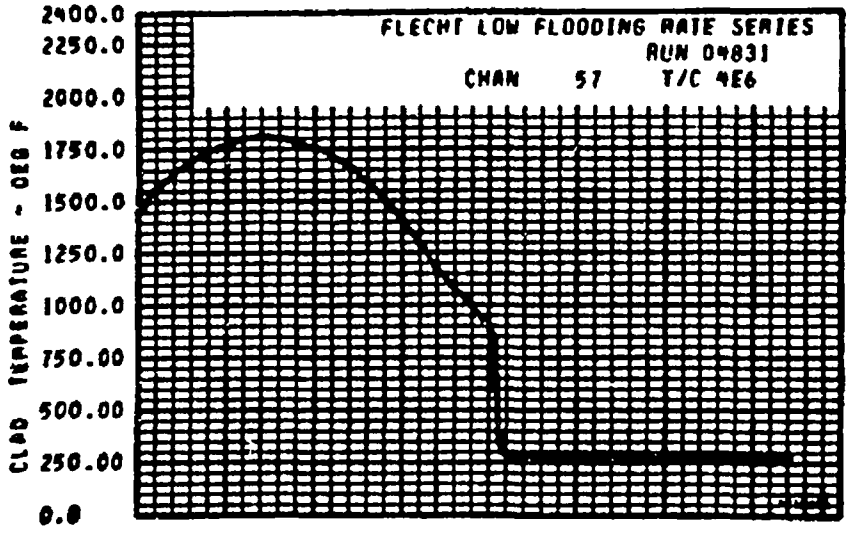

FLECHT LOW FLOODING RATE SERIES
RUN 04831
CH 216 HOUSING OFT -12FT OVERALL DIFF PRESSURE
PRESSURE - PSI
7.0000
6.0000
5.0000
4.0000
3.0000
2.0000
1.0000
0.0

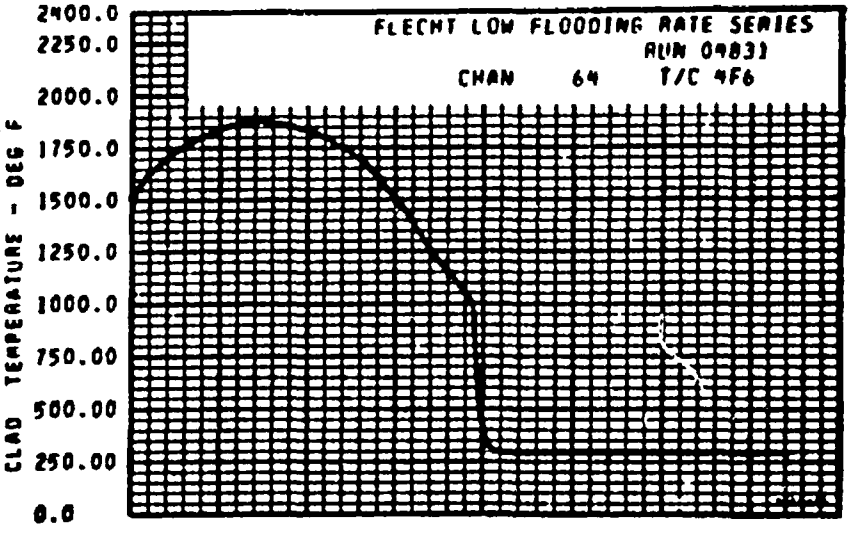

FLECHT LOW FLOODING RATE SERIES
RUN 04831
CHANNEL 204 TURBINE METER
FLOW RATE - GPM
15.000
12.500
10.000
7.5000
5.0000
2.5000
0.0

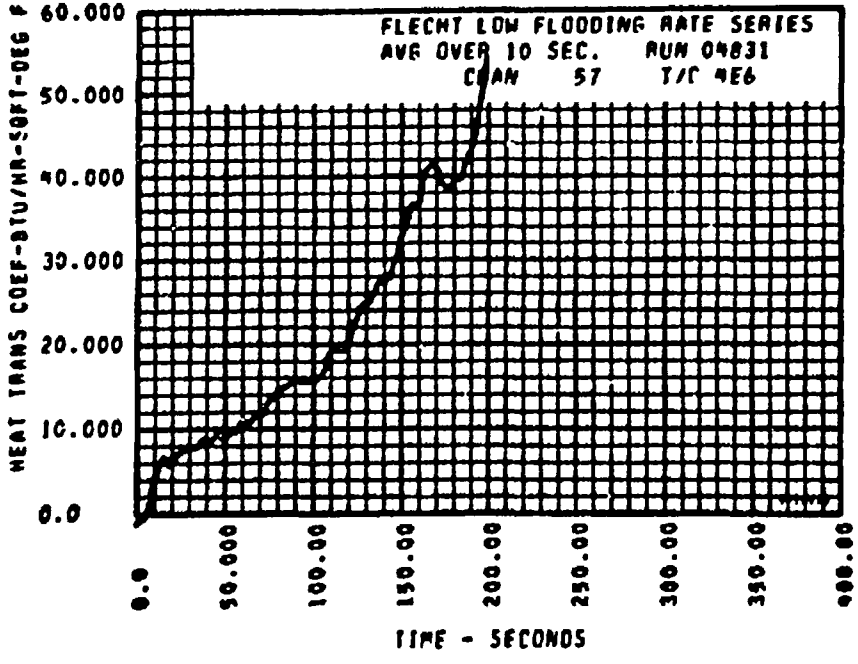

FLECHT LOW FLOODING RATE SERIES
RUN 04831 CARRYOVER TANK + STEAM SEPARATOR
1=STM SEP. 2=CARRYOVER TANK
PRESSURE - PSI
5.0000
4.0000
3.0000
2.0000
1.0000
0.0
-1.0000
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
TIME - SEC

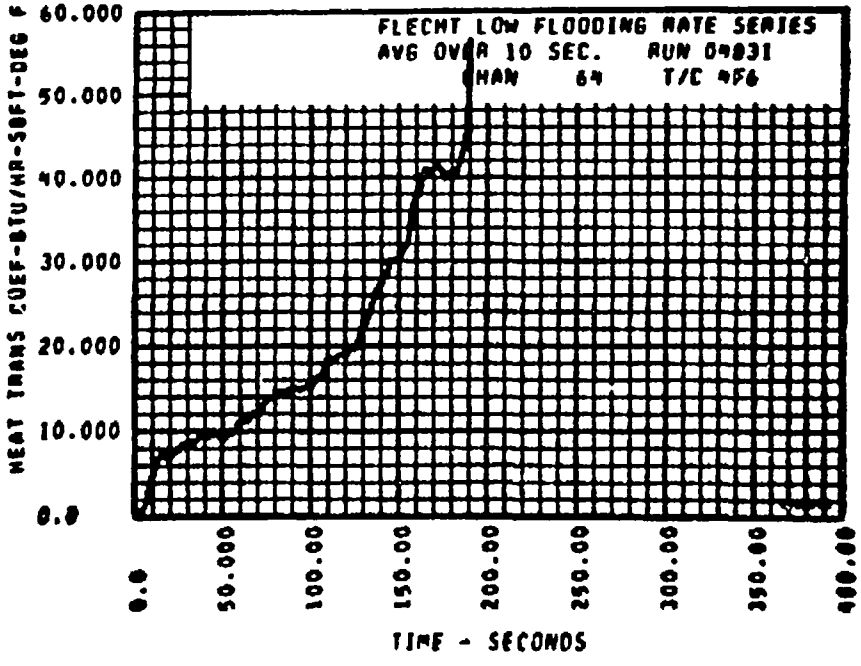

FLECHT LOW FLOODING RATE SERIES
RUN 04831
TEMP - DEGREES F
500.00
400.00
300.00
200.00
100.00
0.0
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 04031 POWER ZONES
1=1.0 2=0.95 3=1.1
POWER - KILOWATTS
300.00
250.00
200.00
150.00
100.00
50.000
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04031
CH 217 HOUSING UPPER PLENUM PRESSURE (P C T A.
PRESSURE - PSI
75.000
70.000
60.000
50.000
40.000
30.000
20.000
10.000
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04031 LOWER AND UPPER PLENUM TEMP.
1=LOWER PL. 2=UPPER PL.
TEMP - DEGREES F
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.000
0.0
-84.000
-50.000
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
375.00
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 04831
CHAN 57 T/C 4E6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0


FLECHT LOW FLOODING RATE SERIES
RUN 04831
CHAN 64 T/C 4F6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0


FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04831
CHAN 57 T/C 4E6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS


FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04831
CHAN 64 T/C 4F6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

BLANK PAGE

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 04930

DATE: 5/12/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40		
Initial Clad Temperature (6 Ft)°F At Flood	1,601	Rod T/C	3H6
Rod Peak Power, kw/ft	0.51		
Flooding Rate, in/sec	0.8		

Coolant Temperature, °F	129		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

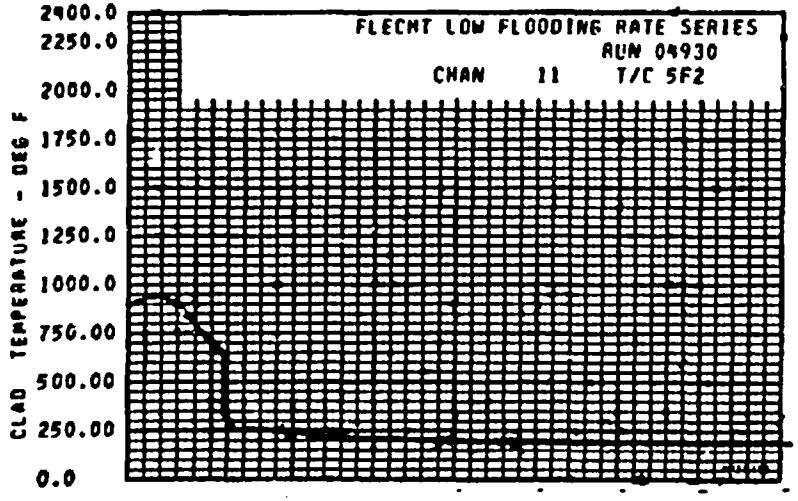
B. INITIAL HOUSING TEMPERATURE

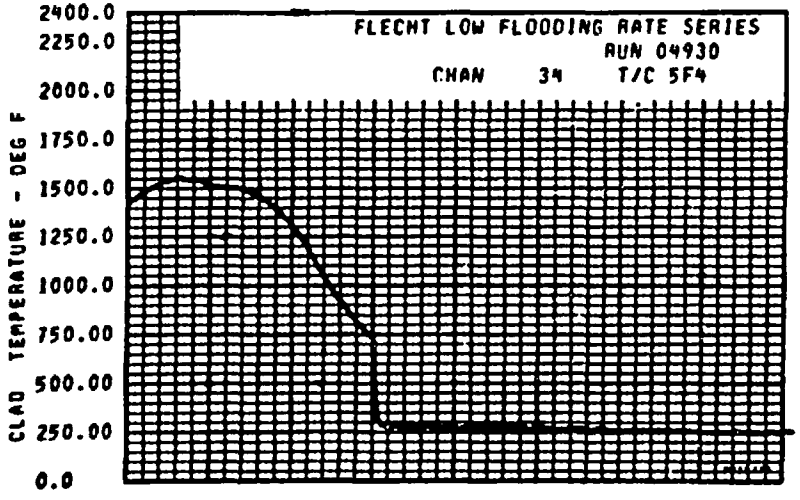
Back Side Elevation, Ft.	Temperature, °F
0	245
2	451
4	617
5.5	673
6	694
6.5	572
7	570
7.5	574
8	595
10	442
12	276
Average	519
Lower Plenum	122
Upper Plenum	269

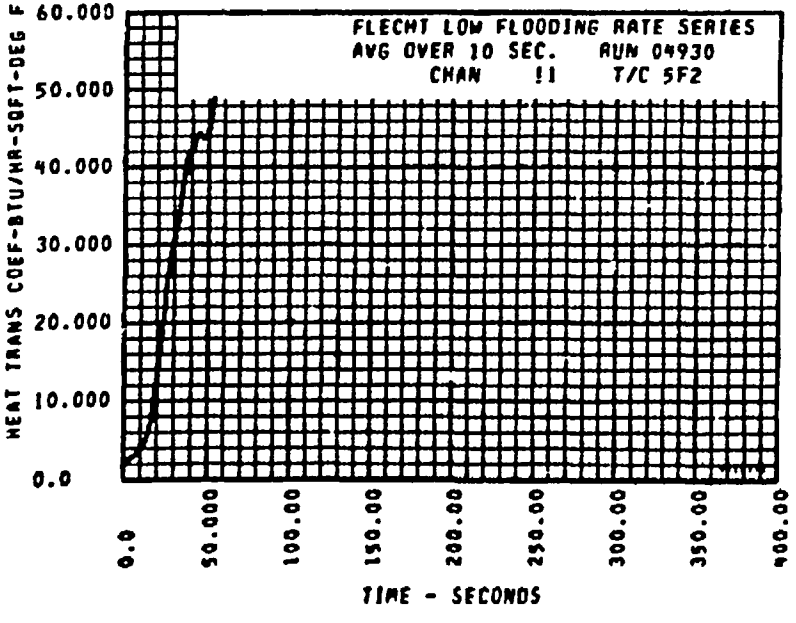
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

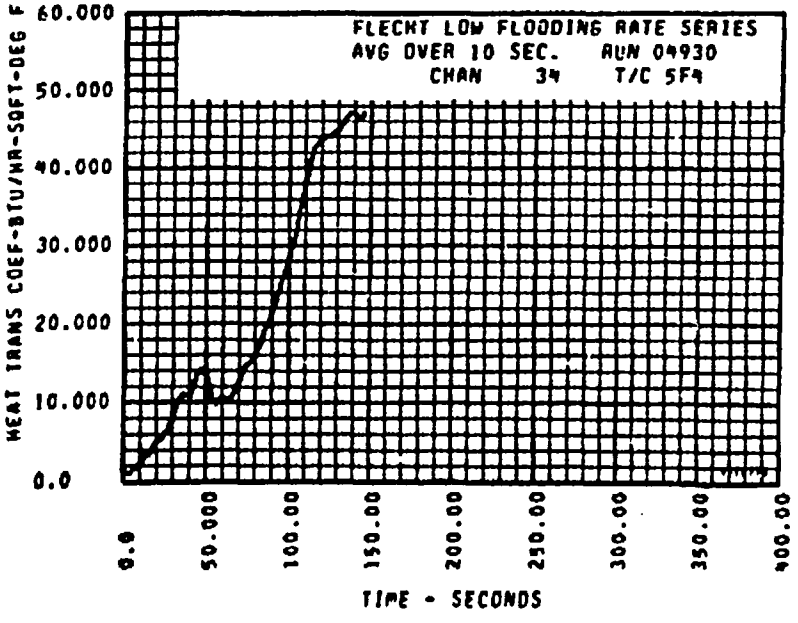
RUN NUMBER 04930

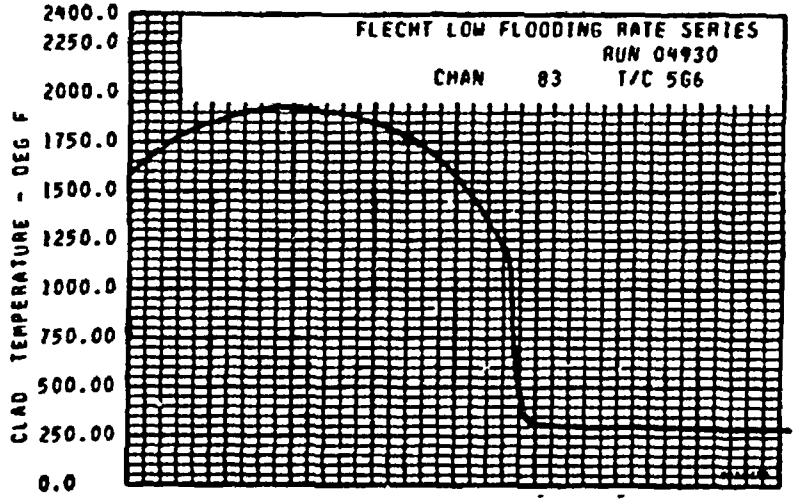
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	276.	-115.6	637.	656.	19.	7.4	563.	18.0
4H1	307.	-116.6	665.	696.	31.	13.9	580.	28.9
4H1.5	351.	-115.6	687.	721.	34.	14.8	606.	39.2
4H2	434.	-115.6	927.	978.	51.	21.6	692.	56.4
4H4	588.	-116.6	1418.	1552.	134.	42.0	776.	150.0
4H6	599.	-115.6	1600.	1890.	291.	92.0	858.	250.0
8D6	430.	-115.6	1499.	1812.	314.	92.3	856.	245.9
8D6.5	419.	-115.6	1409.	1790.	381.	102.4	860.	280.4
8D7	390.	-115.6	1356.	1679.	322.	103.9	723.	309.9
8D8	359.	-113.6	1196.	1721.	525.	149.6	686.	346.0
8D9	281.	-115.6	990.	1508.	518.	162.0	594.	357.0
8D10	275.	-115.6	777.	1263.	486.	154.0	812.	322.6
8D11	276.	-115.6	636.	958.	323.	152.3	845.	257.9
8D12	272.	-115.6	497.	671.	174.	87.5	659.	99.2
5F0	271.	-116.6	391.	392.	1.	1.4	393.	1.9
5F0.5	273.	-115.6	636.	653.	17.	6.9	557.	17.7
5F1	295.	-115.6	654.	683.	29.	12.3	549.	29.2
5F1.5	* * BAD THERMOCOUPLE DATA * *							
5F2	409.	-115.6	445.	491.	46.	19.6	627.	58.8
5F3	430.	-113.6	1172.	1247.	75.	29.2	703.	96.7
5F4	377.	-115.6	1419.	1565.	145.	29.9	726.	151.0
5F6	315.	-115.6	1554.	1870.	316.	101.4	924.	241.0
5G6	553.	-115.6	1586.	1930.	344.	91.9	1119.	234.6
5G6.5	331.	-115.6	1528.	1894.	366.	91.9	1004.	251.7
5G7	452.	-115.6	1426.	1920.	494.	179.2	820.	289.0
5G8	537.	-115.6	1345.	1849.	503.	183.9	930.	330.5
5G9	332.	-115.6	1065.	1641.	575.	163.3	657.	357.9
5G11	275.	-115.6	630.	942.	311.	129.2	520.	375.9
5G12	274.	-113.6	544.	870.	296.	151.3	569.	399.0
1G4	333.	-113.6	1303.	1370.	67.	31.0	818.	122.0
1G6	418.	-116.6	1504.	1632.	128.	45.6	855.	236.2
1G10	318.	-113.6	744.	933.	189.	101.6	586.	359.0
3H2	414.	-113.6	428.	472.	44.	15.2	671.	52.7
3H6	418.	-115.6	1491.	[illegible]	265.	73.3	667.	246.0
3H8	464.	-113.6	1367.	1786.	419.	126.5	862.	329.3
3H10	427.	-113.6	910.	1359.	449.	156.3	1080.	258.7

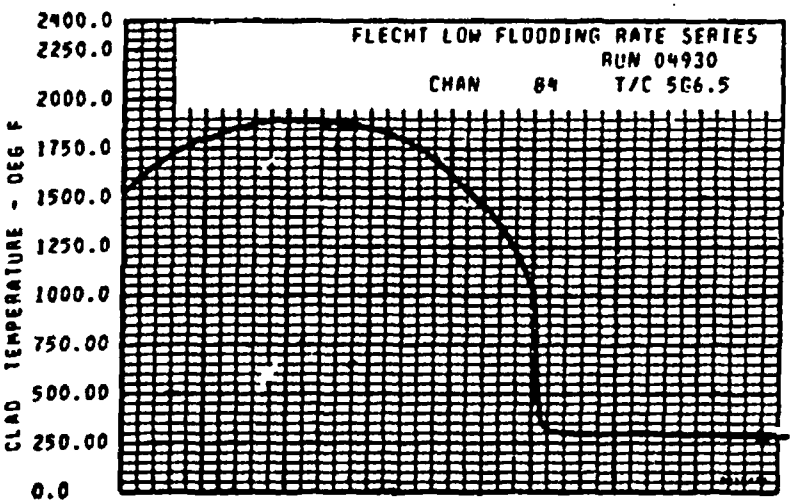

FLECHT LOW FLOODING RATE SERIES
RUN 04930
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

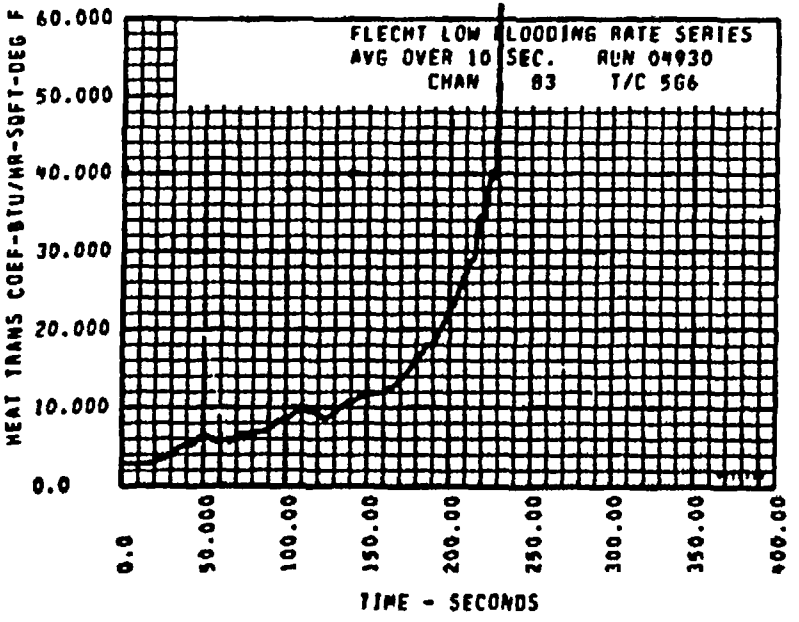

FLECHT LOW FLOODING RATE SERIES
RUN 04930
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

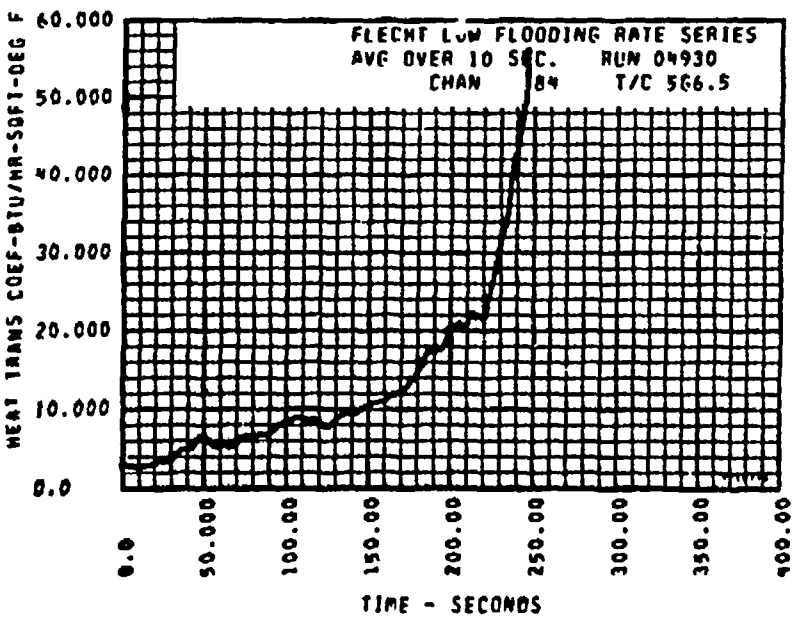

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04930
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

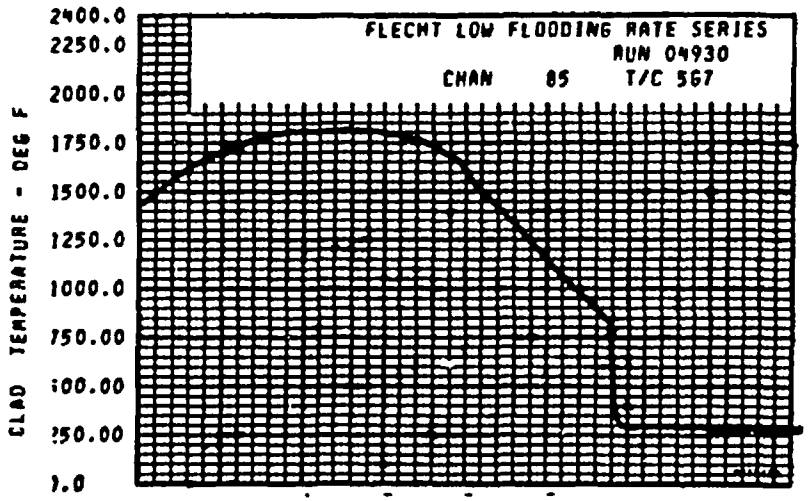

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04930
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

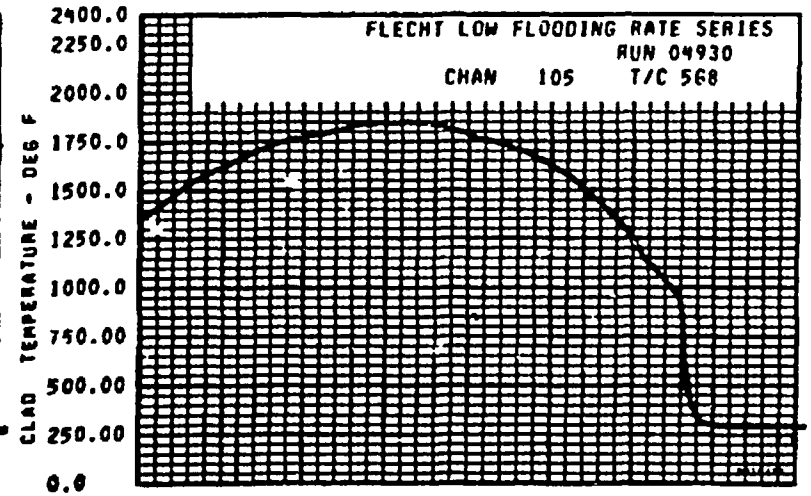

FLECHT LOW FLOODING RATE SERIES
RUN 04930
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

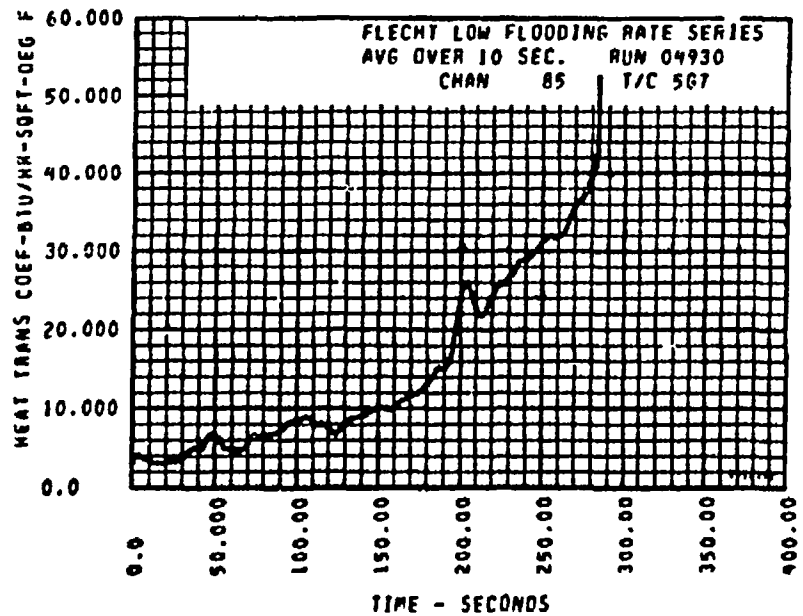

FLECHT LOW FLOODING RATE SERIES
RUN 04930
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

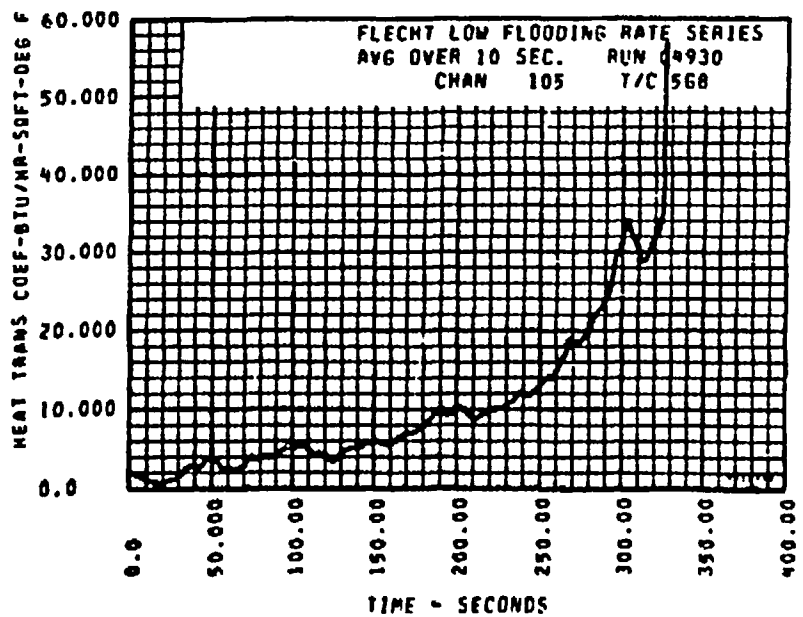

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04930
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

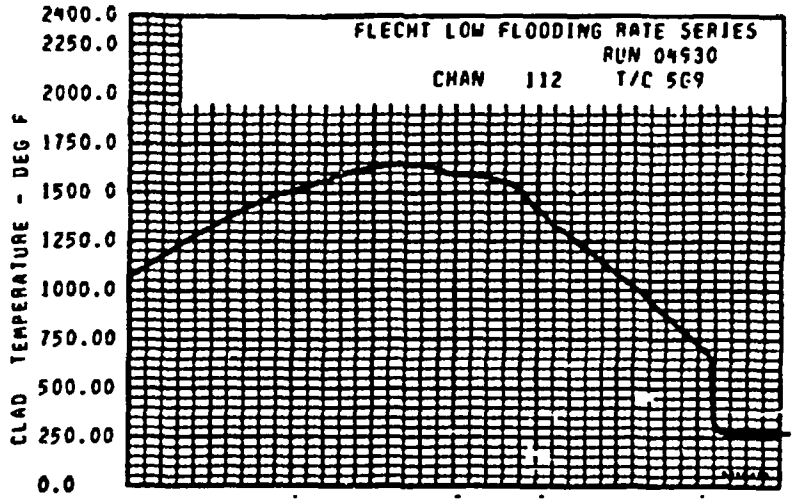

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04930
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

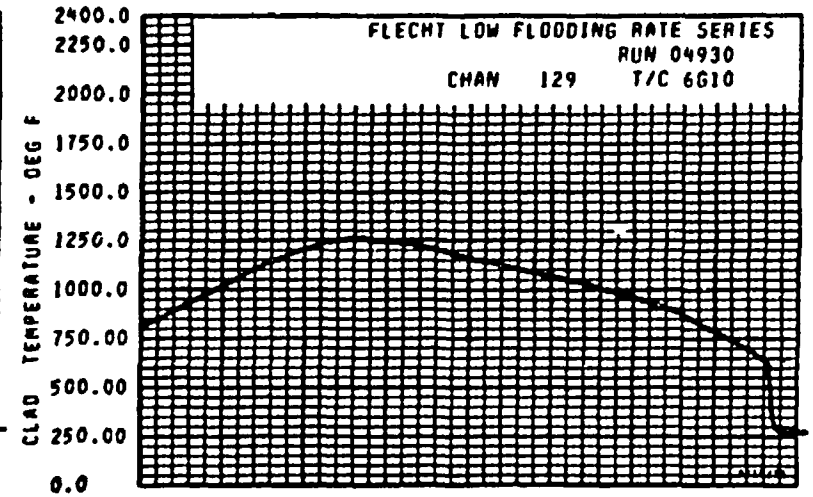

FLECHT LOW FLOODING RATE SERIES
RUN 04930
CHAN 85 T/C 567
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

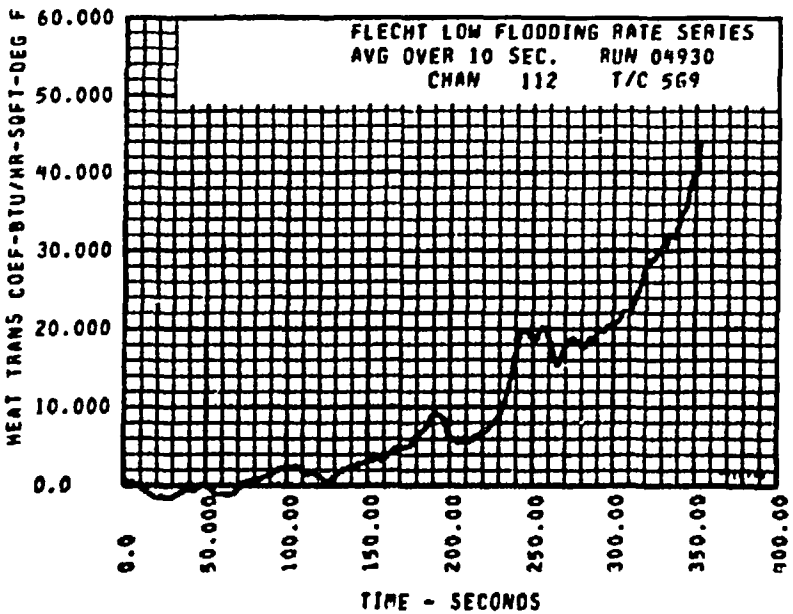

FLECHT LOW FLOODING RATE SERIES
RUN 04930
CHAN 105 T/C 568
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

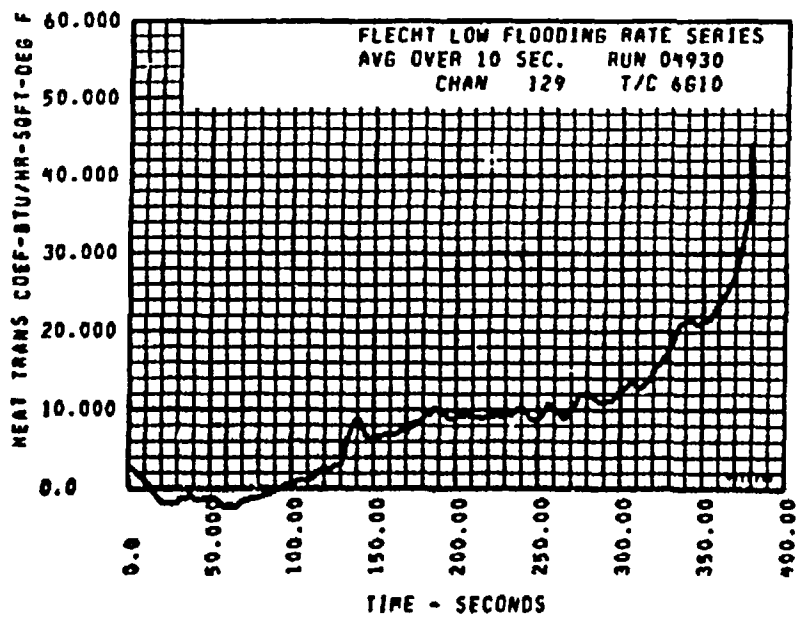

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04930
CHAN 85 T/C 567
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

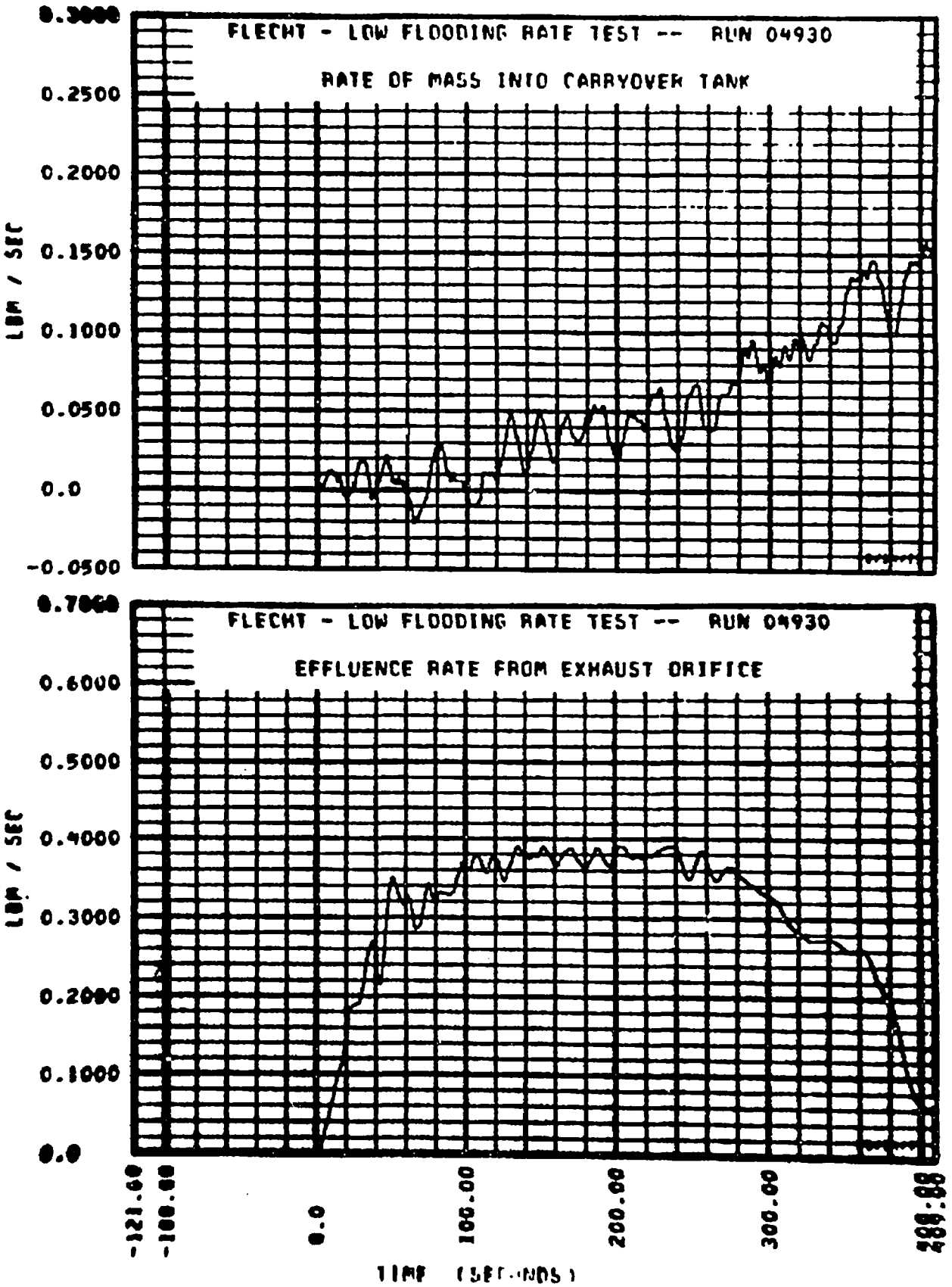

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04930
CHAN 105 T/C 568
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

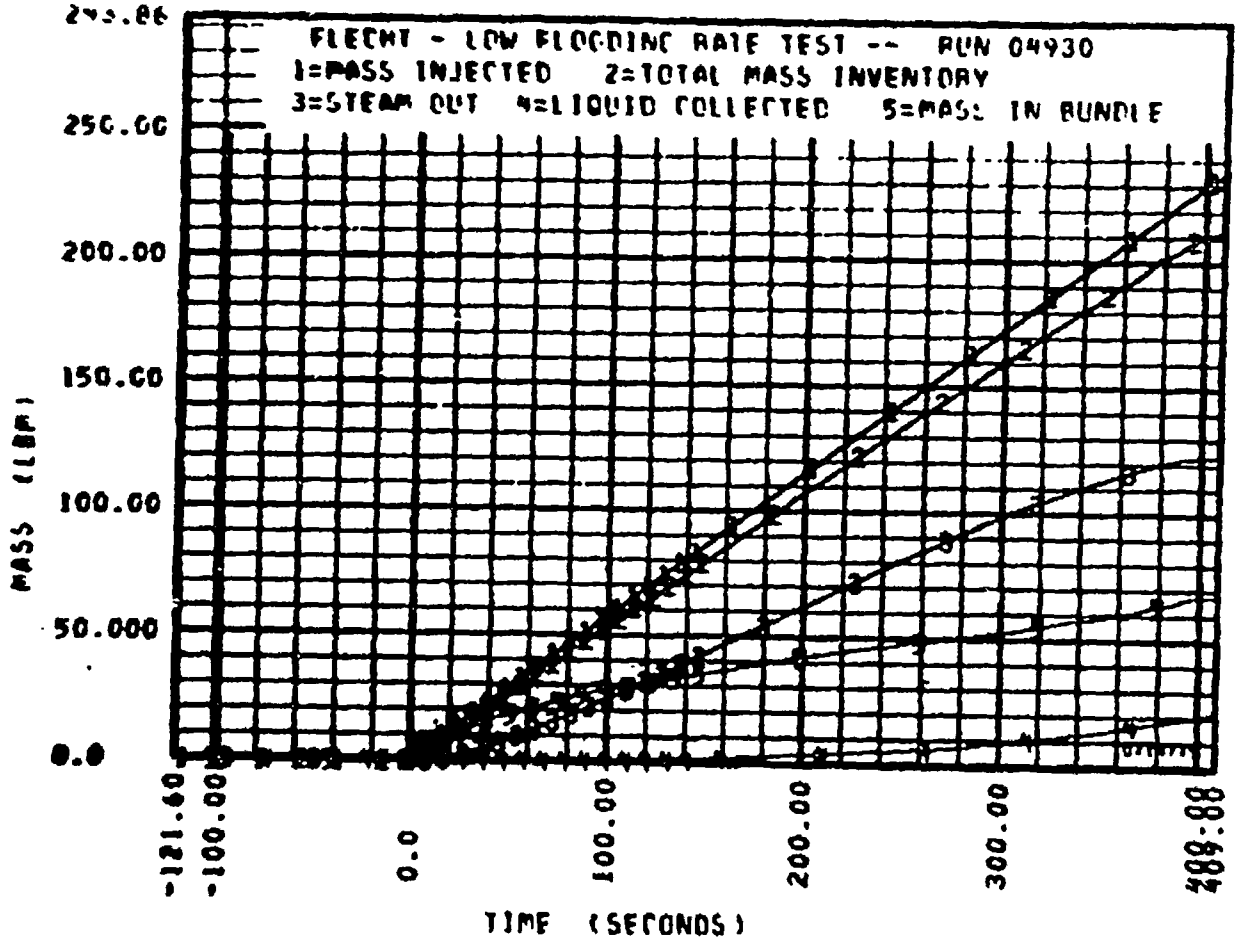

FLECHT LOW FLOODING RATE SERIES
RUN 04930
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

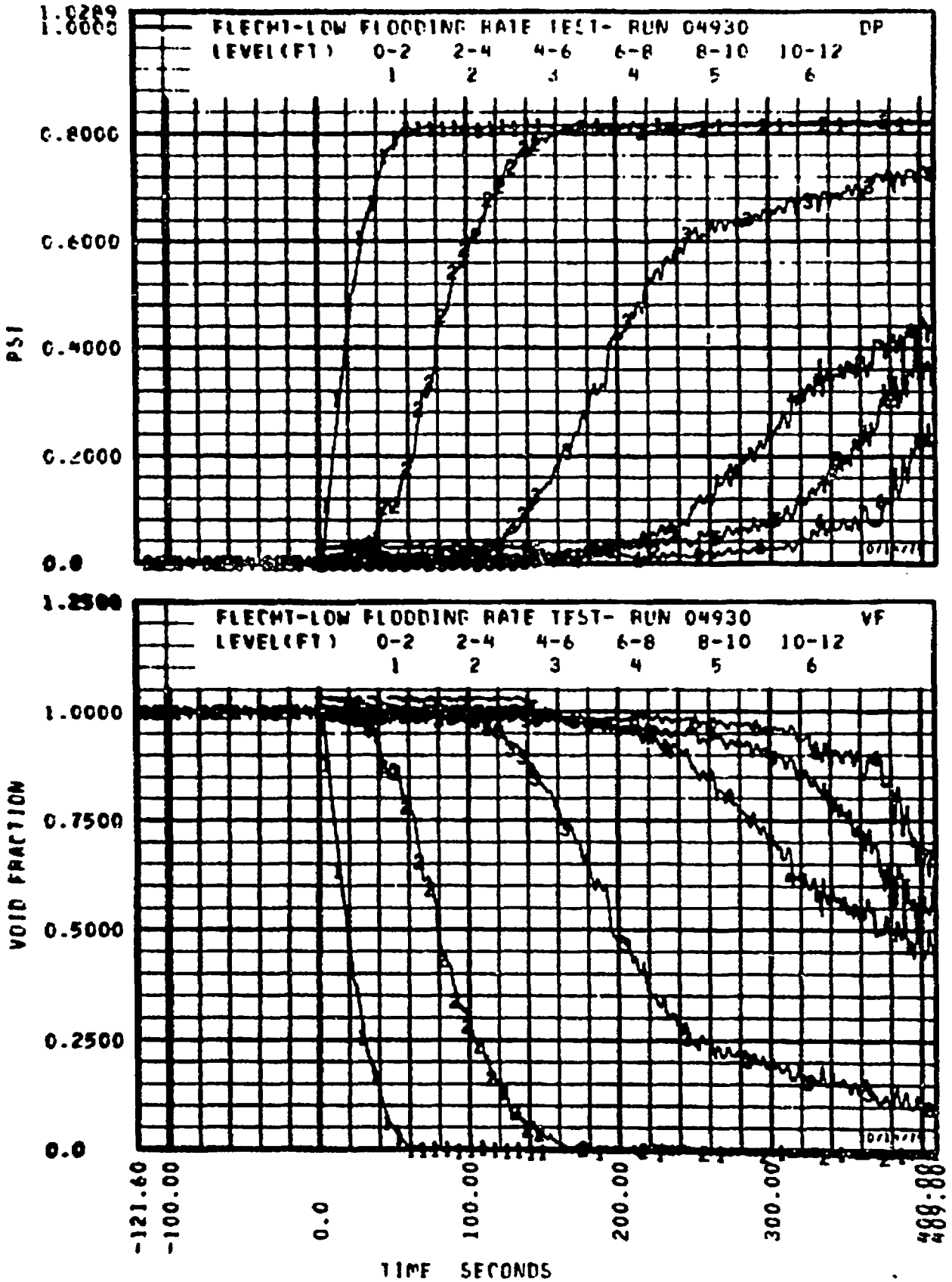

FLECHT LOW FLOODING RATE SERIES
RUN 04930
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

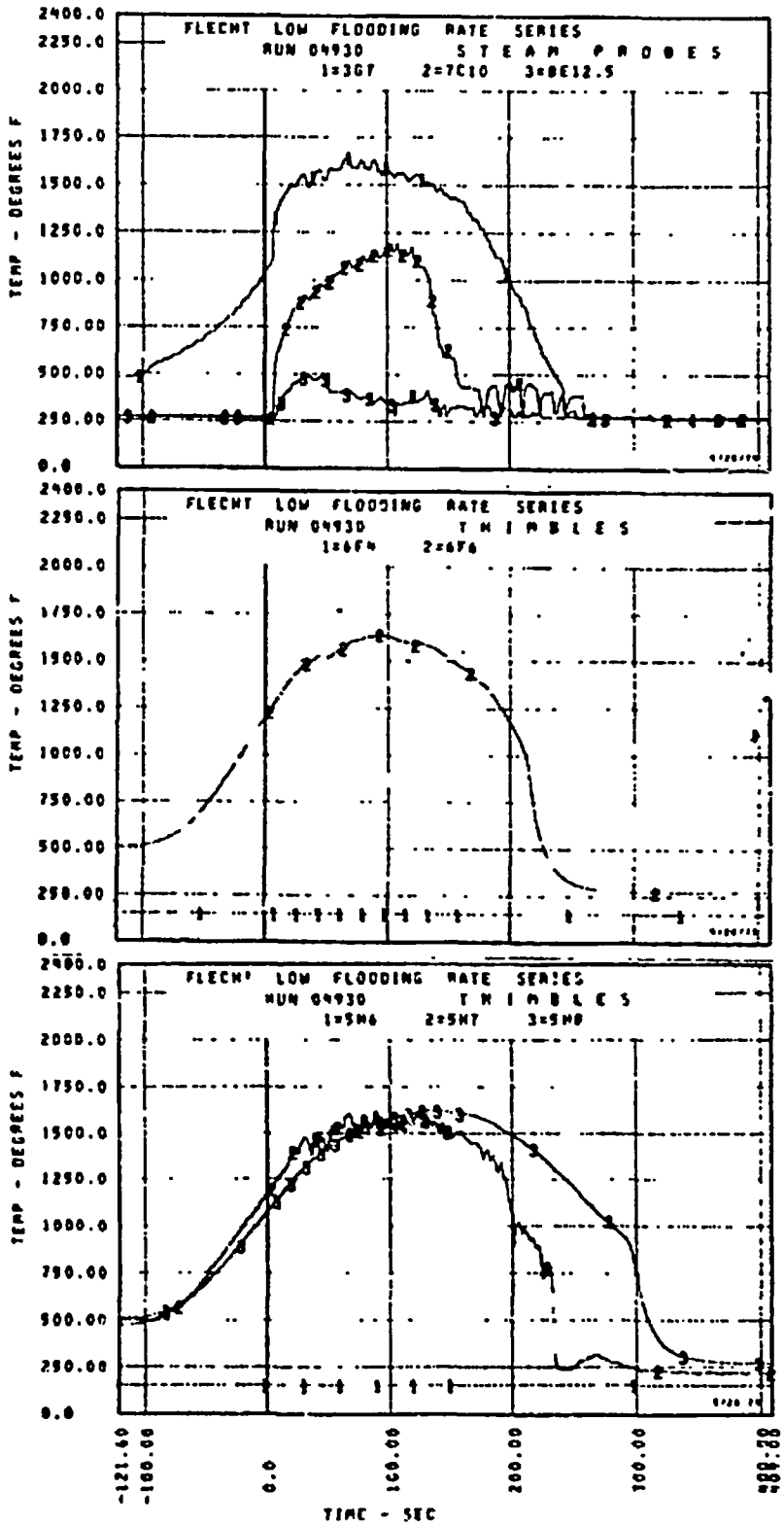

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04930
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

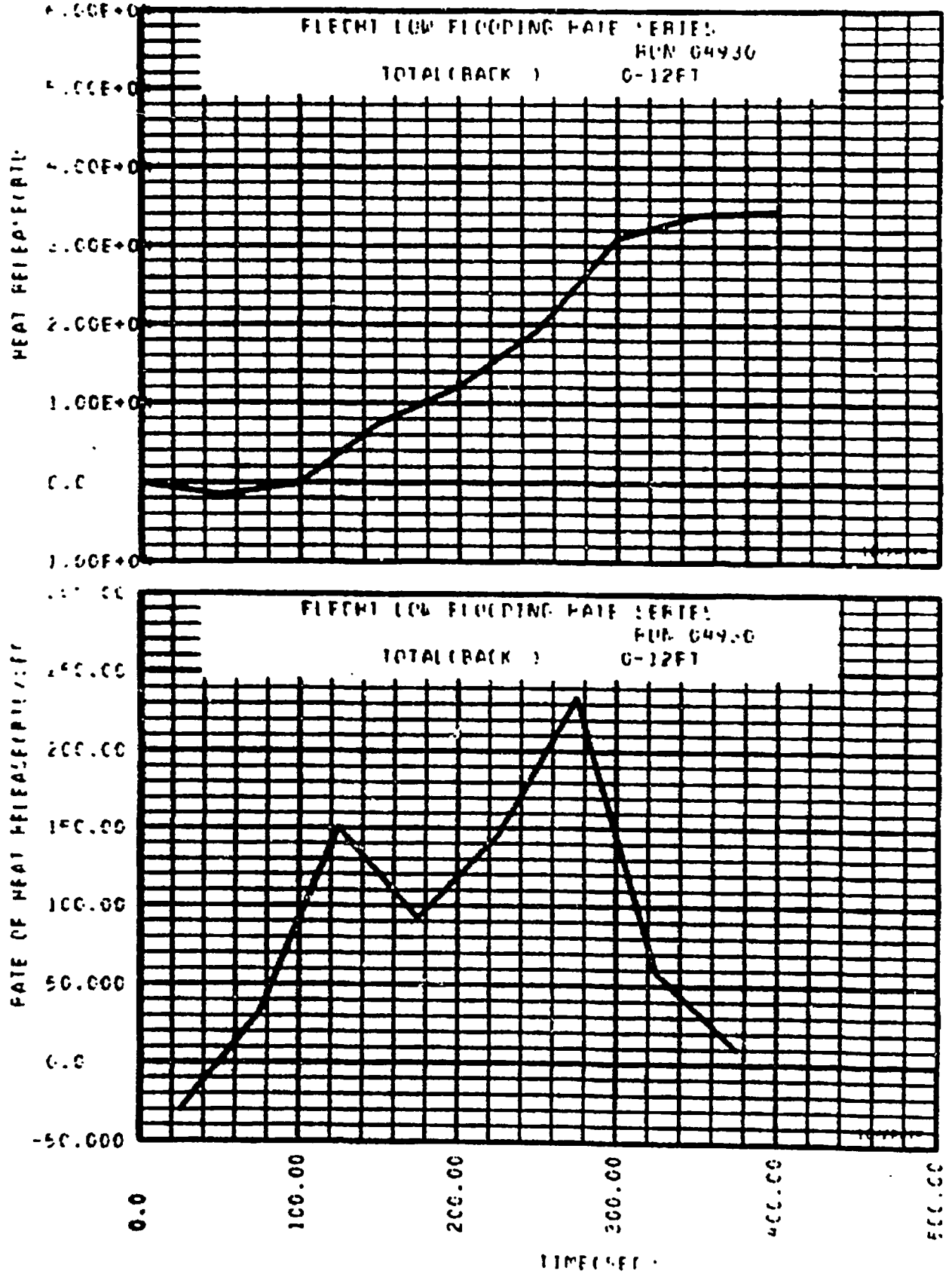

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 04930
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 04930
RATE OF MASS INTO CARRYOVER TANK
0.3000
0.2500
0.2000
0.1500
0.1000
0.0500
0.0
-0.0500
LBM / SEC
FLECHT - LOW FLOODING RATE TEST -- RUN 04930
EFFLUENCE RATE FROM EXHAUST ORIFICE
0.7000
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
LBM / SEC
-121.00
-100.00
0.0
100.00
200.00
300.00
400.00
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 04930
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
250.00
200.00
150.00
100.00
50.000
0.0
MASS (LBM)
-121.60
-100.00
0.0
100.00
200.00
300.00
488.88
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 04930 DP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.0269
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 04930 VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-121.60
-100.00
0.0
100.00
200.00
300.00
488.88
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 04930
STEAM PROBES
1=3GF 2=7C10 3=8E12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 04930
THIMBLES
1=6F4 2=6F6
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 04930
THIMBLES
1=5M6 2=5M7 3=5M8
TEMP - DEGREES F
-121.60
-100.00
0.0
100.00
200.00
300.00
400.00
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 04930
TOTAL(BACK)
0-12FT
HEAT RELEASE(BTU
FLECHT LOW FLOODING RATE SERIES
RUN 04930
TOTAL(BACK)
0-12FT
RATE OF HEAT RELEASE(BTU/
50.000
0.0
-50.000
0.0
100.00
200.00
300.00
TIME(SEC)

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 05029

DATE: 5/13/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40		
Initial Clad Temperature (6 Ft)°F At Flood	1,600	Rod T/C	4H6
Rod Peak Power, kw/ft	0.73		
Flooding Rate, in/sec	0.85		

Coolant Temperature, °F	126		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

B. INITIAL HOUSING TEMPERATURE

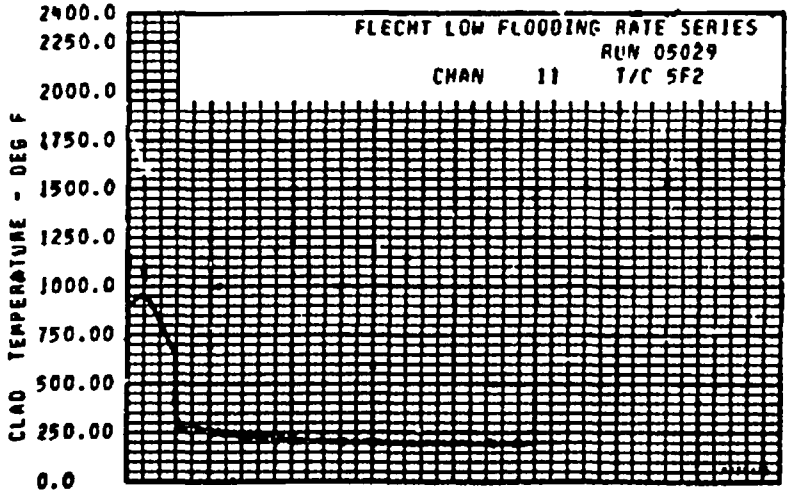
Back Side Elevation, Ft.	Temperature, °F
0	246
2	487
4	641
5.5	748
6	770
6.5	614
7	609
7.5	611
8	649
10	488
12	276
Average	558
Lower Plenum	125
Upper Plenum	269

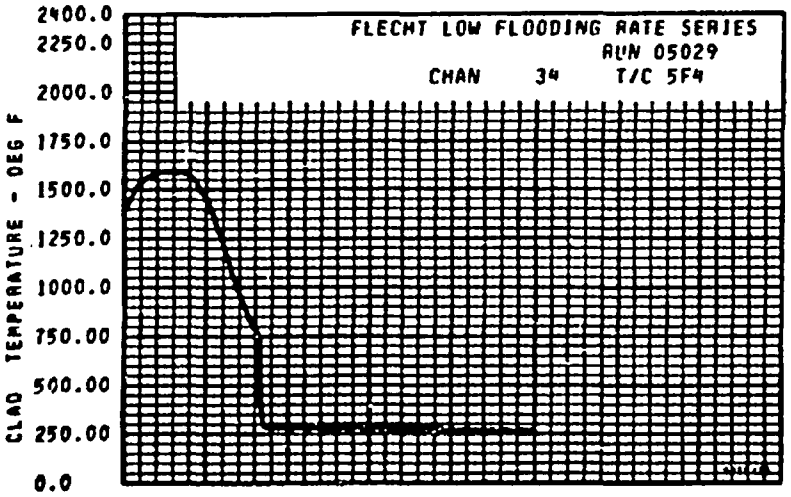
BLANK PAGE

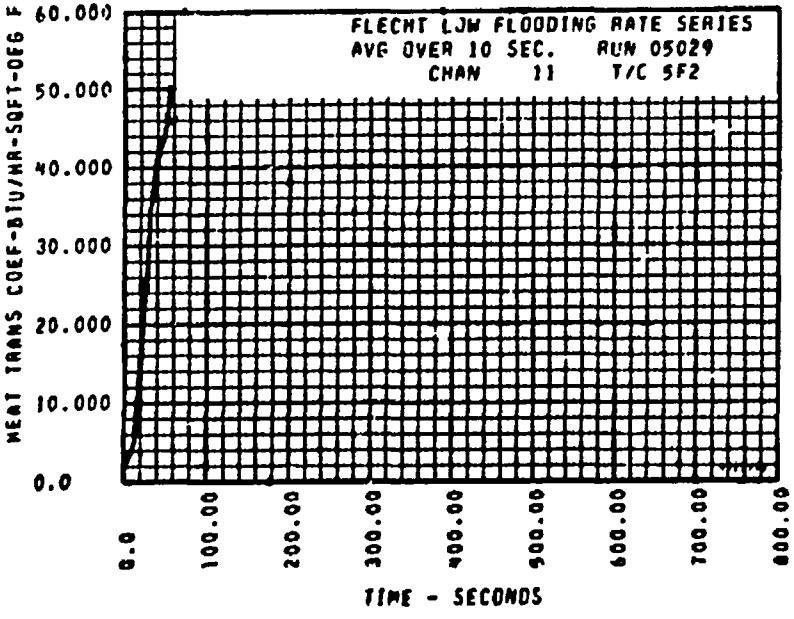
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

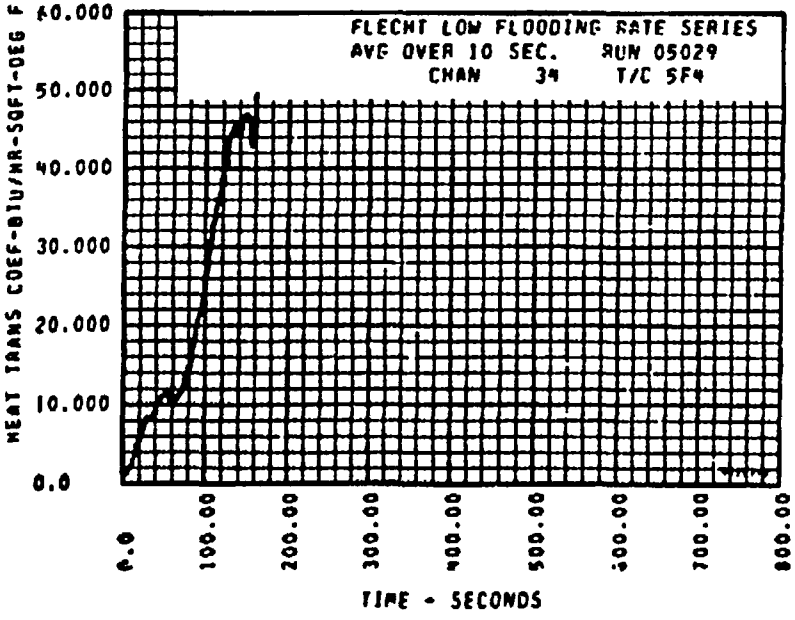
RUN NUMBER 05029

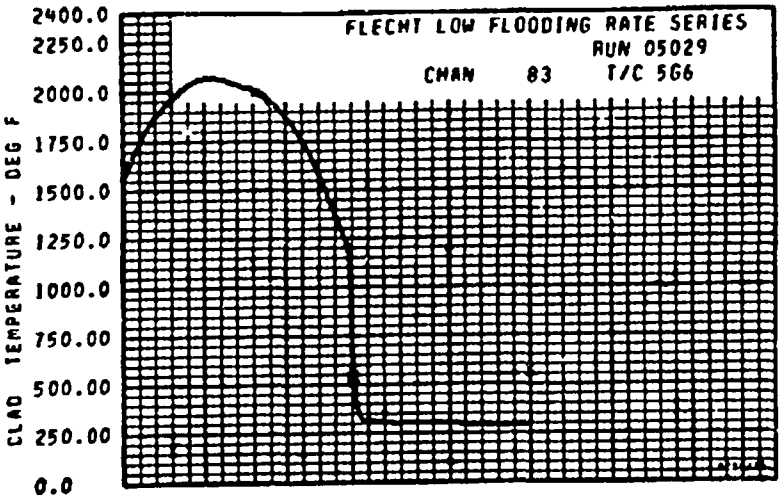
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	242.	-93.0	616.	643.	26.	7.9	563.	17.5
4H1	227.	-94.0	657.	693.	36.	11.9	579.	30.5
4H1.5	192.	-93.0	687.	733.	46.	15.9	605.	39.9
4H2	161.	-84.0	917.	984.	67.	17.6	712.	57.4
4H4	536.	-94.0	1400.	1507.	207.	69.5	803.	163.9
4H6	536.	-94.0	1600.	2024.	423.	101.9	917.	291.9
8D6	439.	-93.0	1498.	1558.	470.	131.9	914.	283.9
8D6.5	494.	-83.0	1400.	1965.	554.	172.9	907.	330.1
8D7	465.	-83.0	1359.	1824.	464.	112.5	750.	367.9
8D8	394.	-83.0	1174.	1890.	716.	166.9	744.	419.0
8D9	376.	-84.0	946.	1651.	704.	172.0	564.	453.0
8D10	376.	-93.0	746.	1430.	684.	193.0	718.	435.0
8D11	273.	-83.0	606.	1127.	521.	169.0	779.	393.0
8D12	278.	-93.0	484.	823.	339.	102.6	716.	137.3
5F0	222.	-94.0	405.	407.	2.	.9	404.	1.6
5F0.5	273.	-94.0	612.	635.	23.	7.2	624.	19.9
5F1	315.	-84.0	643.	677.	35.	11.6	531.	32.5
5F1.5	* * B A D T H E R M O C O U P L E.				D A T A * *			
5F2	437.	-94.0	839.	952.	63.	17.4	645.	59.6
5F3	525.	-84.0	1140.	1257.	117.	37.2	702.	103.2
5F4	614.	-84.0	1391.	1599.	207.	48.4	747.	165.9
5F6	525.	-84.0	1537.	2016.	481.	101.4	984.	279.2
5G6	574.	-93.0	1556.	2075.	519.	102.2	1156.	278.8
5G6.5	549.	-83.0	1489.	2030.	540.	112.9	987.	300.7
5G7	497.	-84.0	1403.	1961.	558.	156.0	862.	342.8
5G8	529.	-83.0	1310.	2004.	694.	166.0	865.	412.8
5G9	316.	-84.0	971.	1756.	786.	198.0	755.	421.6
5G11	270.	-84.0	604.	985.	382.	157.0	528.	453.0
5G12	272.	-83.0	571.	921.	351.	169.0	541.	475.0
1G4	629.	-83.0	1307.	1410.	103.	27.6	846.	129.7
1G6	720.	-84.0	1536.	1732.	196.	71.5	986.	274.0
1G10	368.	-84.0	786.	1047.	261.	110.4	579.	457.0
3H2	449.	-83.0	922.	985.	63.	17.4	783.	53.2
3H6	684.	-84.0	1600.	1988.	387.	80.8	919.	283.8
3H8	575.	-83.0	1337.	1914.	577.	156.0	849.	406.8
3H10	299.	-84.0	809.	1426.	617.	170.0	918.	394.5

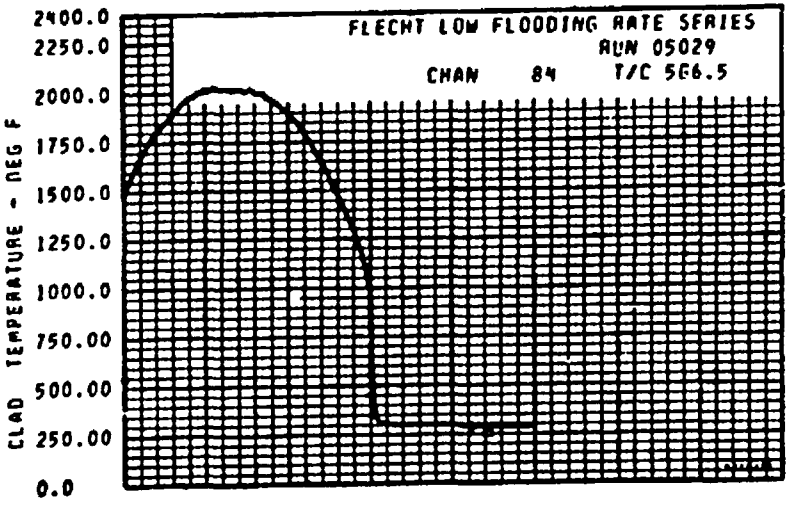

FLECHT LOW FLOODING RATE SERIES
RUN 05029
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

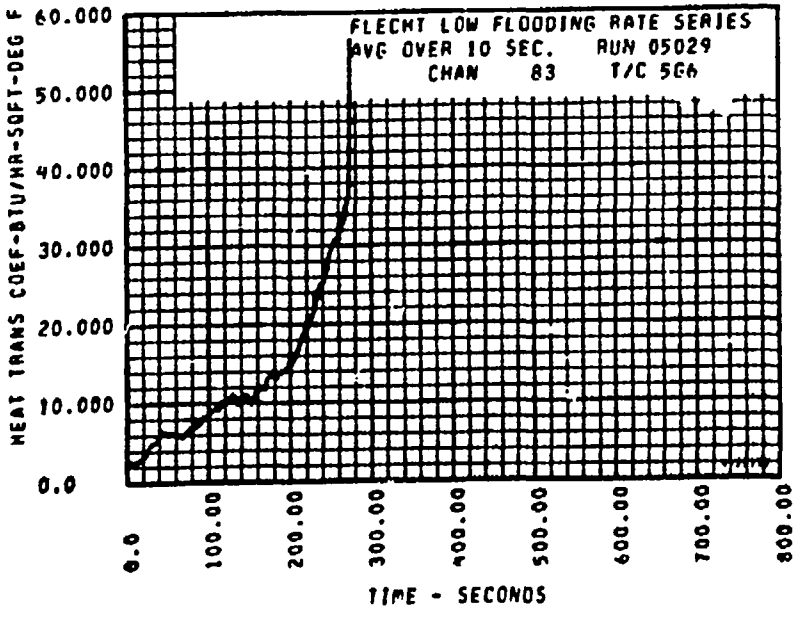

FLECHT LOW FLOODING RATE SERIES
RUN 05029
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

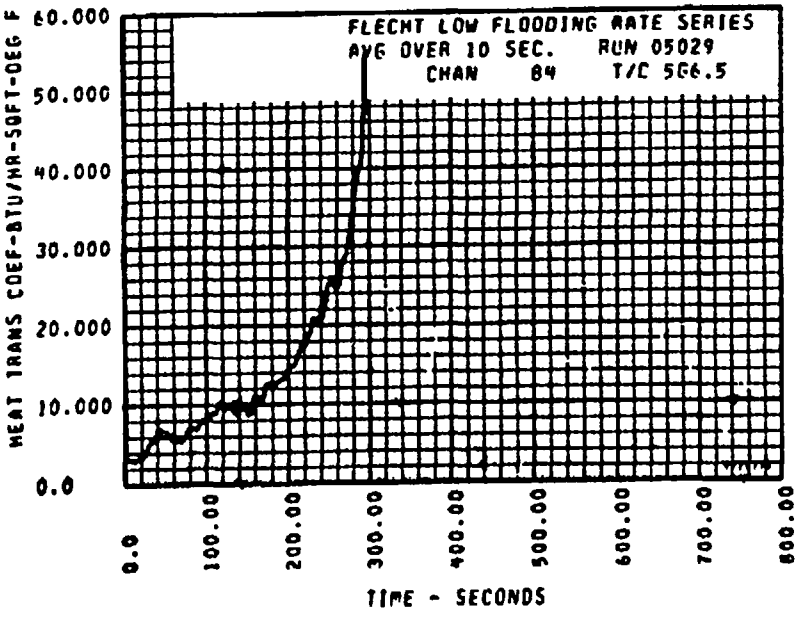

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05029
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

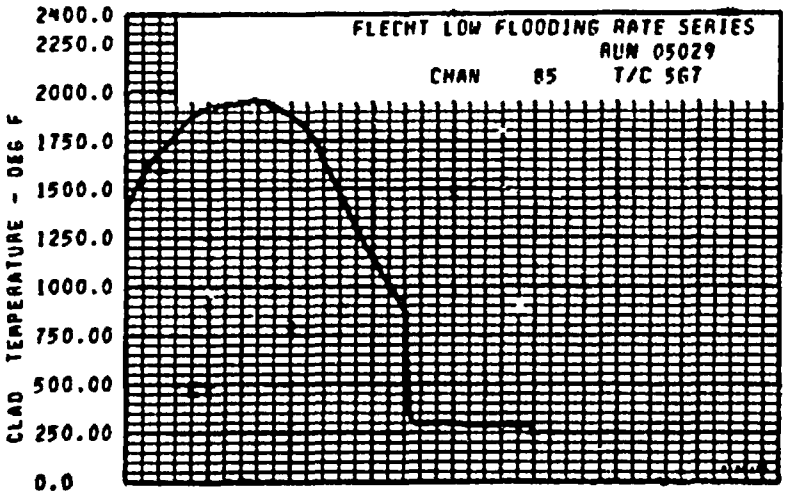

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05029
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

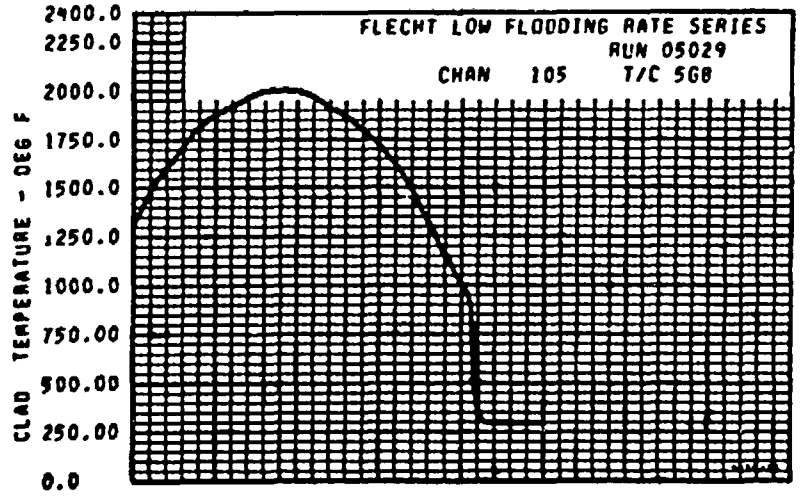

FLECHT LOW FLOODING RATE SERIES
RUN 05029
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

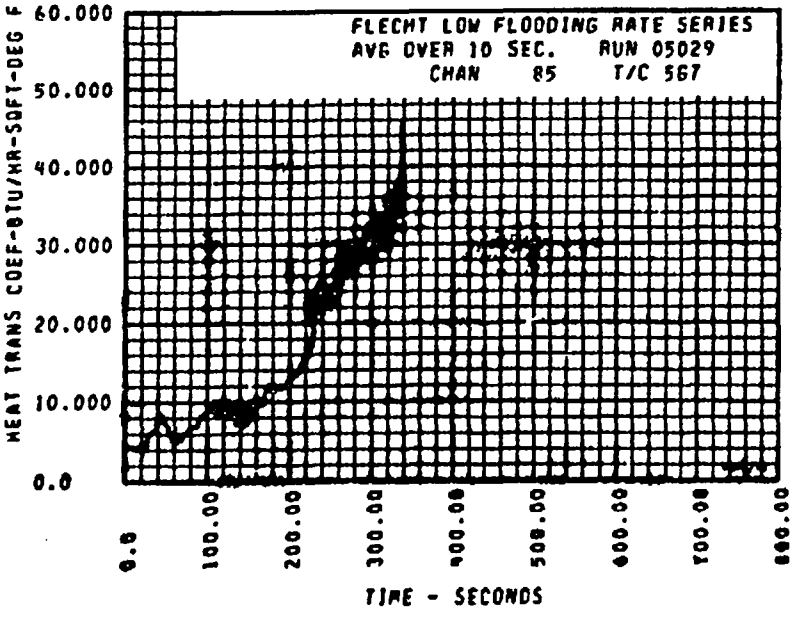

FLECHT LOW FLOODING RATE SERIES
RUN 05029
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

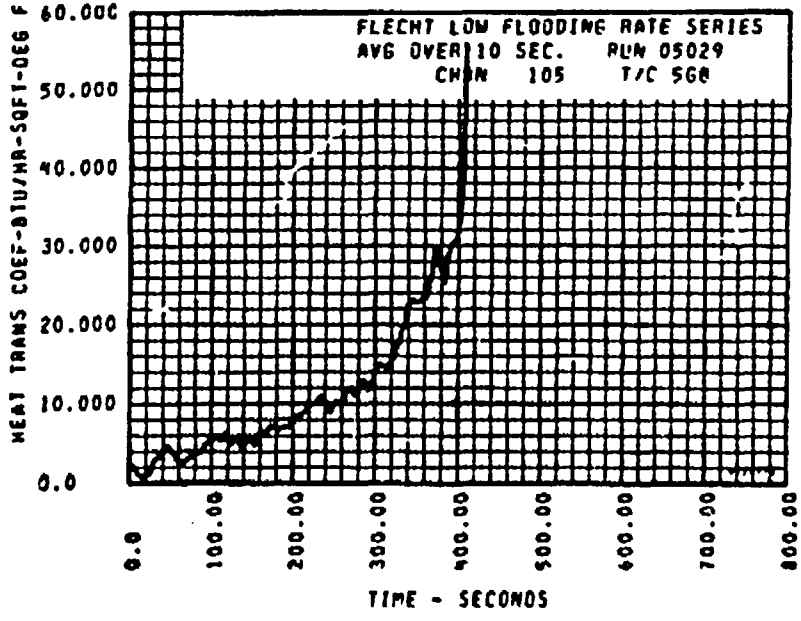

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05029
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

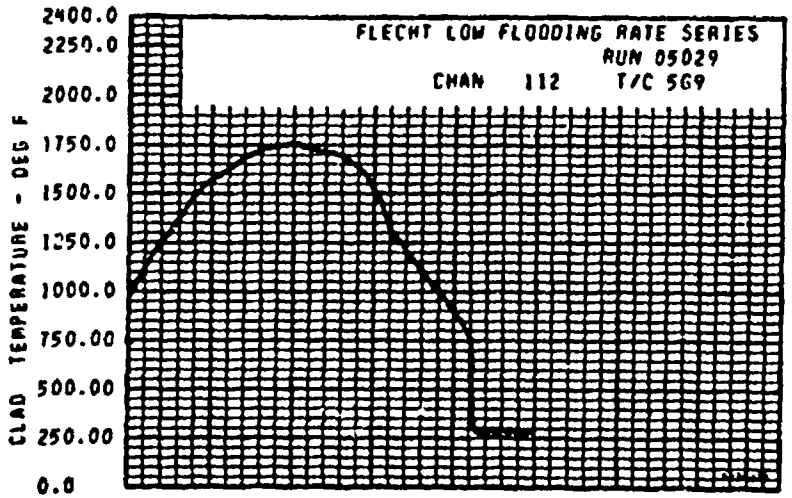

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05029
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

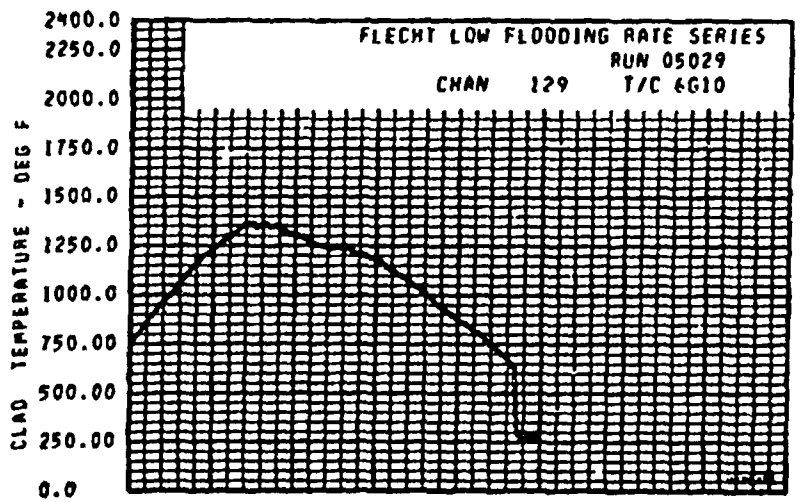

FLECHT LOW FLOODING RATE SERIES
RUN 05029
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

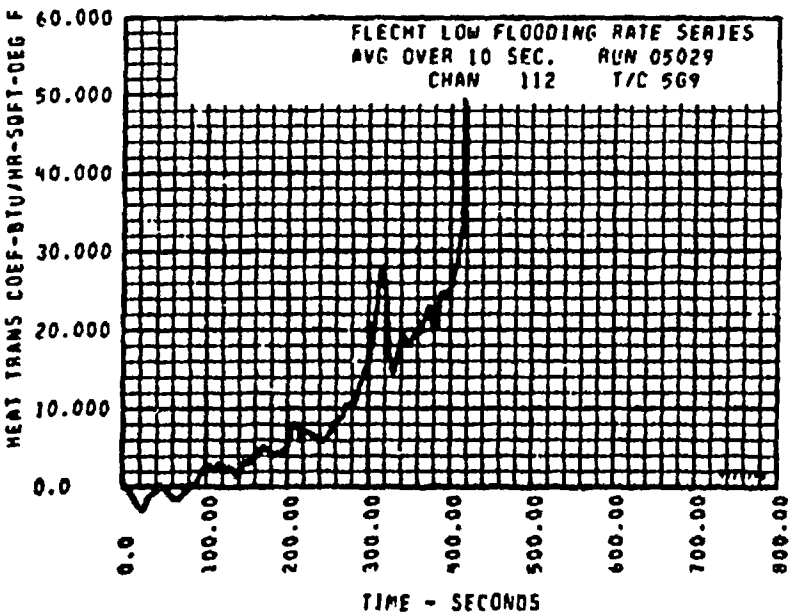

FLECHT LOW FLOODING RATE SERIES
RUN 05029
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

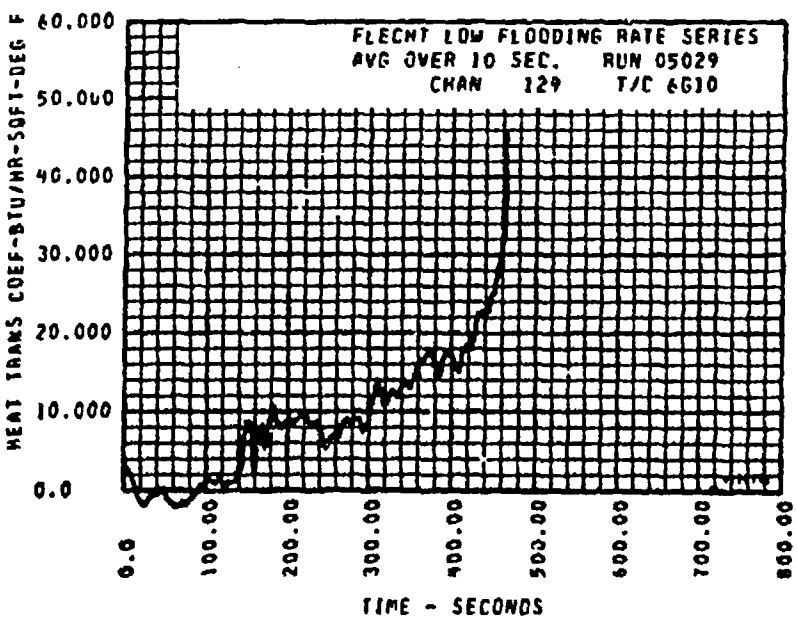

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05029
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

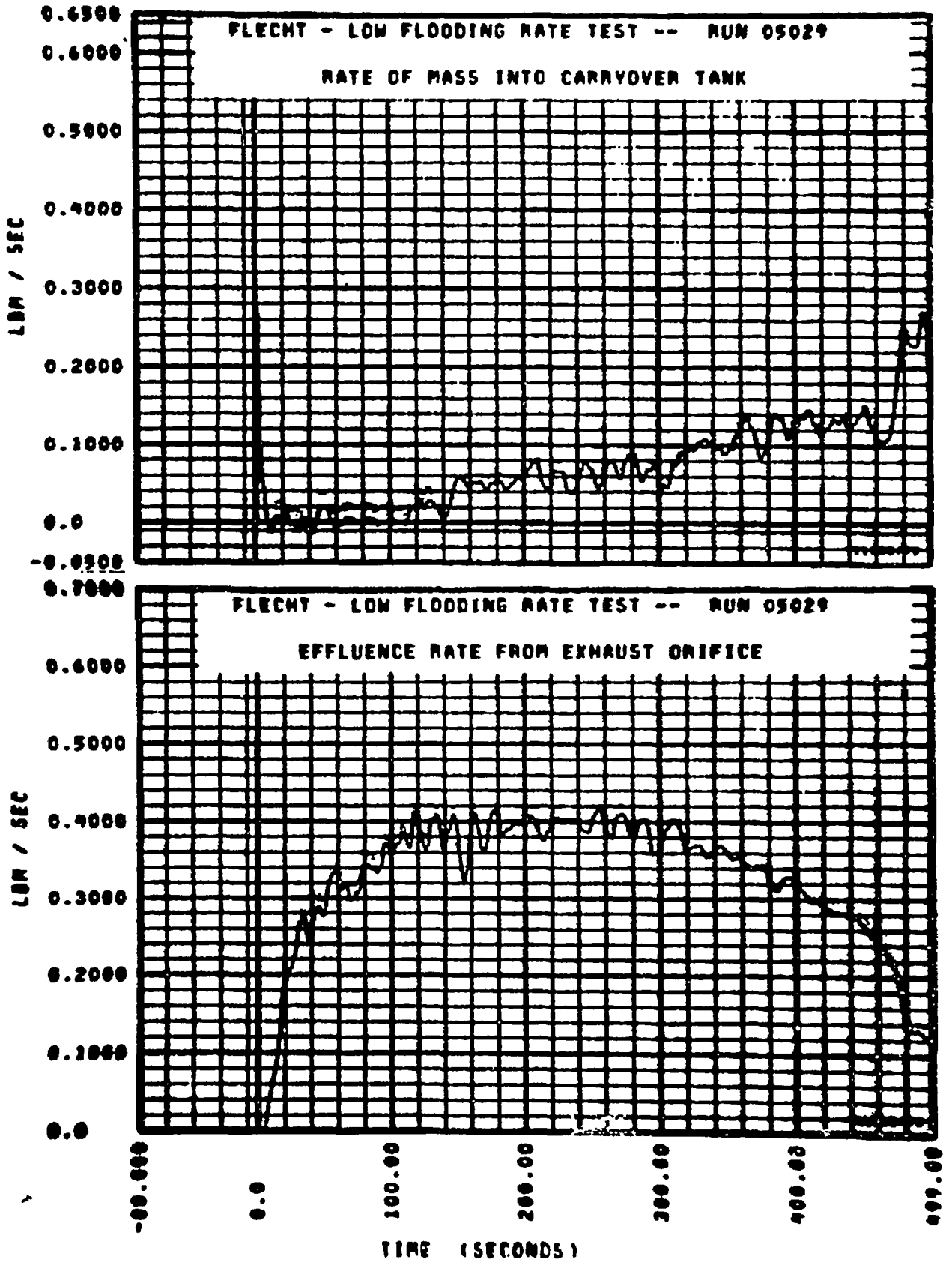

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05029
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

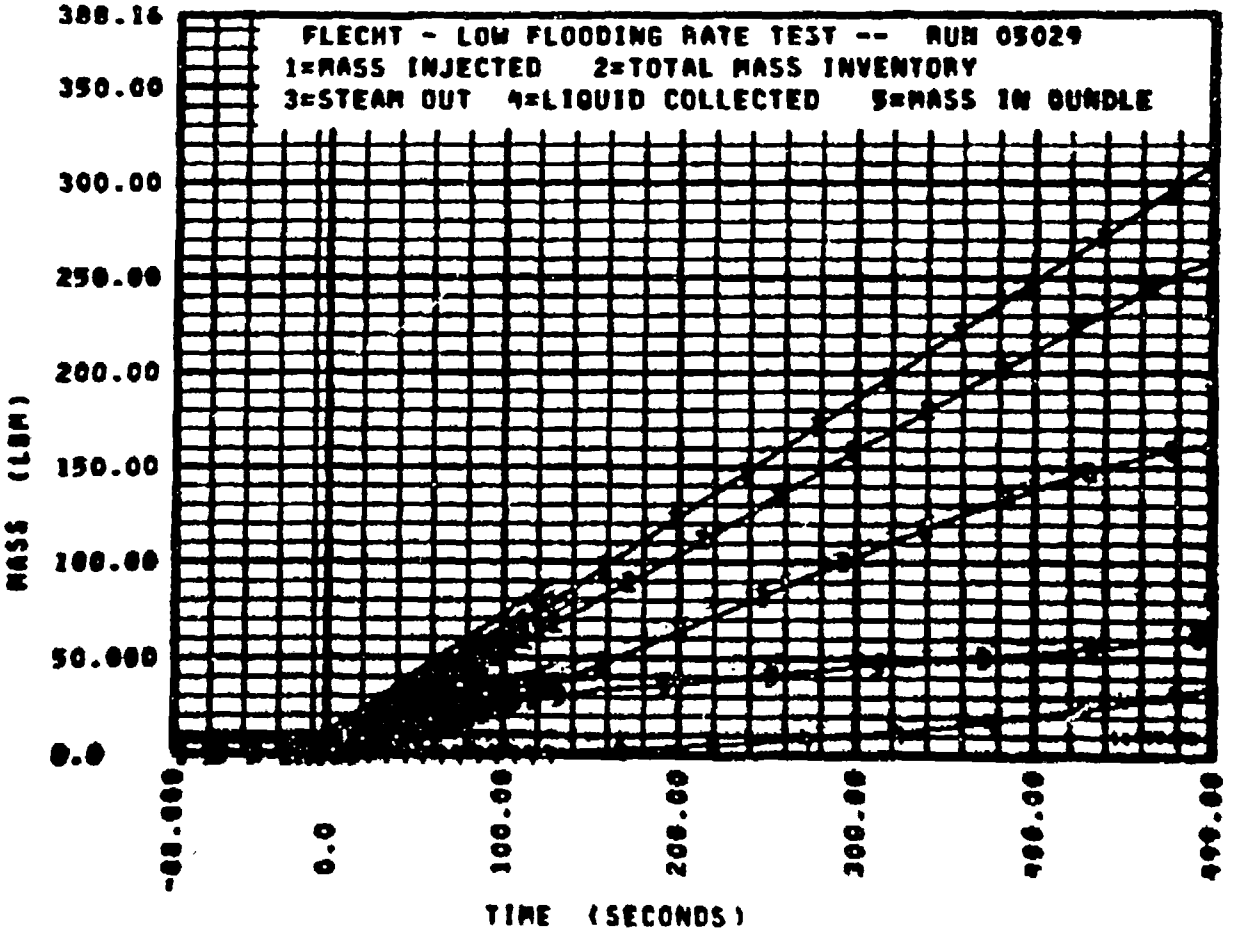

FLECHT LOW FLOODING RATE SERIES
RUN 05029
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

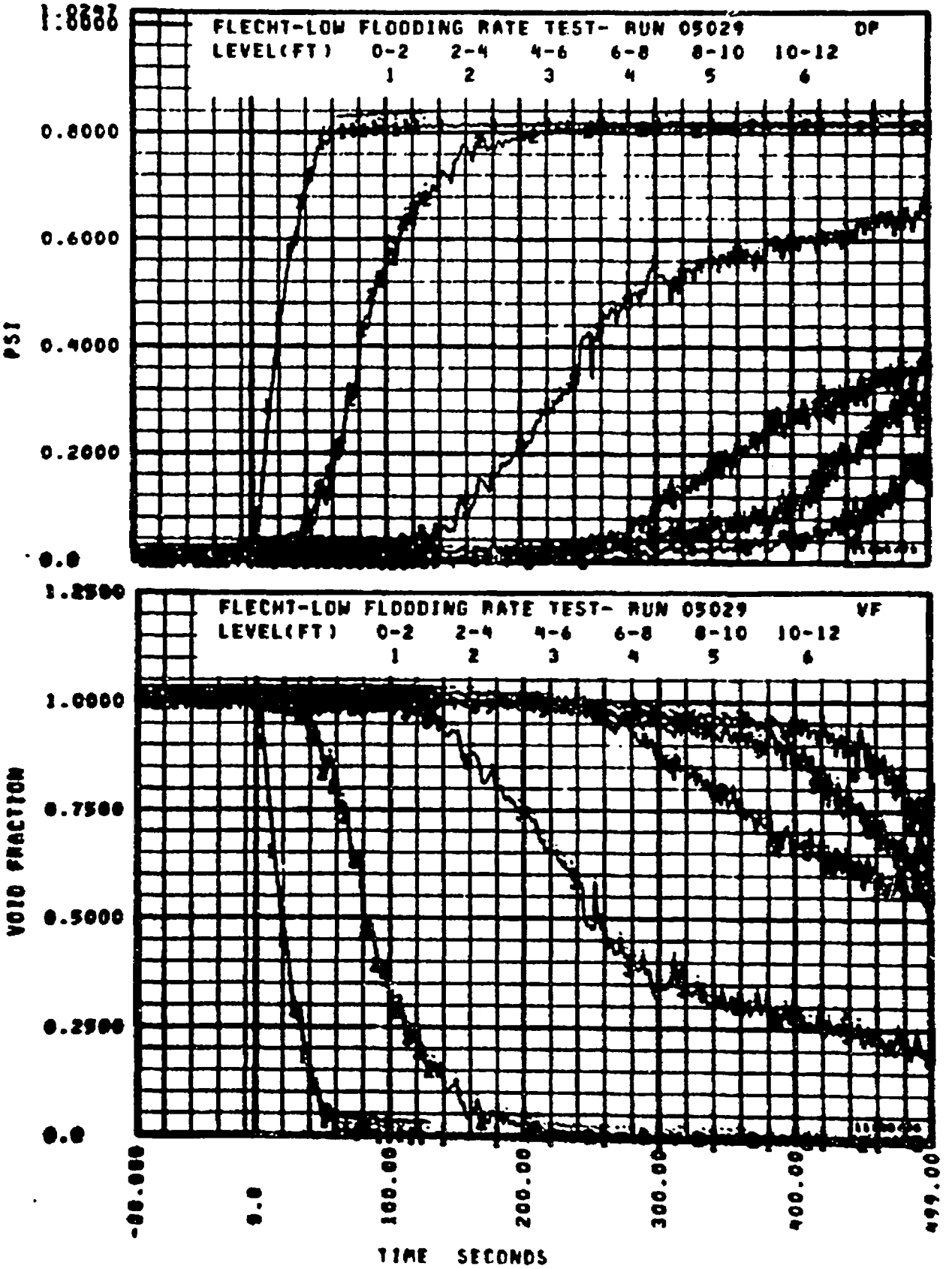

FLECHT LOW FLOODING RATE SERIES
RUN 05029
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

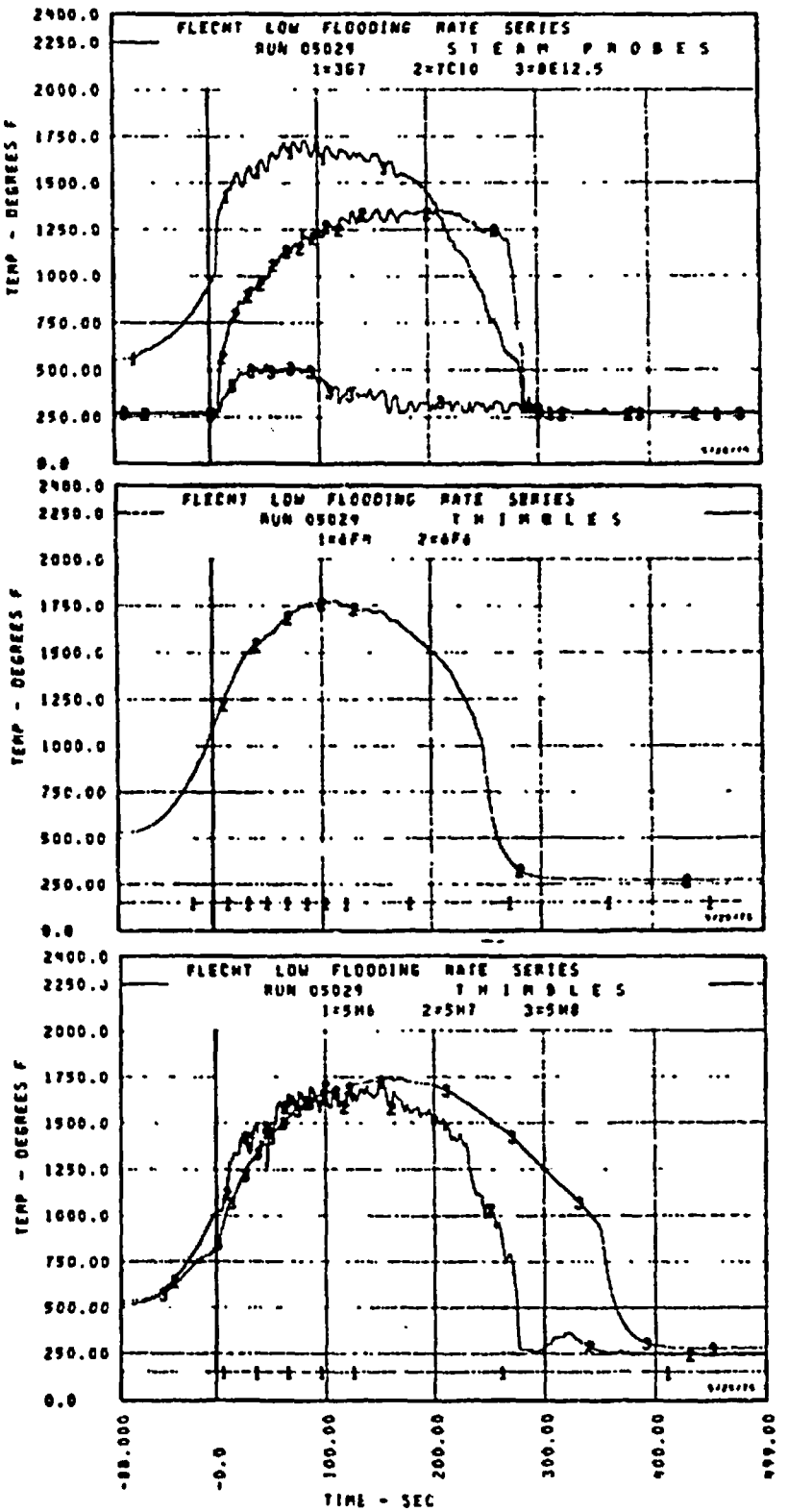

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05029
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

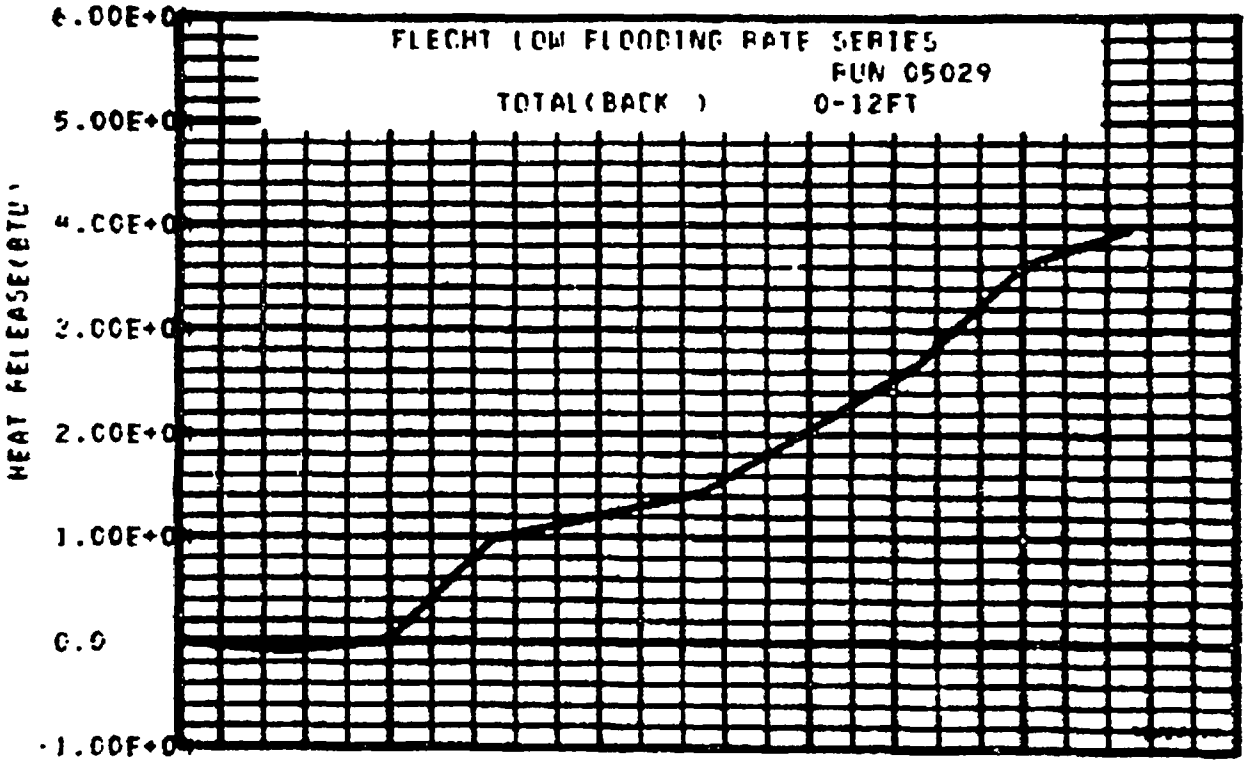

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05029
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

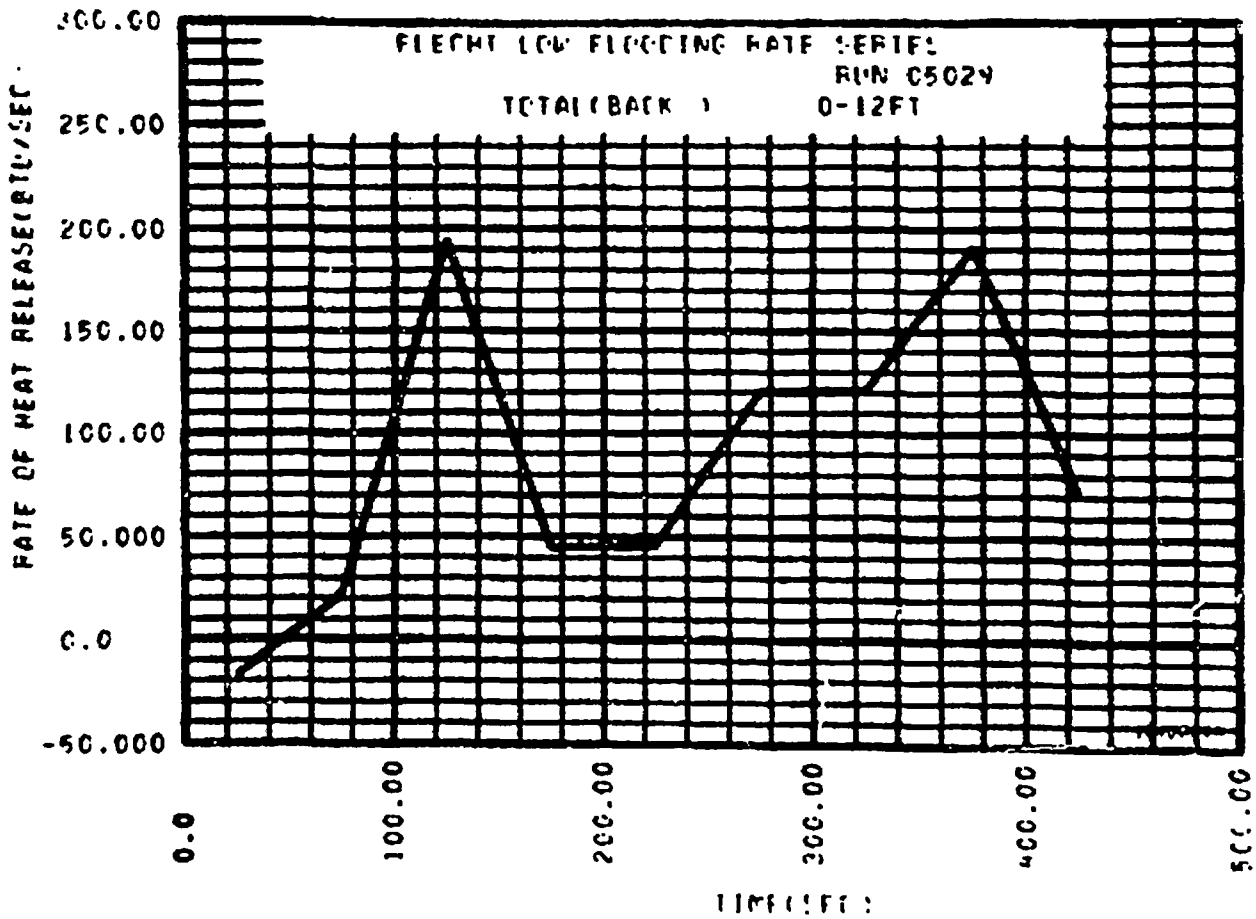

FLECHT - LOW FLOODING RATE TEST -- RUN 05029
RATE OF MASS INTO CARRYOVER TANK
LBM / SEC
0.6500
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
-0.0500
FLECHT - LOW FLOODING RATE TEST -- RUN 05029
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
-50.000
0.0
100.00
200.00
300.00
400.00
500.00
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 05029
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
388.16
350.00
300.00
250.00
200.00
150.00
100.00
50.000
0.0
MASS (LBM)
-50.000
0.0
100.00
200.00
300.00
400.00
500.00
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 05029
DP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 05029
VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-00.000
0.0
100.00
200.00
300.00
400.00
499.00
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 05029
S T E A M P R O B E S
1=3G7 2=TC10 3=8E12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05029
T H I M B L E S
1=6F5 2=6F6
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 05029
T H I M B L E S
1=5N6 2=5N7 3=5N8
TEMP - DEGREES F
-80.000
-0.0
100.00
200.00
300.00
400.00
500.00
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 05029
TOTAL(BACK)
0-12FT
HEAT RELEASE(BTU)
6.00E+0
5.00E+0
4.00E+0
3.00E+0
2.00E+0
1.00E+0
0.0
-1.00E+0


FLECHT LOW FLOODING RATE SERIES
RUN 05029
TOTAL(BACK)
0-12FT
RATE OF HEAT RELEASE(BTU/SEC)
300.00
250.00
200.00
150.00
100.00
50.000
0.0
-50.000
0.0
100.00
200.00
300.00
400.00
500.00
TIME(SEC)

BLANK PAGE

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 05132

DATE: 5/16/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40		
Initial Clad Temperature (6 Ft)°F At Flood	1,601	Rod T/C	4H6
Rod Peak Power, kw/ft	0.95		
Flooding Rate, in/sec	0.99		

Coolant Temperature, °F	127		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

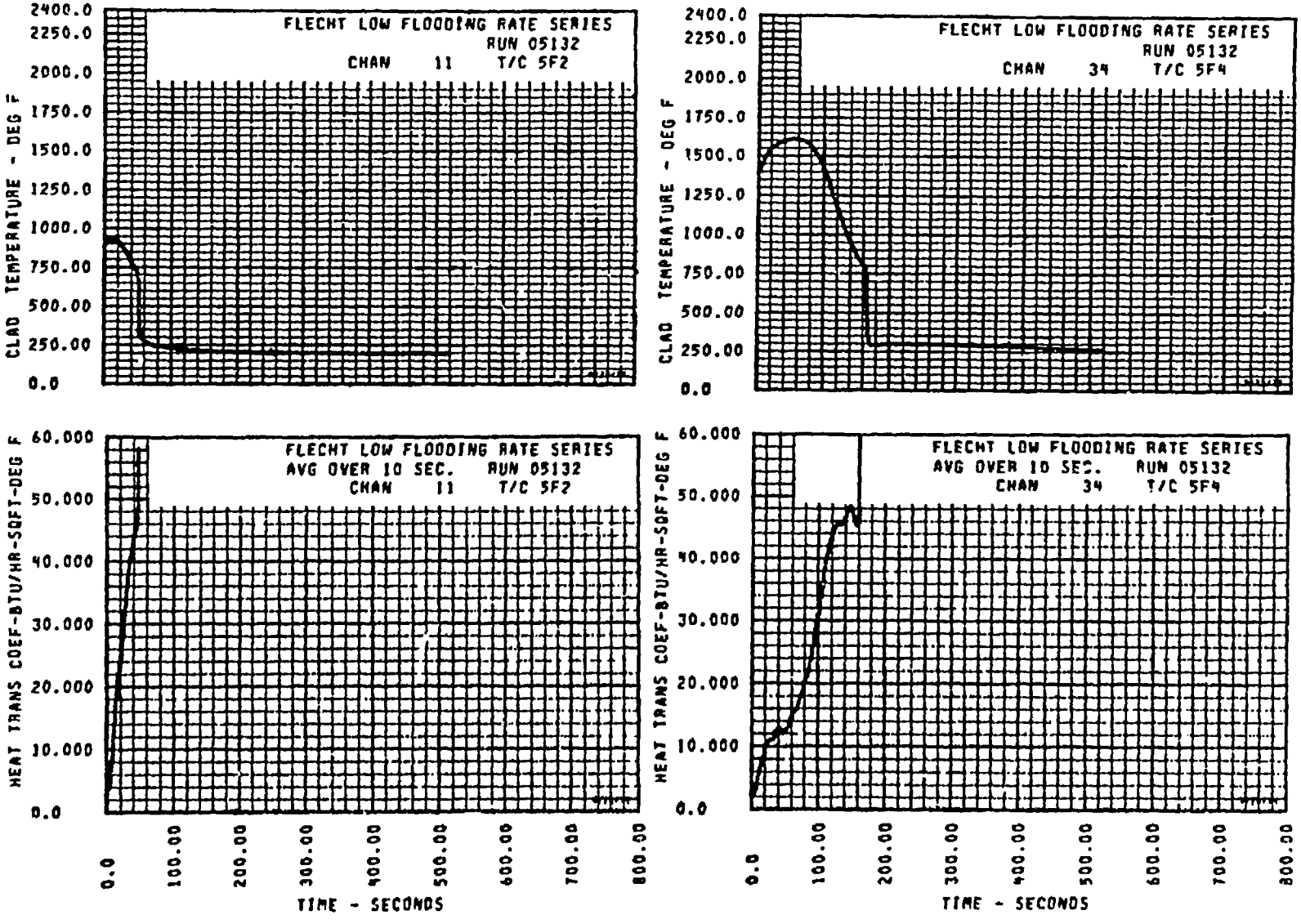
B. INITIAL HOUSING TEMPERATURE

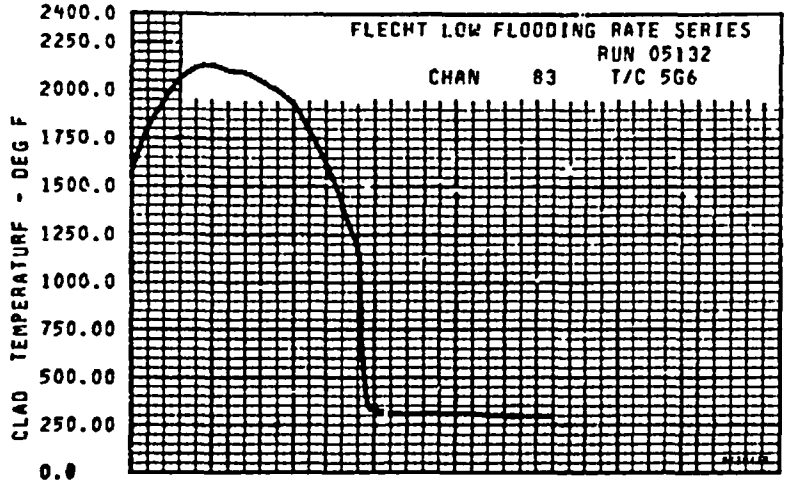
Back Side Elevation, Ft.	Temperature, °F
0	271
2	495
4	668
5.5	764
6	778
6.5	632
7	633
7.5	637
8	665
10	502
12	278
Average	575
Lower Plenum	114
Upper Plenum	270

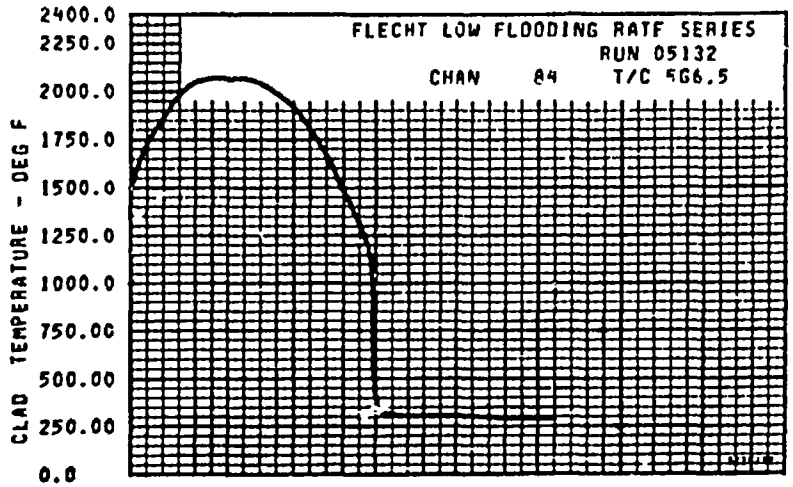
FLECHT-LOW FLOOD [illegible] THERMOCOUPLE DATA

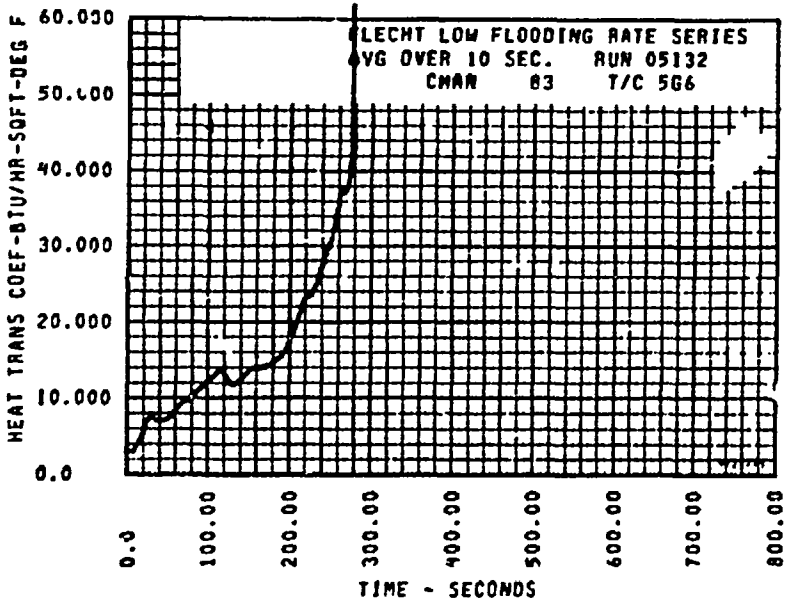
RUN NUMBER 15132

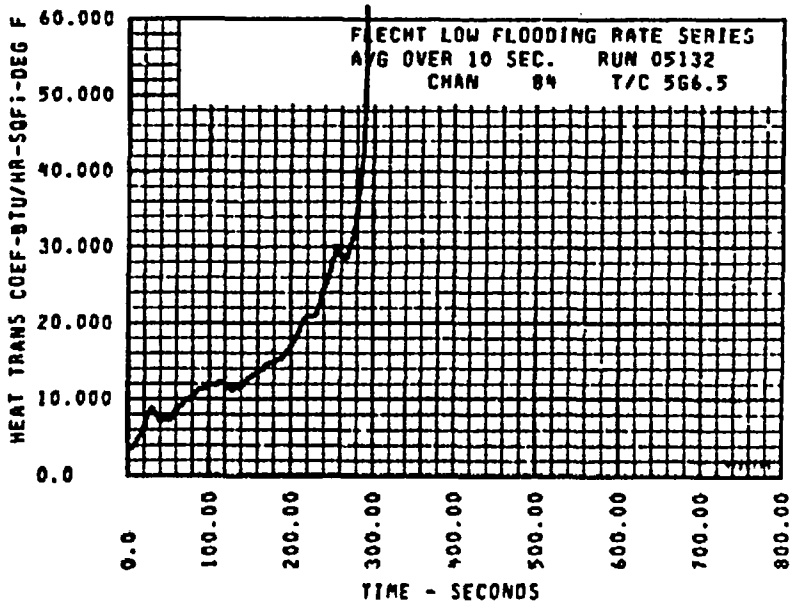
ELEVATION	TEMP RISE AT [illegible] (DEG.F)	TIME OF [illegible] (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4[illegible].5	[illegible]	-5[illegible].6	61[illegible].	674.	21.	5.4	554.	19.5
4[illegible]	341.	-62.6	65[illegible].	685.	33.	[illegible]	591.	23.6
441.5	39[illegible].	-61.6	[illegible]8[illegible].	721.	35.	[illegible]	61[illegible].	36.9
442	[illegible]	-62.[illegible]	917.	972.	55.	17.4	734.	52.6
444	563.	-61.6	1[illegible].	1644.	245.	41.5	[illegible]23.	165.9
446	591.	-61.6	1531.	2990.	40[illegible].	92.9	94[illegible].	296.4
[illegible]	514.	-61.6	1505.	2019.	514.	[illegible].0	[illegible]2[illegible].	299.9
[illegible].5	3[illegible].	-61.6	143[illegible].	234[illegible].	61[illegible].	113.0	943.	335.8
[illegible]	574.	-61.6	140[illegible].	156[illegible].	45[illegible].	137.2	7[illegible].	350.6
[illegible]	551.	-61.6	127[illegible].	1361.	686.	167.0	[illegible]1[illegible].	435.9
[illegible]	[illegible]	-61.6	[illegible]55.	169[illegible].	74[illegible].	178.0	6[illegible]9.	478.0
[illegible]	376.	-61.6	73[illegible].	1397.	665.	20[illegible].0	714.	456.6
[illegible]	372.	-61.6	[illegible]8[illegible].	1[illegible]5.	437.	1[illegible].0	731.	415.7
[illegible]	372.	-61.6	472.	953.	3[illegible]1.	203.0	531.	336.4
5[illegible]	272.	-61.6	29[illegible].	287.	9.	0.[illegible]	292.	.6
5[illegible].5	396.	-62.6	60[illegible].	675.	1[illegible].	4.4	5[illegible].	18.1
5[illegible]	373.	-61.6	634.	665.	31.	8.0	5[illegible]7.	25.9
5[illegible]1.5	[illegible] BAD THERMOCOUPLE				DATA [illegible]			
5[illegible]	[illegible]	-61.6	987.	939.	5[illegible].	10.6	6[illegible]7.	51.9
5[illegible]	371.	-61.6	1[illegible].	1263.	114.	30.0	714.	97.3
5[illegible]	557.	-62.6	1391.	1622.	231.	56.[illegible]	775.	165.7
5[illegible]	55[illegible].	-62.6	157[illegible].	2082.	50[illegible].	92.6	100[illegible].	242.5
556	562.	-60.6	157[illegible].	2138.	563.	93.6	1192.	282.9
556.5	510.	-61.6	1555.	2074.	569.	107.8	1[illegible]74.	296.8
557	598.	-61.6	[illegible]43[illegible].	19[illegible]1.	543.	145.0	919.	349.7
558	551.	-60.6	1323.	2078.	754.	180.0	[illegible].	432.8
559	3[illegible].	-61.6	[illegible]97.	1794.	803.	193.0	699.	468.9
5511	272.	-61.6	59[illegible].	1031.	441.	197.0	524.	477.0
5512	270.	-61.6	564.	927.	363.	196.0	427.	493.5
164	683.	-61.6	1324.	1434.	110.	32.6	[illegible]52.	128.5
166	741.	-62.6	154[illegible].	1769.	229.	60.6	935.	278.6
1610	363.	-61.6	771.	1100.	329.	119.8	566.	484.8
342	466.	-61.6	917.	970.	53.	10.2	714.	48.3
346	714.	-61.6	1591.	2845.	454.	81.8	961.	286.9
348	611.	-61.6	1334.	1975.	635.	134.0	915.	420.9
3410	322.	-61.6	78[illegible].	1471.	683.	160.0	1006.	384.6

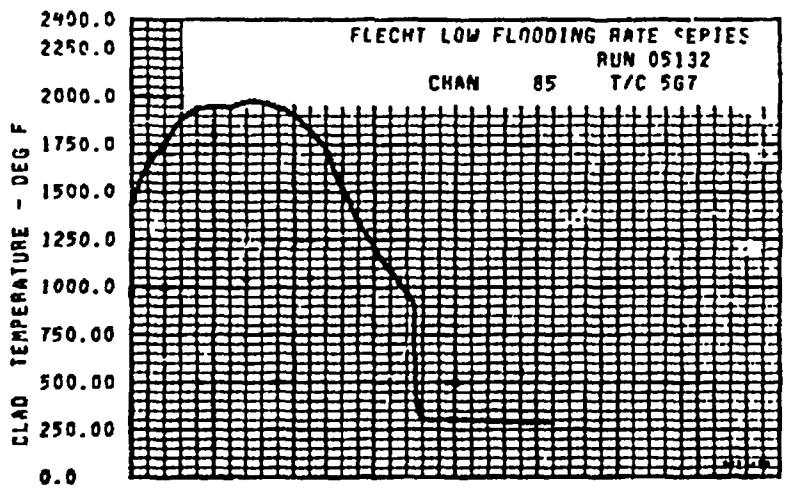

FLECHT LOW FLOODING RATE SERIES
RUN 05132
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05132
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05132
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05132
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

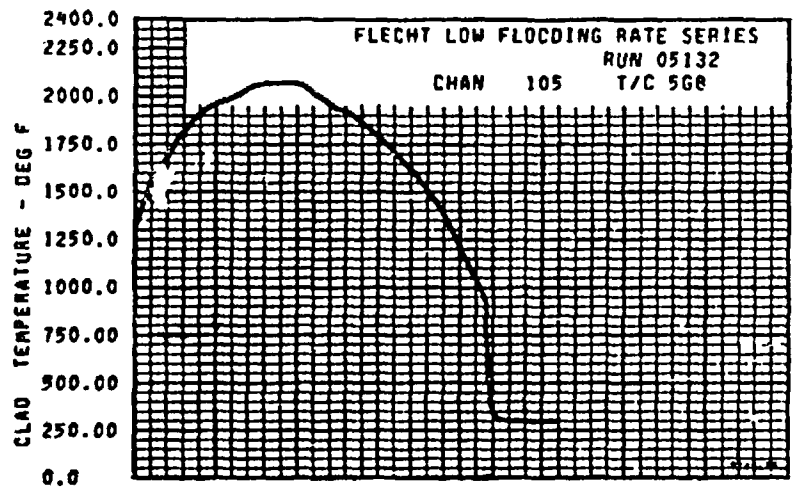

FLECHT LOW FLOODING RATE SERIES
RUN 05132
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

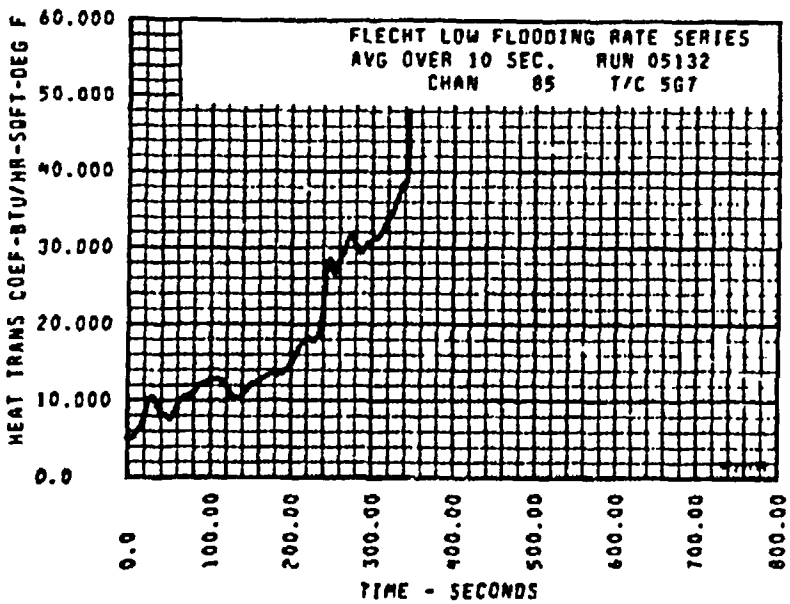

FLECHT LOW FLOODING RATE SERIES
RUN 05132
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

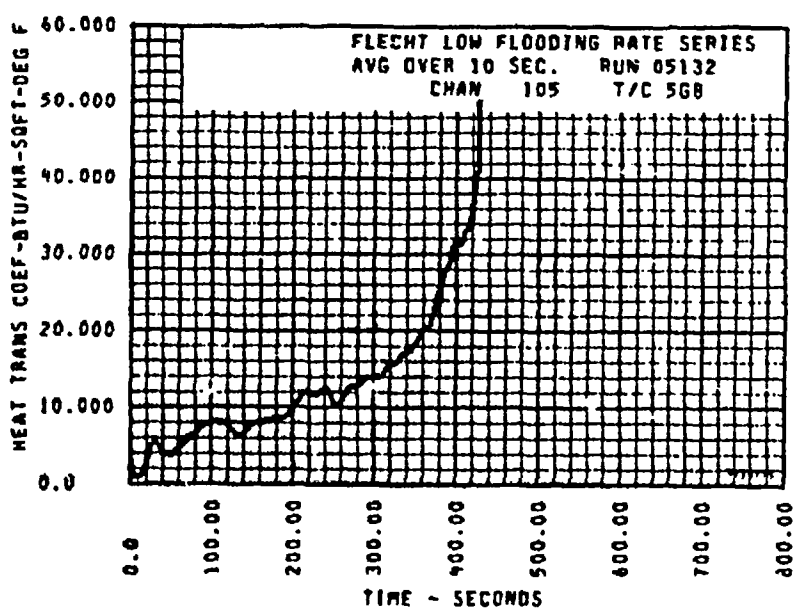

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05132
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

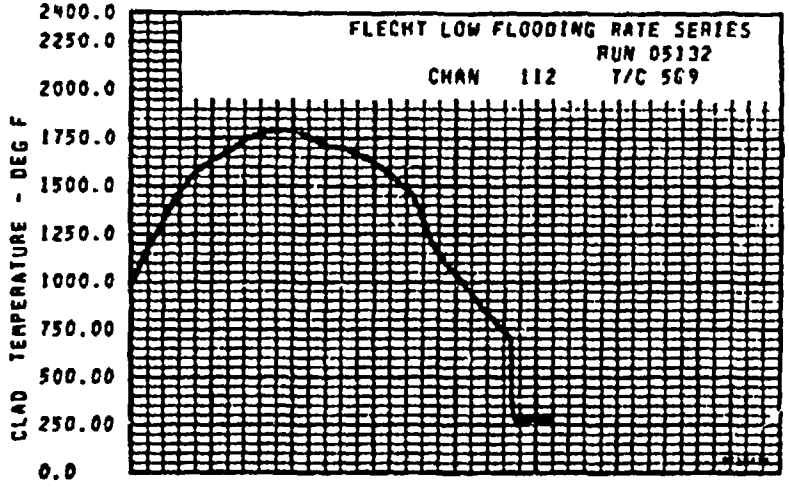

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05132
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

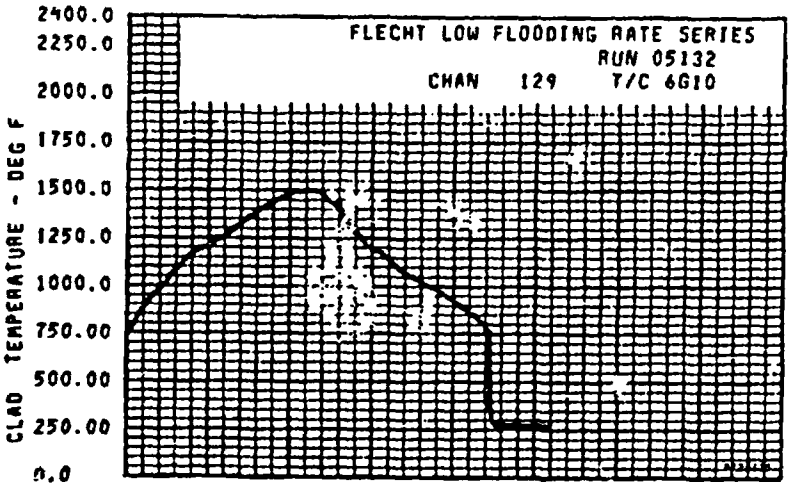

FLECHT LOW FLOODING RATE SERIES
RUN 05132
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

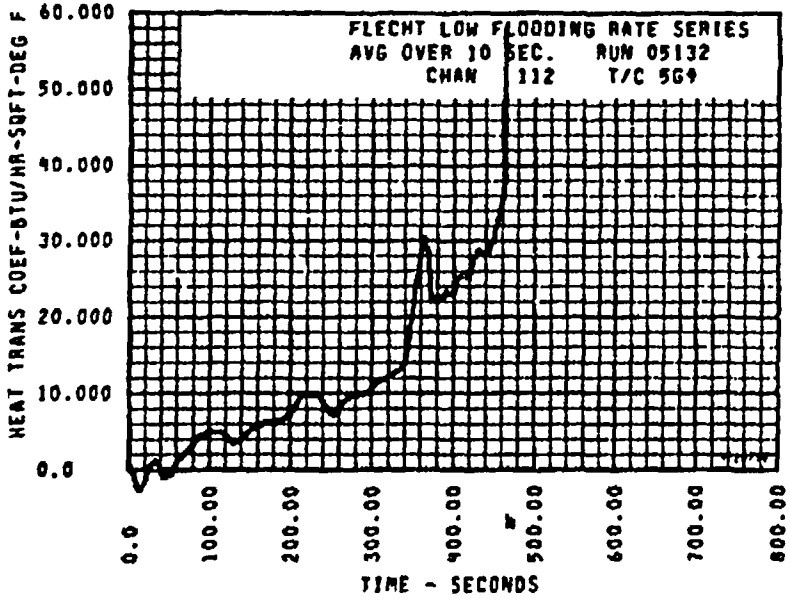

FLECHT LOW FLOODING RATE SERIES
RUN 05132
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

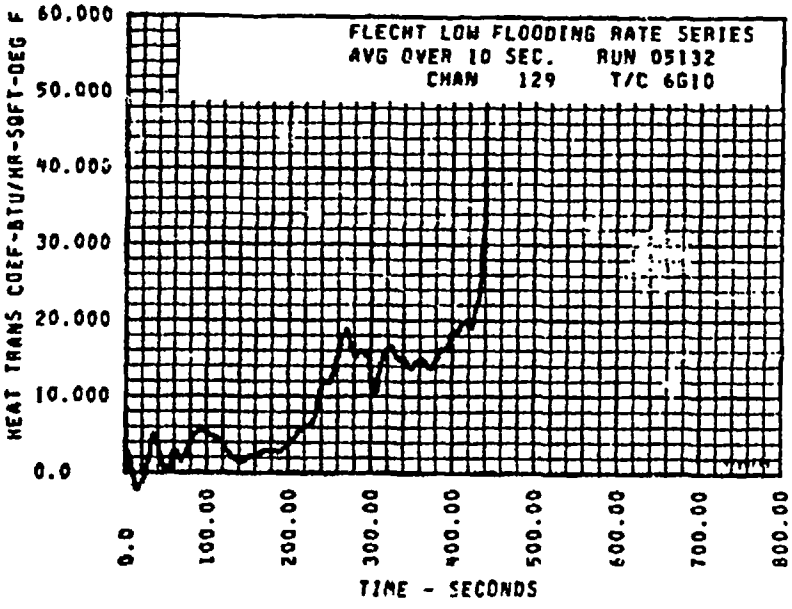

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05132
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

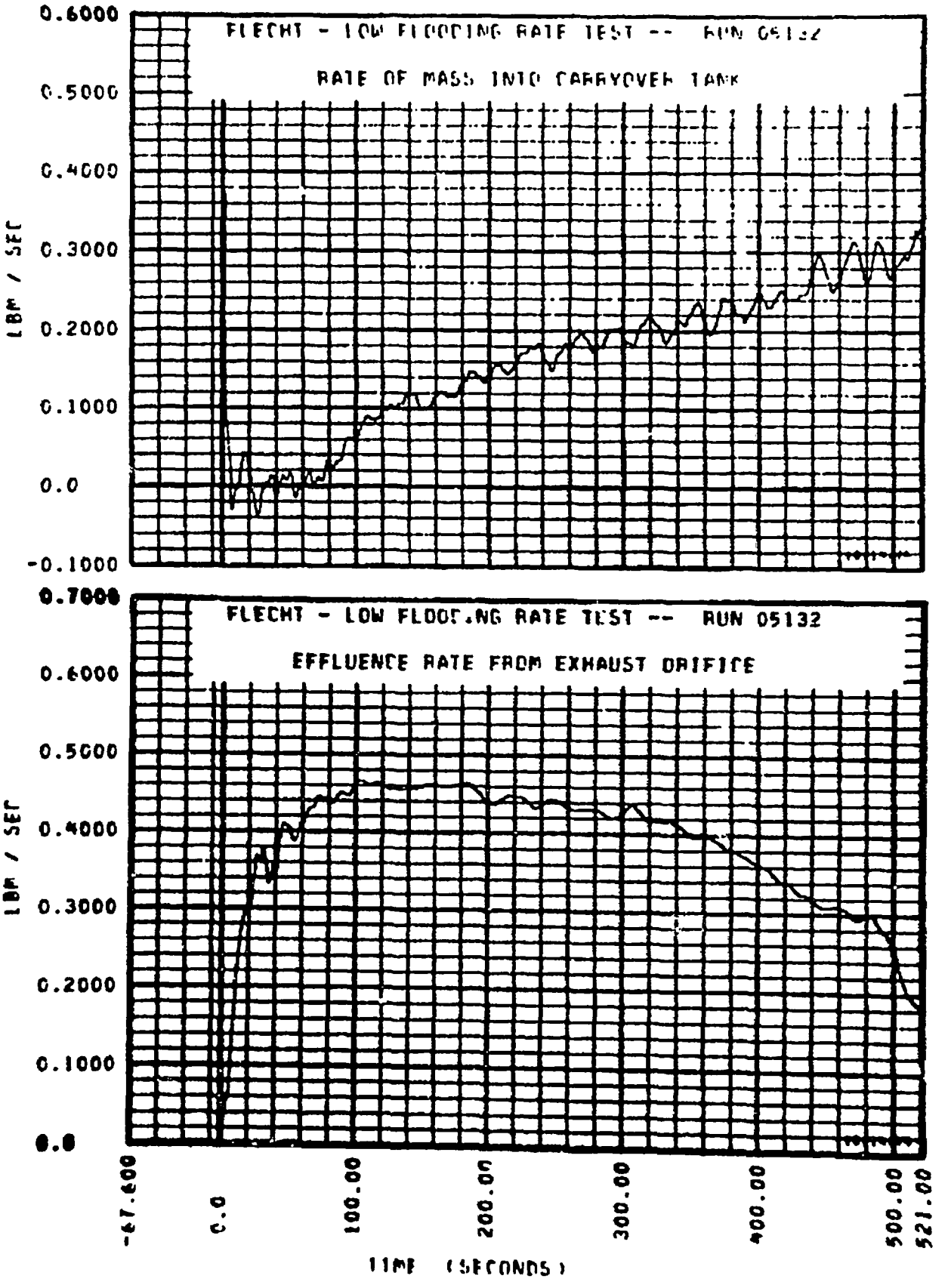

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05132
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

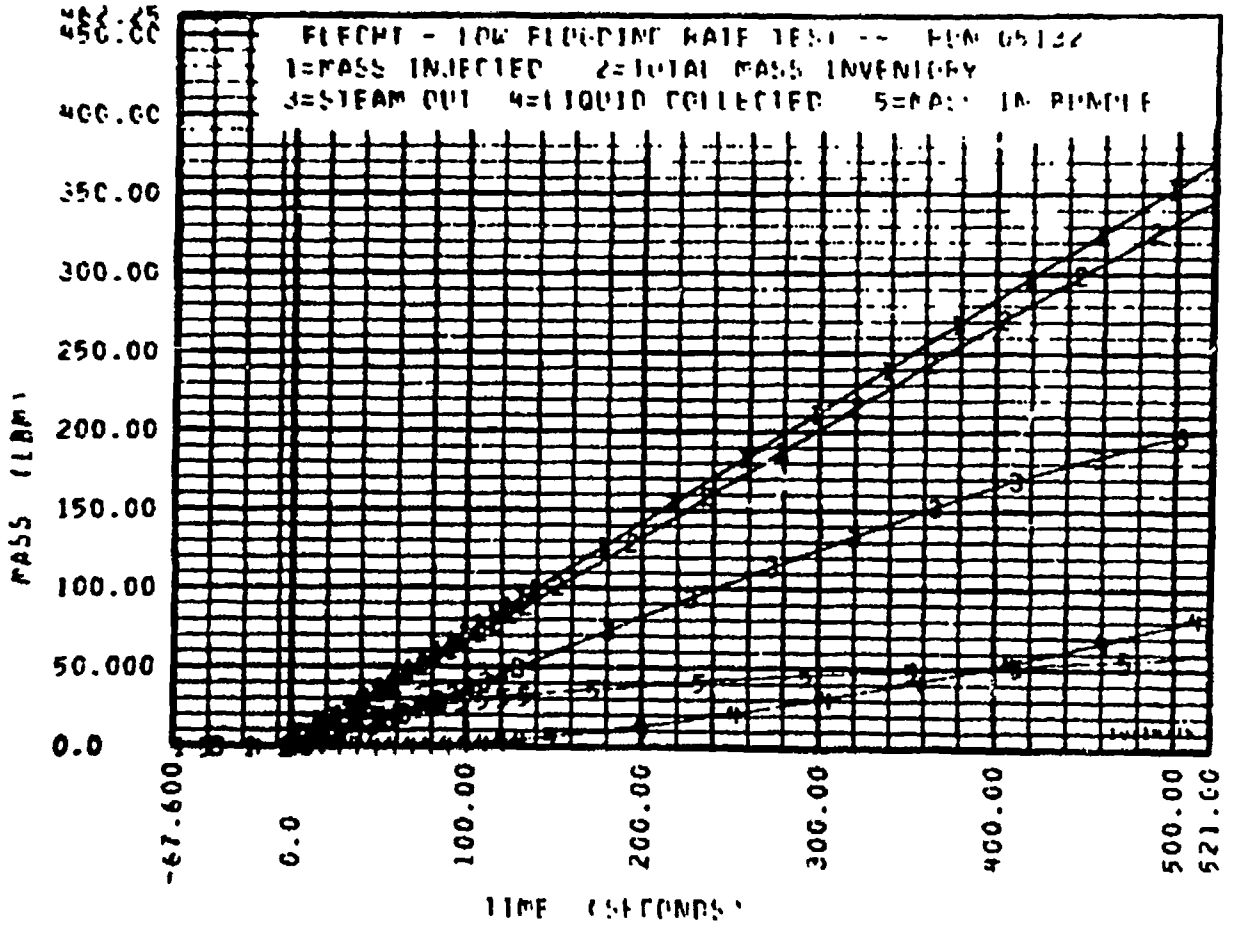

FLECHT LOW FLOODING RATE SERIES
RUN 05132
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

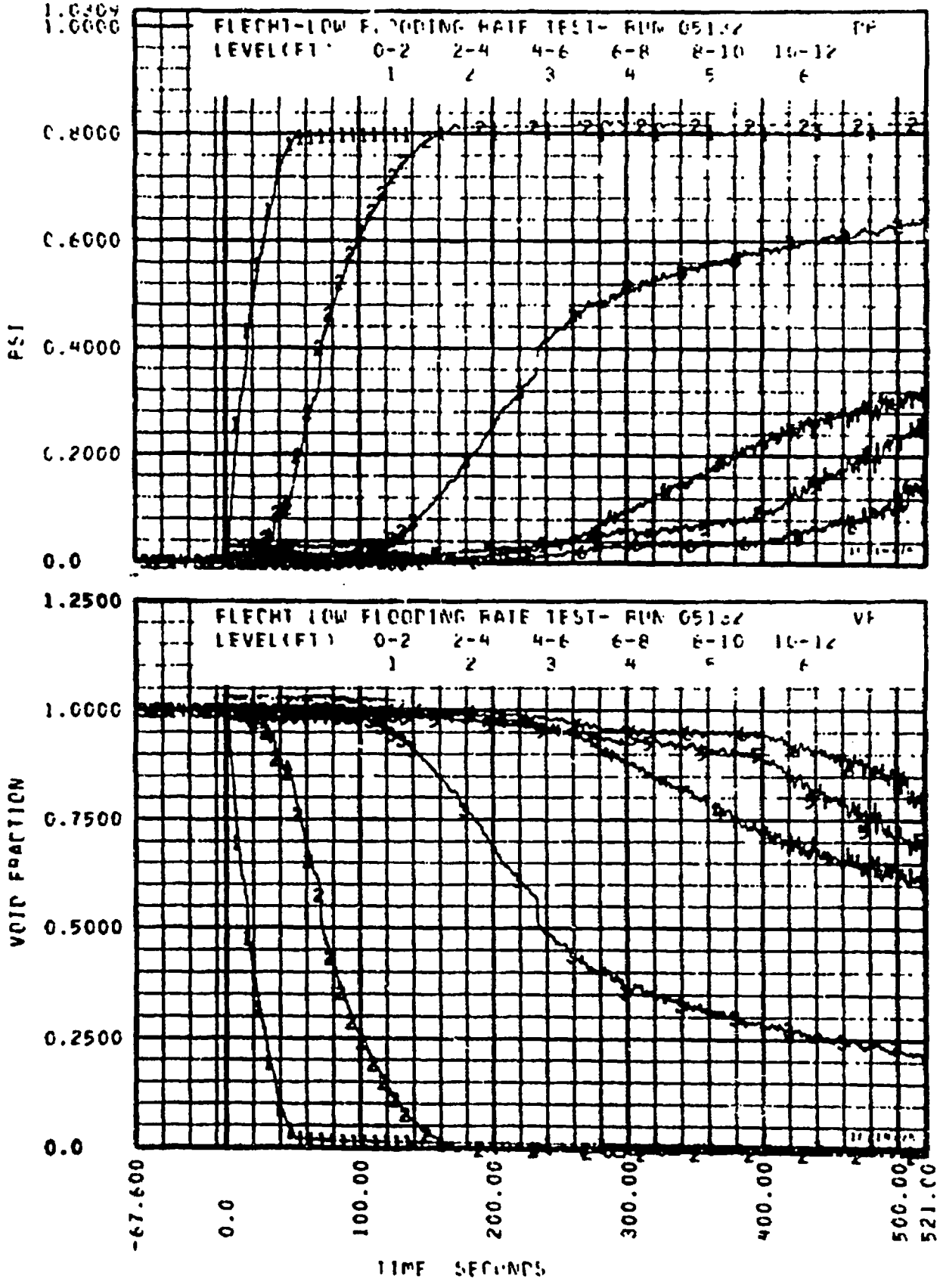

FLECHT LOW FLOODING RATE SERIES
RUN 05132
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

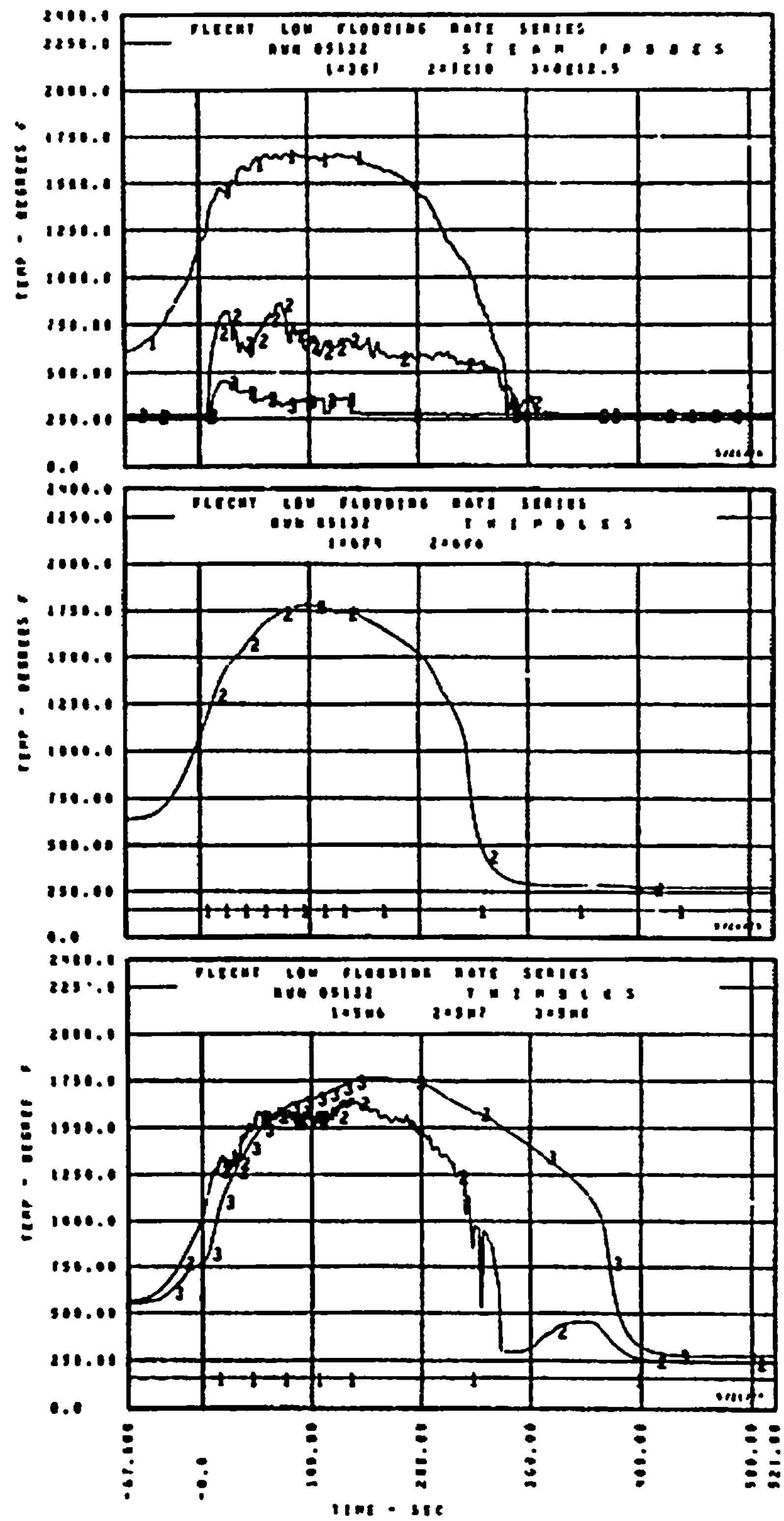

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05132
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

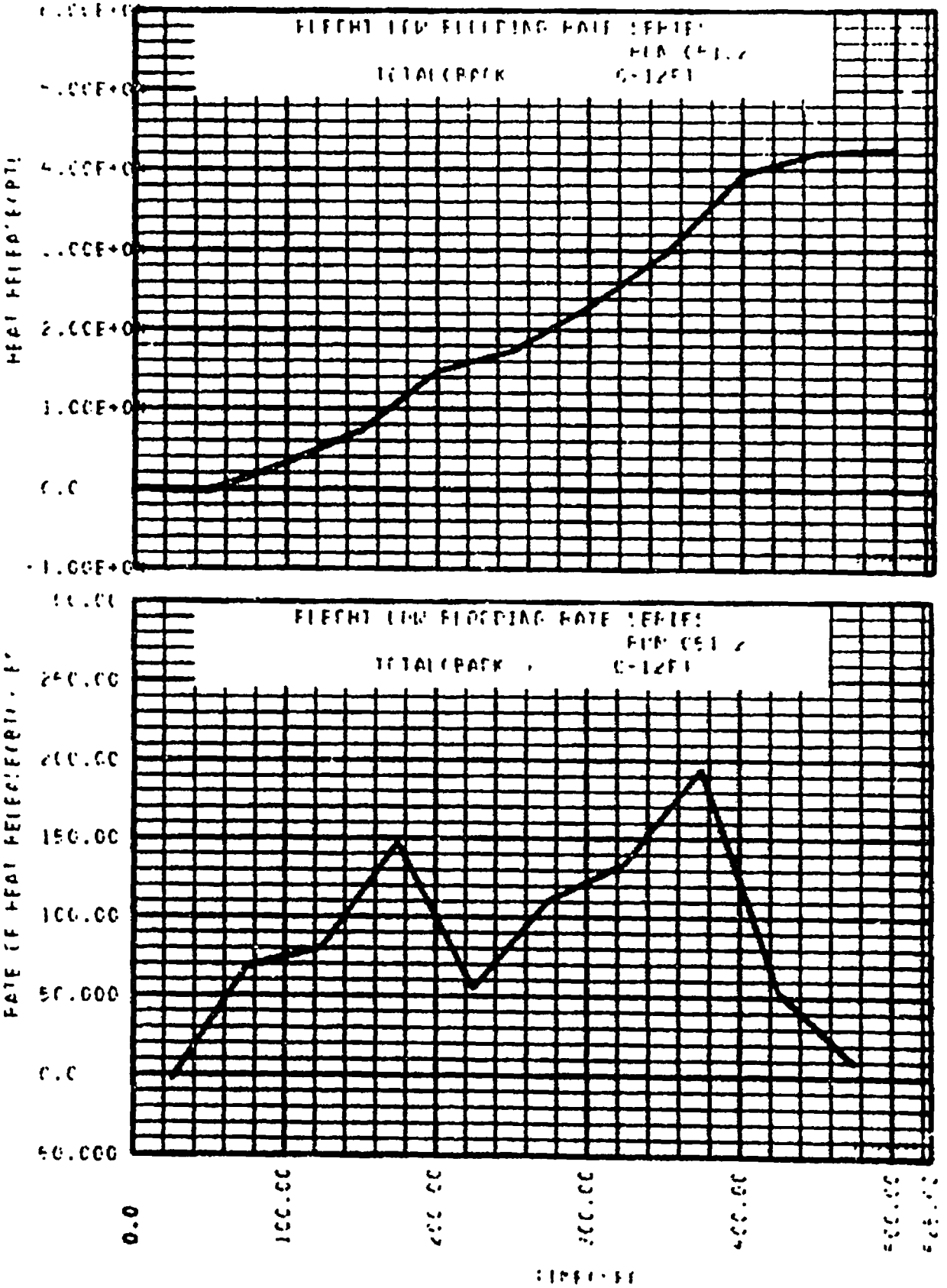

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05132
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 05132
RATE OF MASS INTO CARRYOVER TANK
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
-0.1000
LBM / SEC
FLECHT - LOW FLOODING RATE TEST -- RUN 05132
EFFLUENCE RATE FROM EXHAUST ORIFICE
0.7000
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
LBM / SEC
-47.600
0.0
100.00
200.00
300.00
400.00
500.00
521.00
TIME (SECONDS)


1=MASS INJECTED
2=TOTAL MASS INVENTORY
3=STEAM OUT
4=LIQUID COLLECTED
5=MASS IN PUMPLE
450.00
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.000
0.0
-67.600
0.0
100.00
200.00
300.00
400.00
500.00
521.00


FLECHT-LOW FLOODING RATE TEST- RUN 051
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
PSI
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
FLECHT LOW FLOODING RATE TEST- RUN 051
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
VOID FRACTION
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
-67.600
0.0
100.00
200.00
300.00
400.00
500.00
521.00
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
STEAM PROBES
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
TIME - SEC



FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 05239

DATE: 5/19/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	60	
Initial Clad Temperature (6 Ft)°F At Flood	1,600	Rod T/C 4H6
Rod Peak Power, kw/ft	0.95	
Flooding Rate, in/sec	0.82	

Coolant Temperature, °F	150	
Bundle Radial Power Profile	FLECHT	
Disconnected Rods	7F & 8C (Failed During Run)	

B. INITIAL HOUSING TEMPERATURE

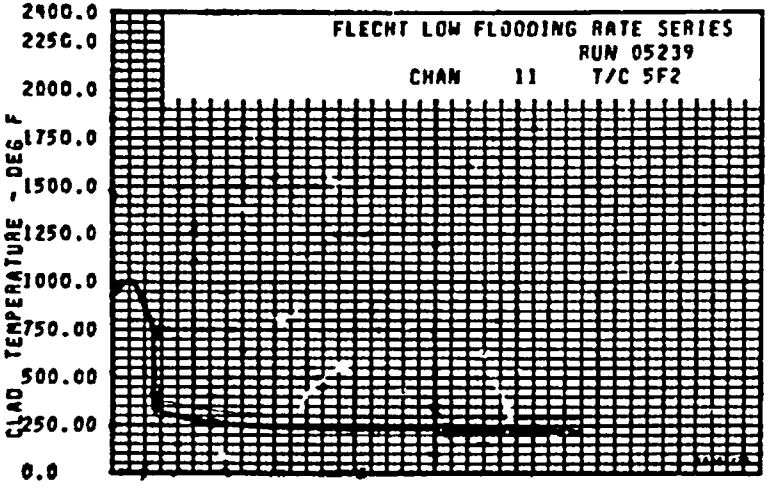
Back Side Elevation, Ft.	Temperature, °F
0	292
2	575
4	731
5.5	806
6	815
6.5	669
7	675
7.5	692
8	742
10	600
12	269
Average	624
Lower Plenum	138
Upper Plenum	295

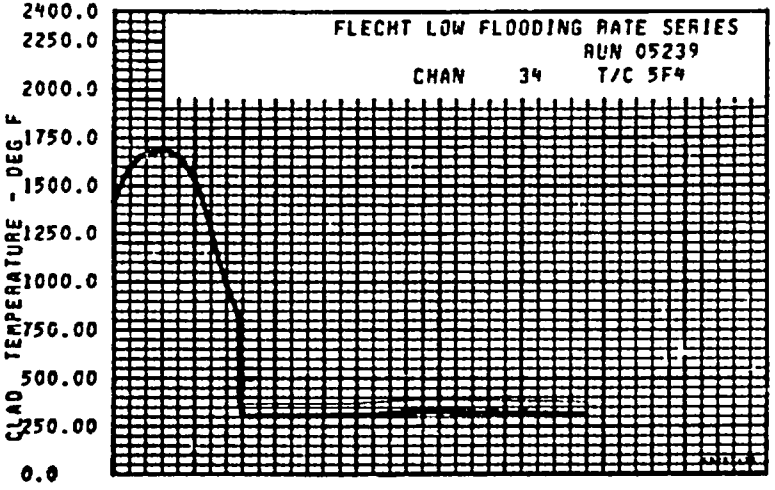
BLANK PAGE

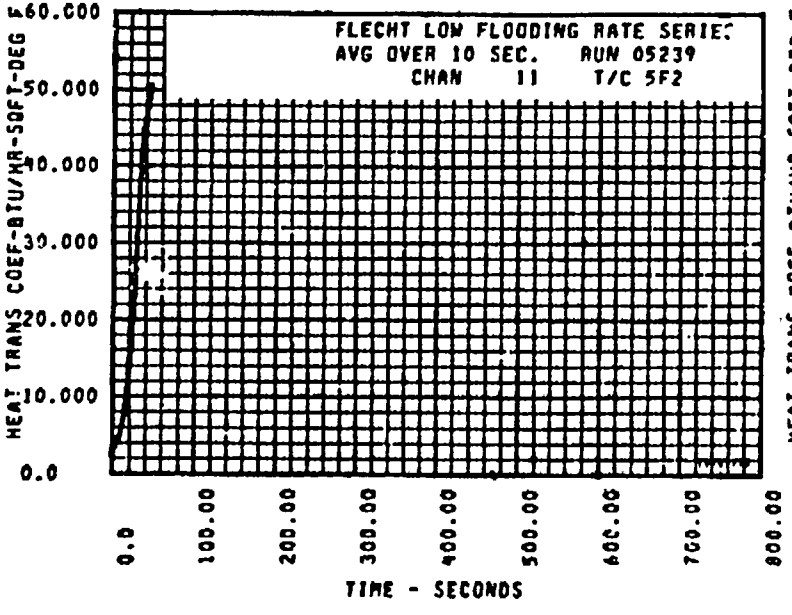
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

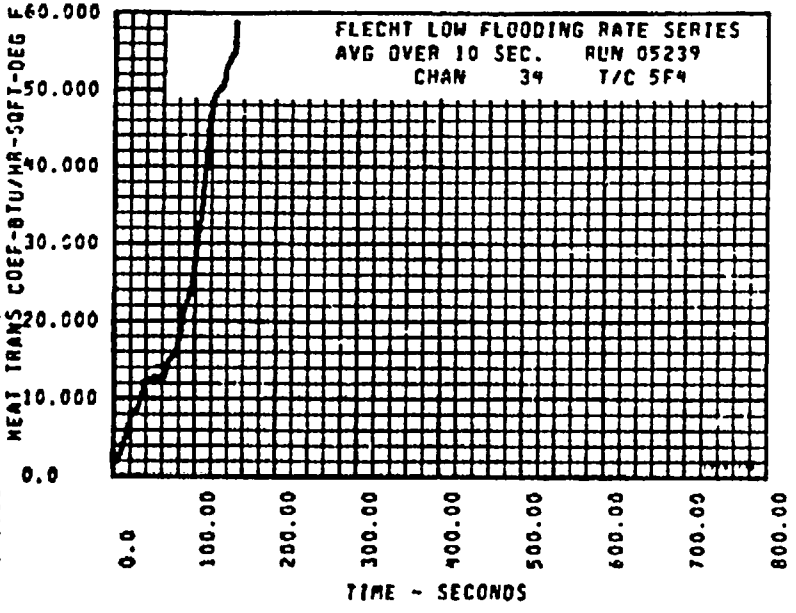
RUN NUMBER 05239

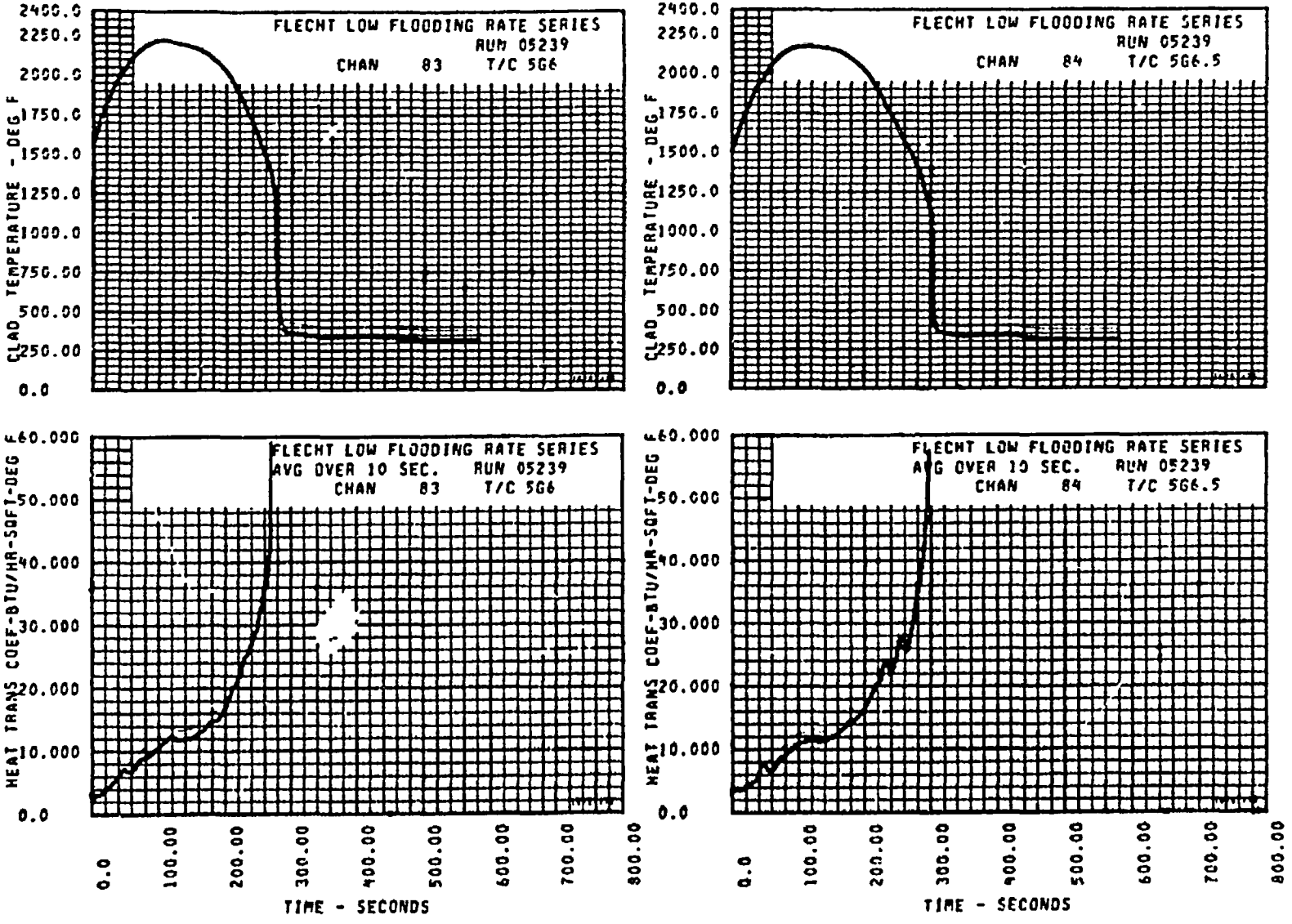
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
6H0.5	318.	-59.6	615.	645.	29.	7.8	574.	19.9
6H1	397.	-59.6	672.	717.	45.	12.6	621.	27.6
6H1.5	668.	-59.6	735.	782.	47.	15.9	678.	36.8
6H2	562.	-59.6	962.	1050.	89.	20.6	785.	53.8
6H4	738.	-59.6	1427.	1713.	286.	64.0	936.	153.5
6H6	777.	-59.6	1600.	2171.	571.	49.2	1873.	285.9
8H6	643.	-59.6	1492.	2106.	614.	182.8	1978.	275.9
8H6.5	598.	-57.6	1415.	2133.	718.	110.4	1023.	327.6
8H7	335.	-59.6	1381.	1987.	601.	186.6	790.	372.4
8H8	597.	-59.6	1265.	2100.	830.	149.0	956.	646.9
8H9	655.	-59.6	1007.	1919.	916.	191.9	771.	583.4
8H10	776.	-59.6	778.	1714.	936.	218.0	699.	535.0
8H11	797.	-59.6	590.	1564.	974.	255.0	844.	510.5
8H12	725.	-59.6	310.	945.	676.	267.0	513.	430.8
5F0	390.	-59.6	437.	437.	0.	0.0	433.	.7
5F0.5	395.	-59.6	607.	834.	26.	6.6	546.	13.8
5F1	15[illegible].	-59.6	64[illegible].	692.	43.	11.6	567.	29.8
5F1.5	* * * BAD THERMOCOUPLE				DATA * * *			
5F2	532.	-59.6	921.	1009.	73.	19.6	756.	51.4
5F3	552.	-59.6	1190.	1340.	150.	34.2	779.	35.1
5F4	733.	-59.6	1421.	1693.	272.	63.9	835.	155.7
5F6	713.	-59.6	1561.	2169.	608.	198.0	1056.	275.0
5G6	711.	-57.6	1566.	2229.	663.	102.0	1277.	274.8
5G6.5	659.	-57.6	1513.	2178.	665.	110.2	1060.	302.[illegible]
5G7	351.	-59.6	1442.	2156.	714.	147.3	925.	353.5
5G8	674.	-57.6	1358.	2276.	918.	172.0	1017.	441.8
5G9	397.	-59.6	1117.	2077.	956.	194.0	847.	489.9
5G11	736.	-59.6	510.	1854.	1064.	272.0	597.	554.0
5G12	737.	-59.6	570.	1553.	983.	257.0	665.	561.0
1G4	777.	-59.6	1350.	1512.	161.	61.9	970.	125.7
1G5	745.	-59.6	157[illegible].	1347.	313.	74.8	731.	272.9
1G10	970.	-59.6	586.	1324.	443.	169.3	659.	524.0
3H2	565.	-59.6	957.	1043.	88.	20.7	774.	49.1
3H6	769.	-59.6	1590.	2134.	544.	78.2	1337.	277.7
3H8	599.	-59.6	1375.	2134.	753.	151.9	950.	443.8
3H10	357.	-59.6	15[illegible].	1762.	783.	179.0	1042.	493.7
5E4	790.	-59.6	1355.	1597.	242.	51.4	863.	144.6
5E6	587.	-59.6	1308.	2159.	853.	102.2	1162.	276.9
5E8	537.	-59.6	1[illegible].	2330.	1095.	200.8	1350.	462.7
5E10	31[illegible].	-59.6	714.	1975.	1211.	276.0	776.	530.9

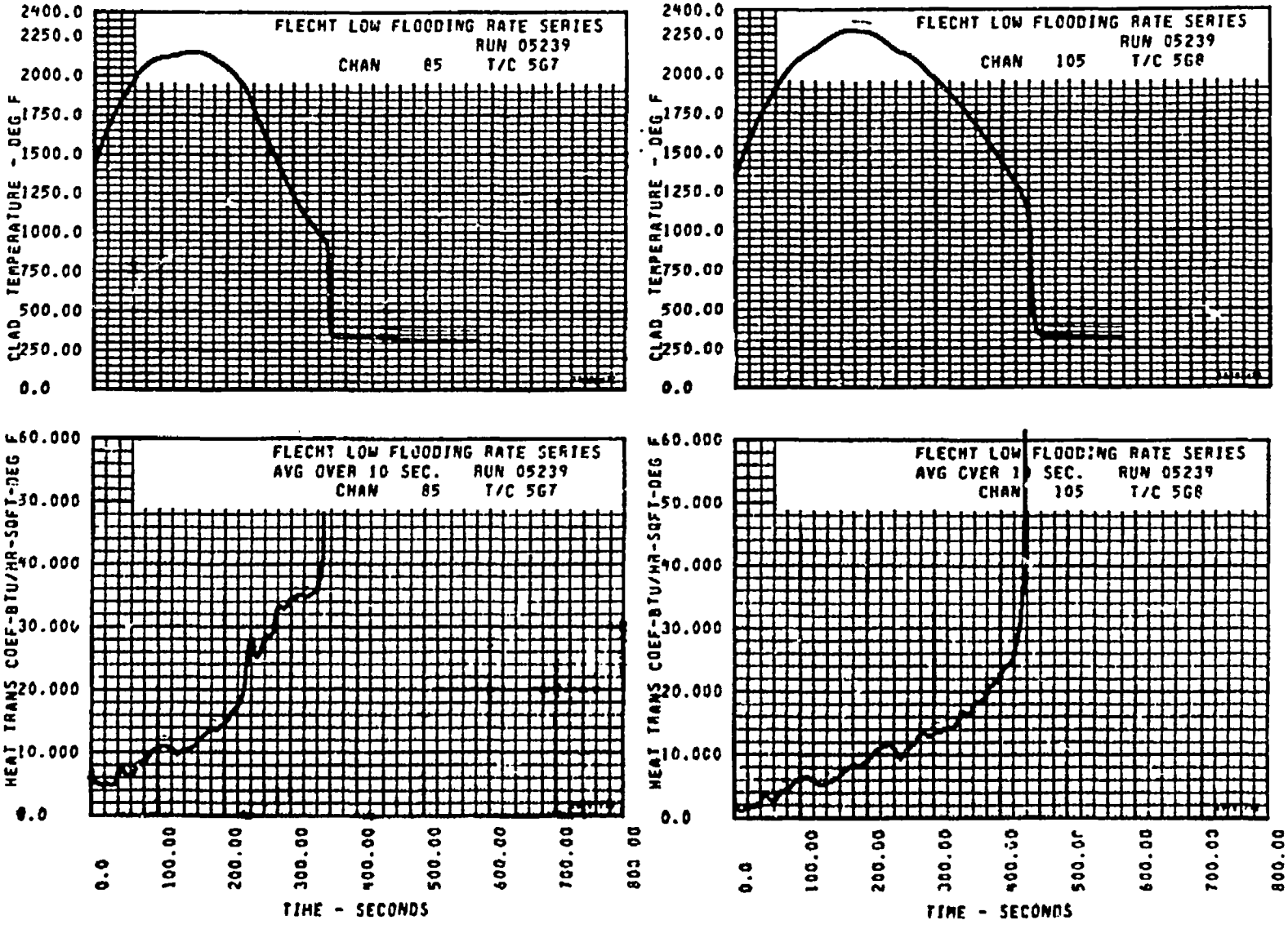

FLECHT LOW FLOODING RATE SERIES
RUN 05239
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

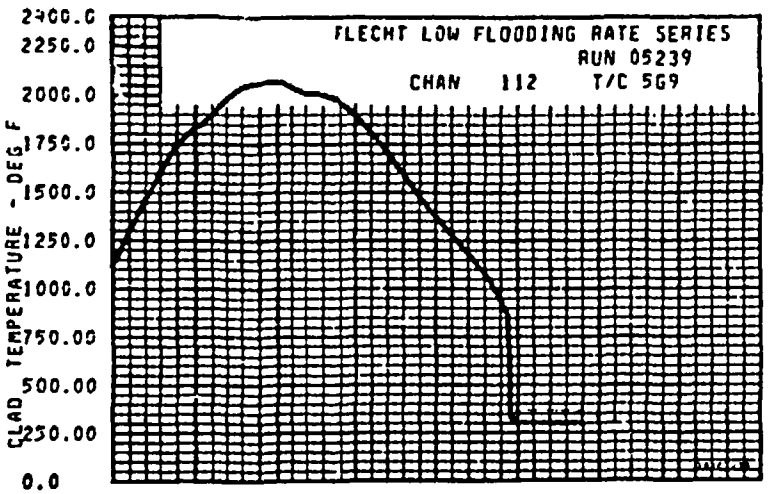

FLECHT LOW FLOODING RATE SERIES
RUN 05239
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

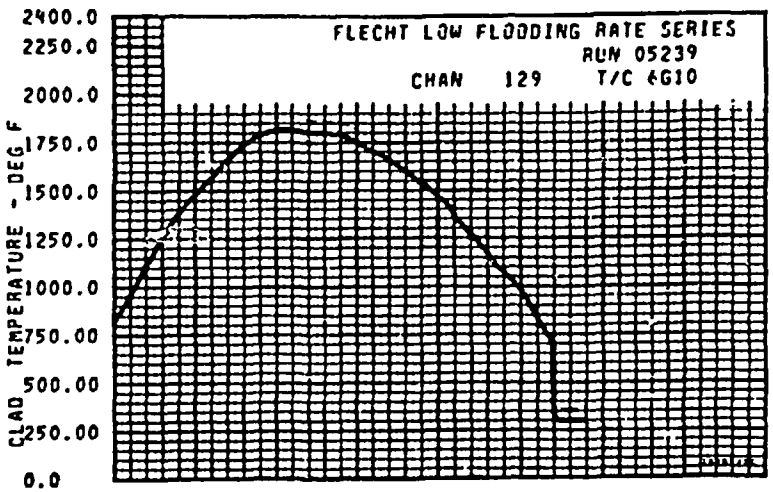

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05239
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

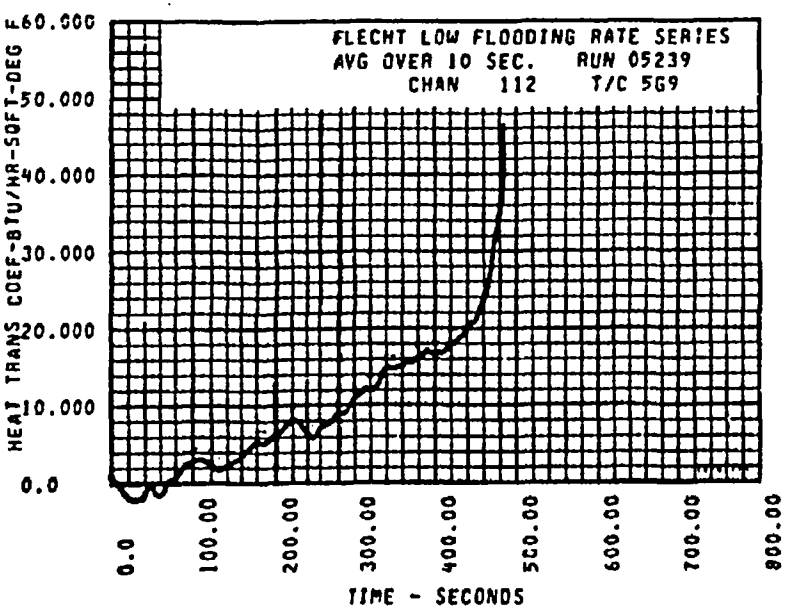

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05239
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

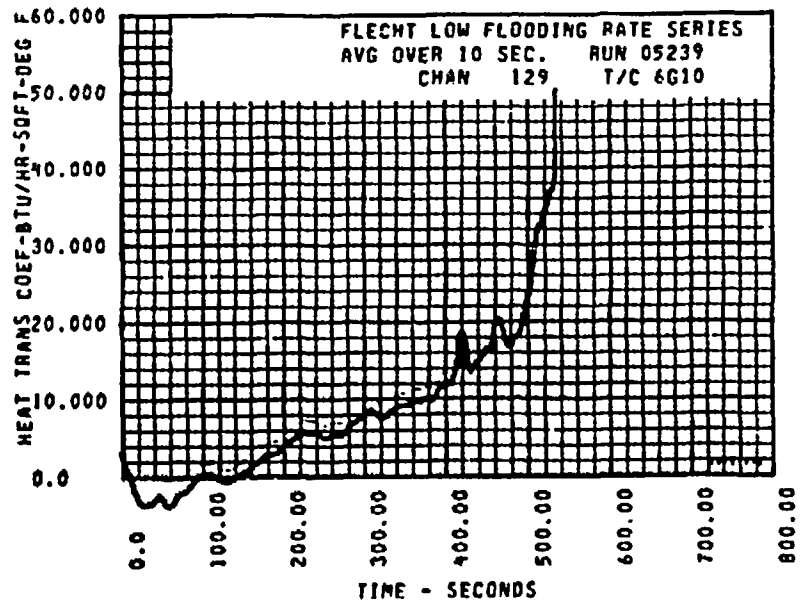

FLECHT LOW FLOODING RATE SERIES
RUN 05239
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05239
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05239
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05239
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
TIME - SECONDS

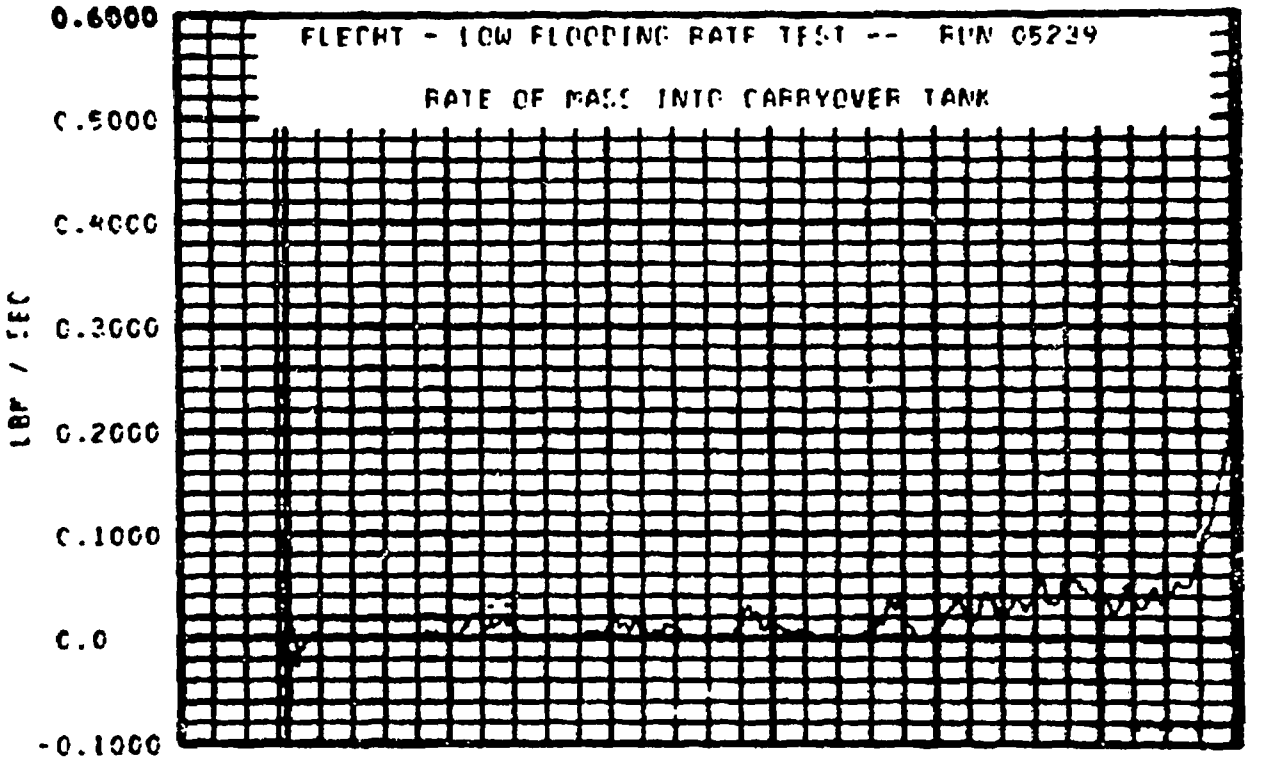

FLECHT LOW FLOODING RATE SERIES
RUN 05239
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05239
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05239
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05239
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

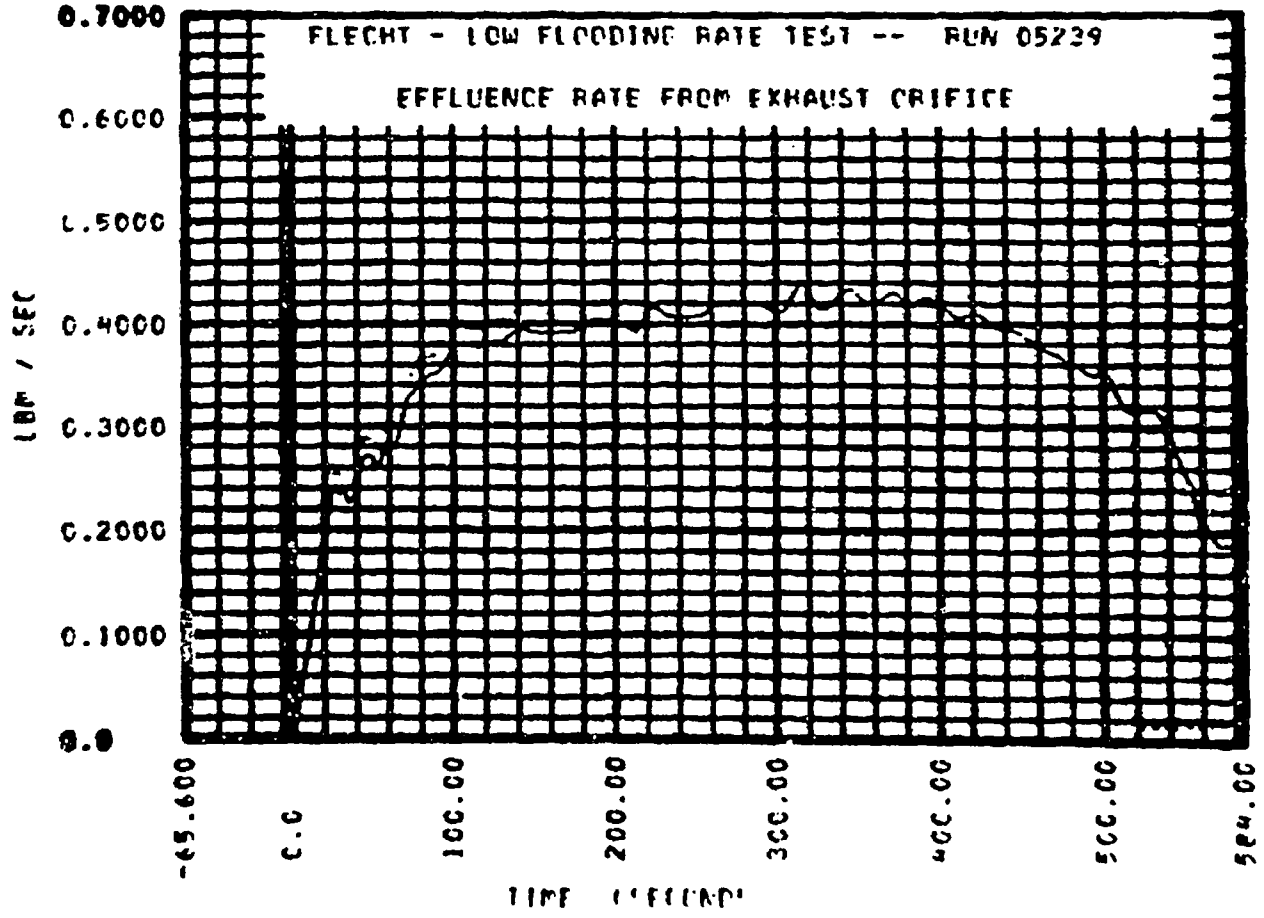

FLECHT LOW FLOODING RATE SERIES
RUN 05239
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0


FLECHT LOW FLOODING RATE SERIES
RUN 05239
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

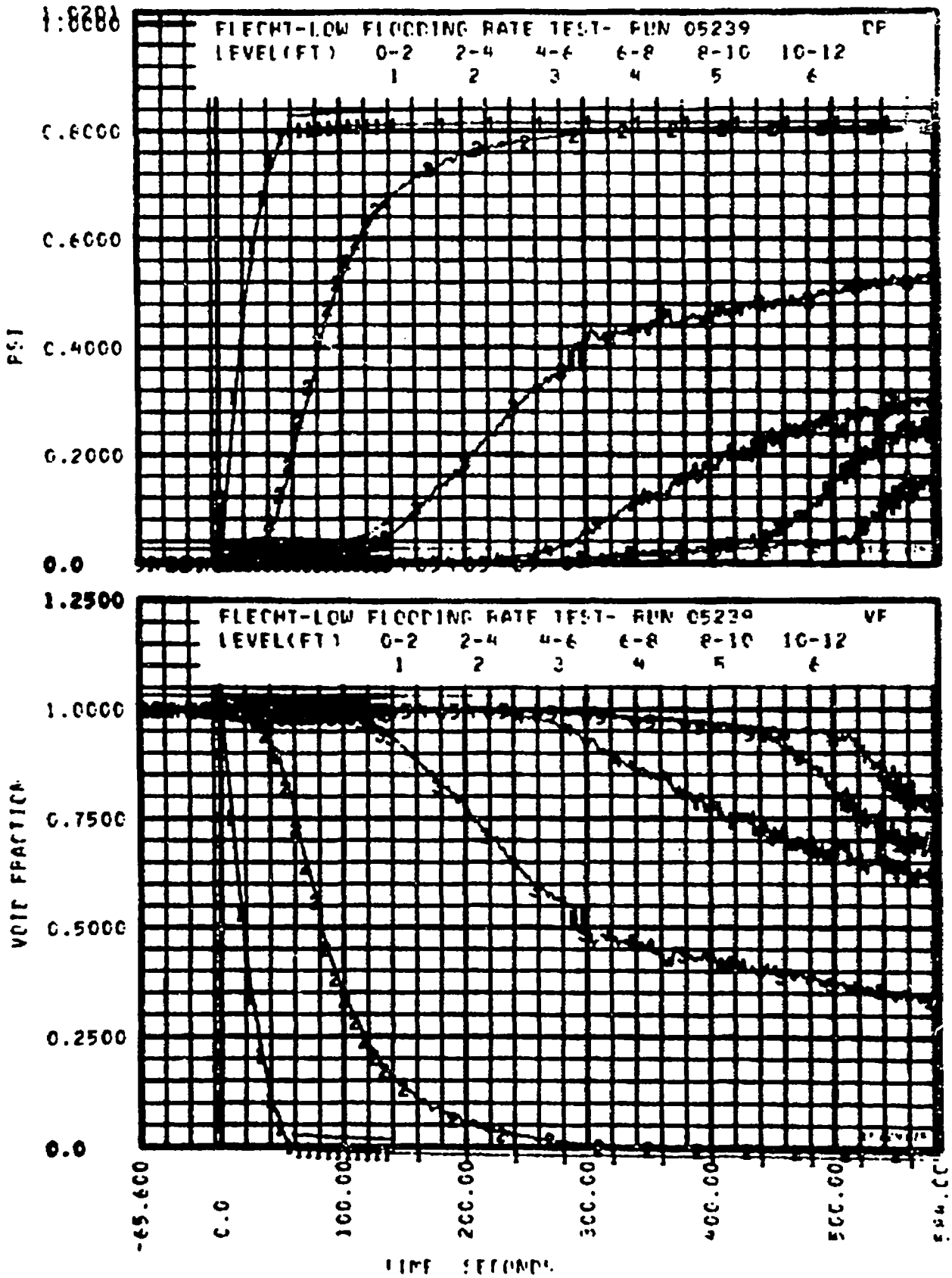

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05239
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

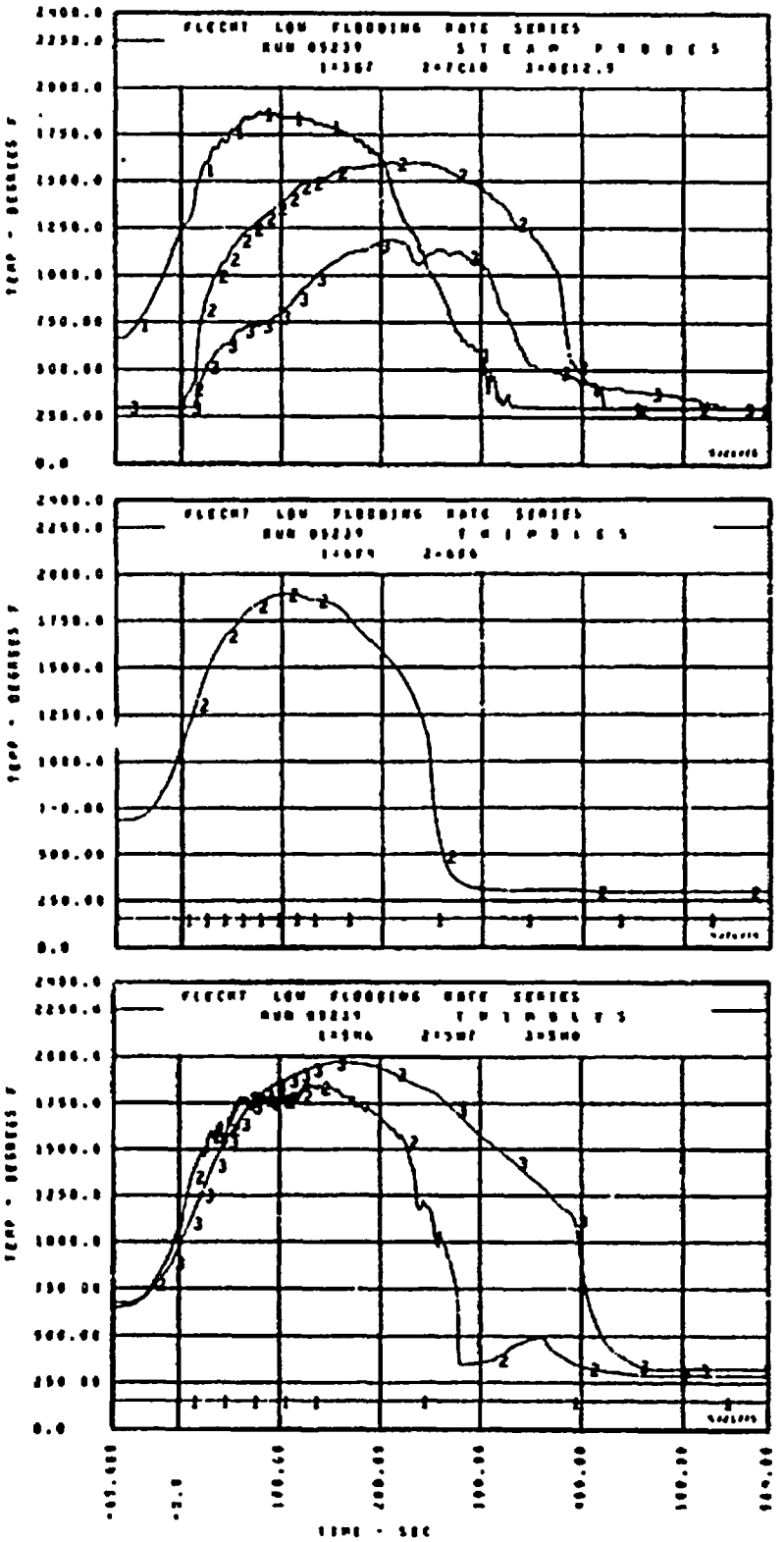

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05239
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

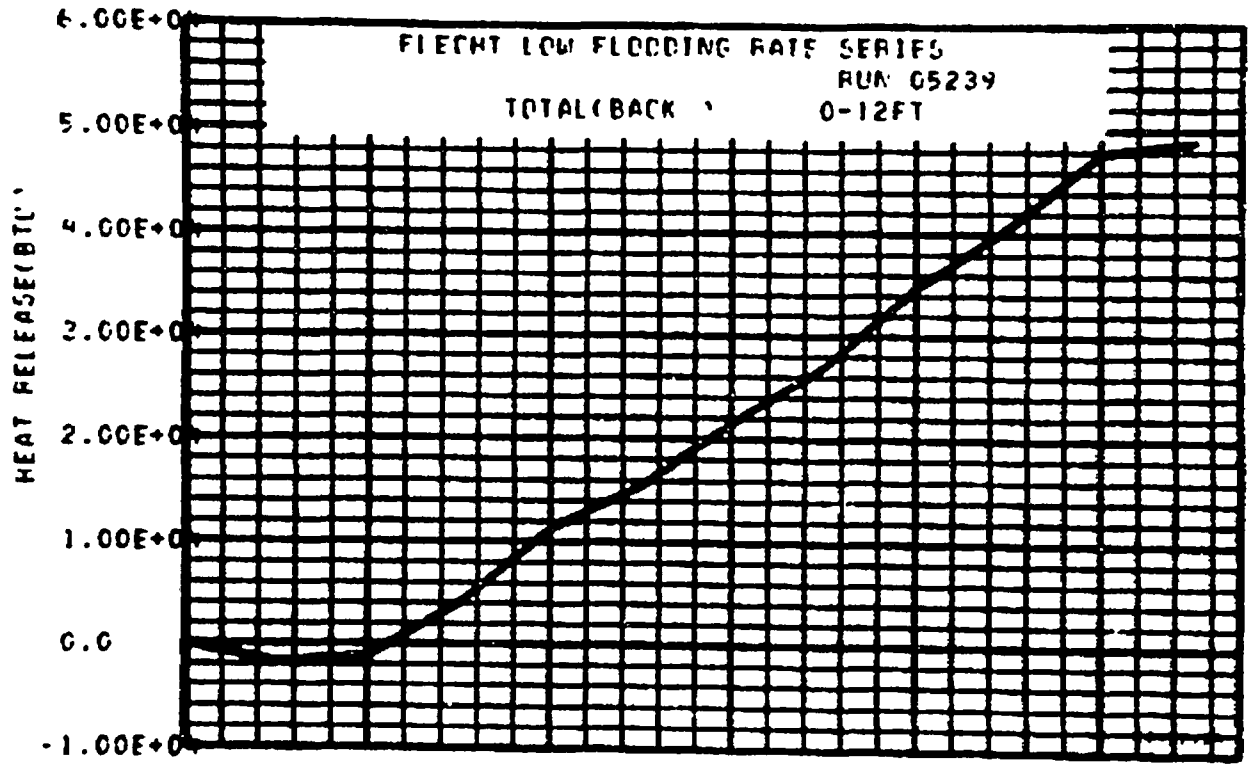

FLECHT - LOW FLOODING RATE TEST -- RUN 05239
RATE OF MASS INTO CARRYOVER TANK
LBM / SEC
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
-0.1000

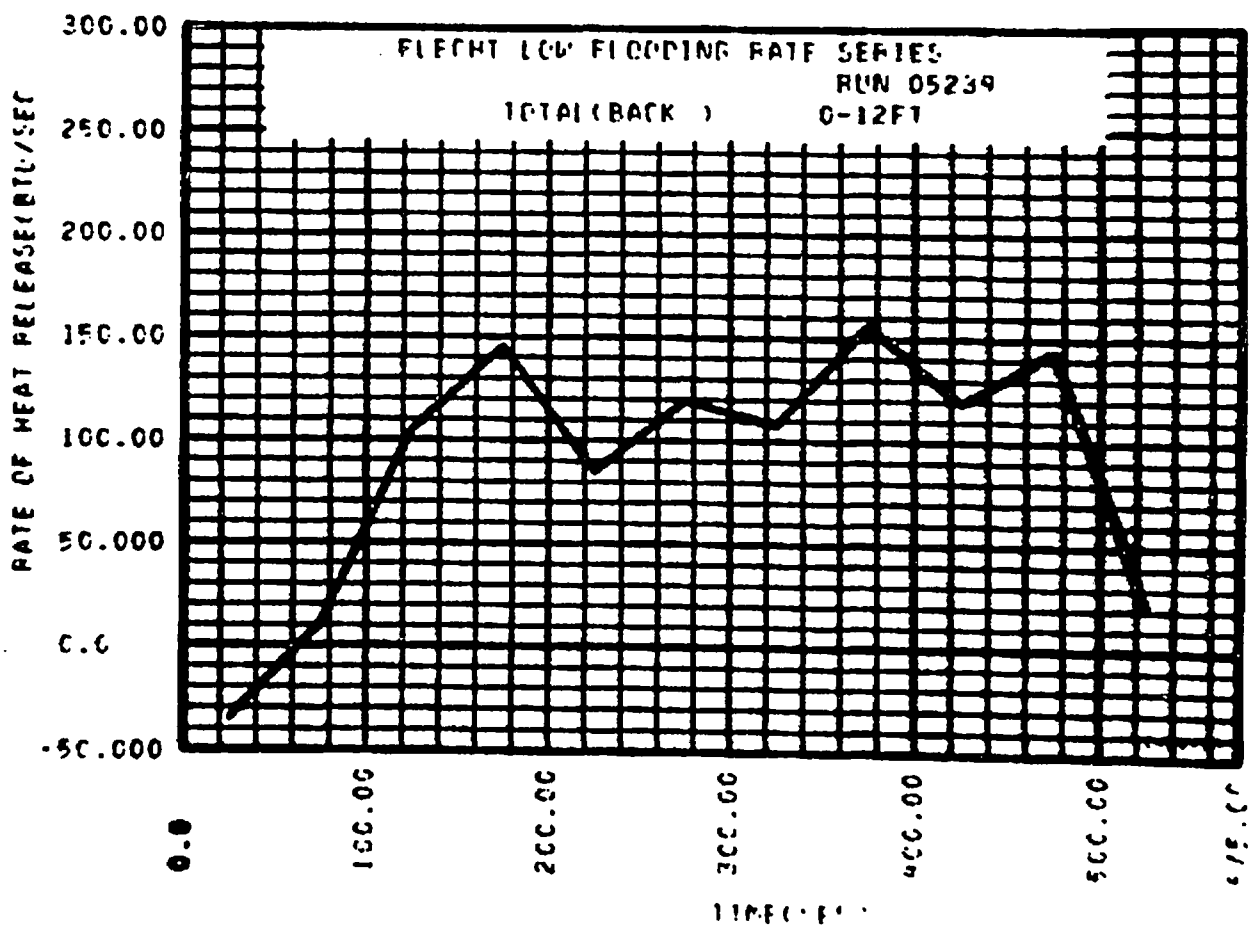

FLECHT - LOW FLOODING RATE TEST -- RUN 05239
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
0.7000
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
-65.600
0.0
100.00
200.00
300.00
400.00
500.00
524.00
TIME (SECOND)

FLECHT - LOW FLOODING RATE TEST --
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
250.00
200.00
150.00
100.00
0.0
100.00
200.00
300.00
400.00
500.00


FLECHT-LOW FLOODING RATE TEST- RUN 05239
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
DF
PSI
0.8000
0.6000
0.4000
0.2000
0.0
FLECHT-LOW FLOODING RATE TEST- RUN 05239
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
VF
VOID FRACTION
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
-65.600
0.0
100.00
200.00
300.00
400.00
500.00
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 05239
STEAM PROBES
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 05239
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 05239
TEMP - DEGREES F
TIME - SEC


FLIGHT LOW FLOODING RATE SERIES
RUN 05239
TOTAL(BACK) 0-12FT
HEAT RELEASE(BTU
6.00E+0
5.00E+0
4.00E+0
3.00E+0
2.00E+0
1.00E+0
0.0
-1.00E+0


FLIGHT LOW FLOODING RATE SERIES
RUN 05239
TOTAL(BACK) 0-12FT
RATE OF HEAT RELEASE(BTU/SEC
300.00
250.00
200.00
150.00
100.00
50.000
0.0
-50.000
0.0
100.00
200.00
300.00
400.00
500.00

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 05342

DATE: 5/21/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40		
Initial Clad Temperature (6 Ft)°F At Flood	1,601	Rod T/C	4G6
Rod Peak Power, kw/ft	0.95		
Flooding Rate, in/sec	0.8		

Coolant Temperature, °F	248		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

B. INITIAL HOUSING TEMPERATURE

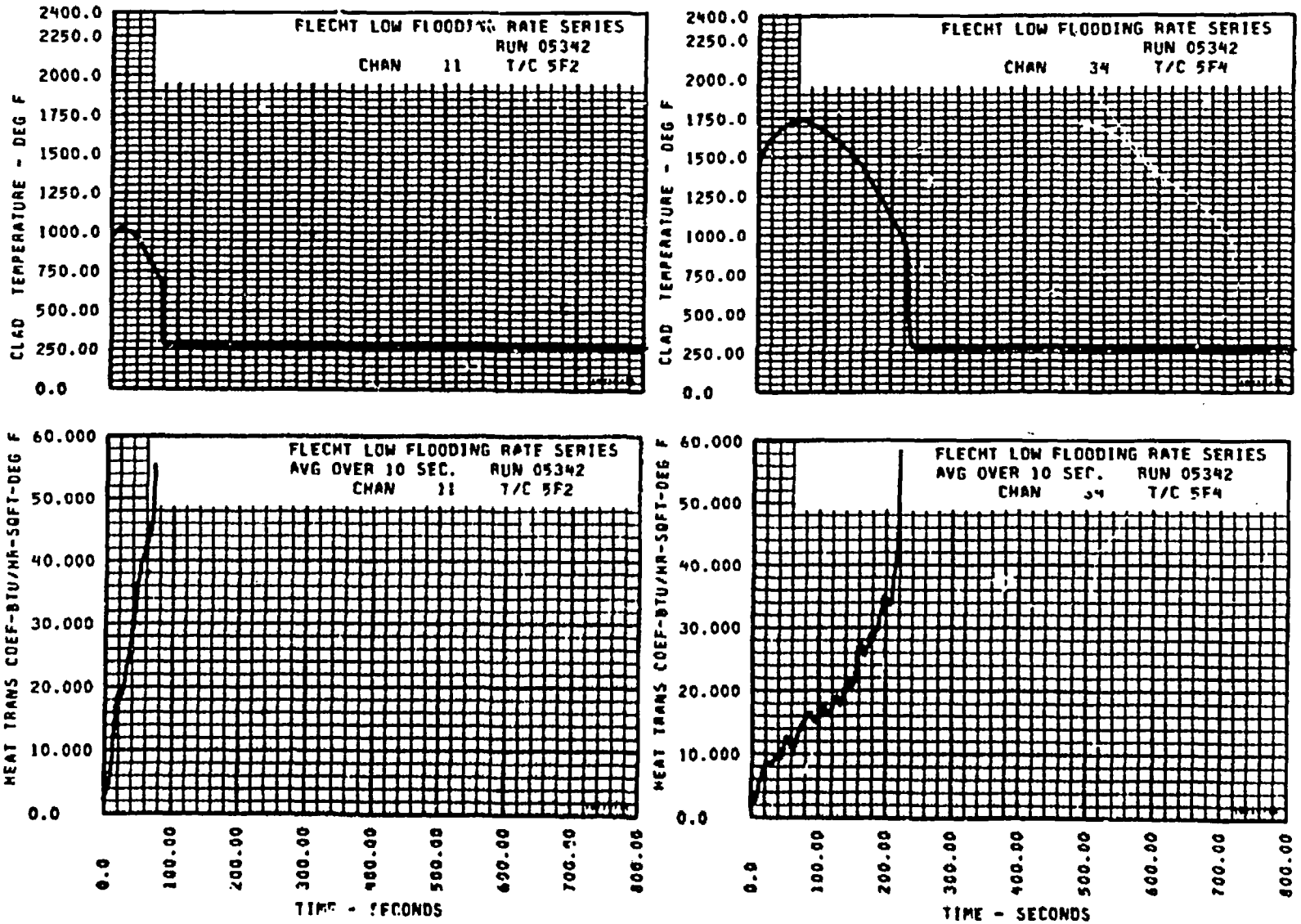
Back Side Elevation, Ft.	Temperature, °F
0	279
2	578
4	777
5.5	806
6	809
6.5	668
7	679
7.5	707
8	777
10	574
12	296
Average	632
Lower Plenum	211
Upper Plenum	284

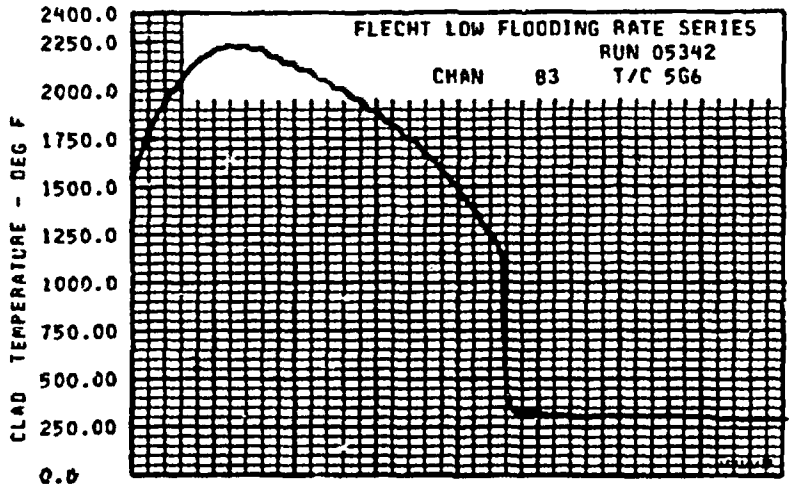
BLANK PAGE

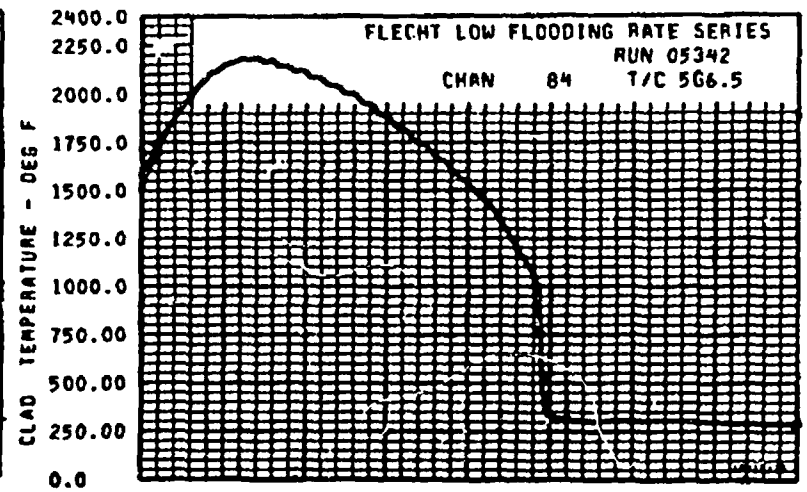
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

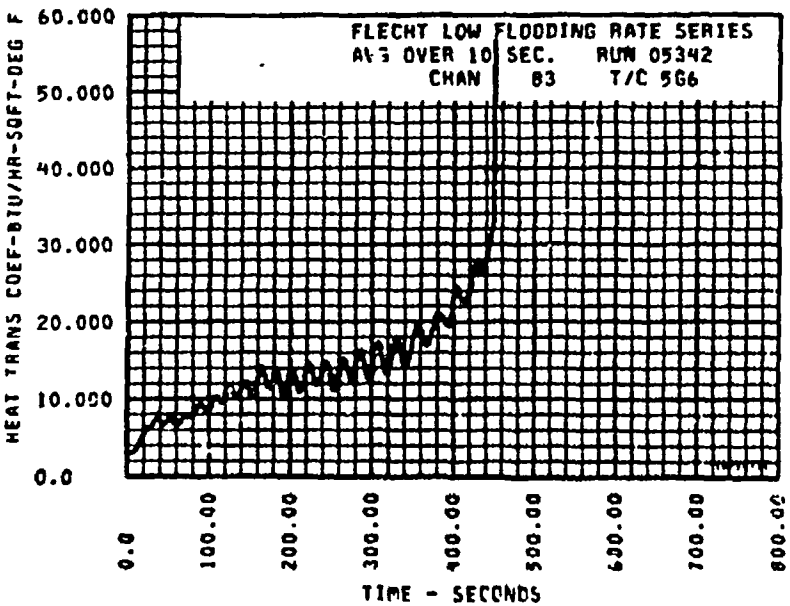
RUN NUMBER 05342

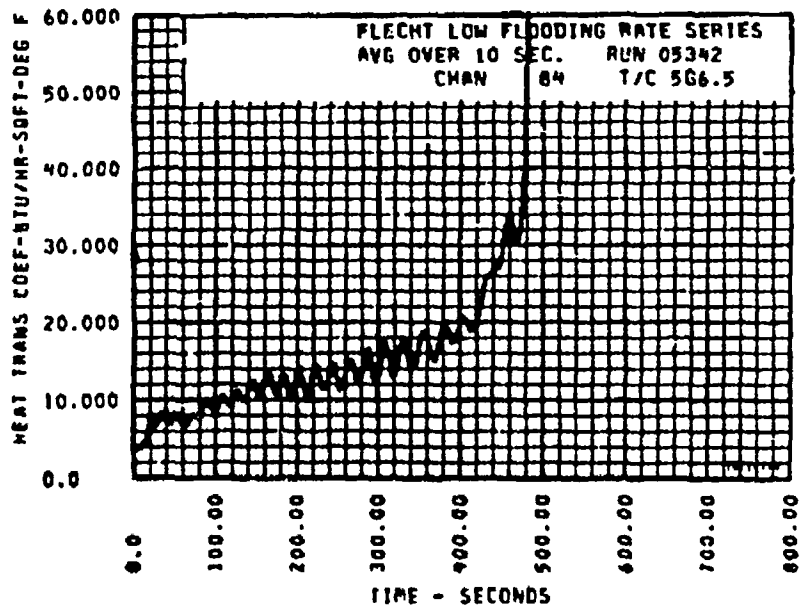
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	347.	-51.2	690.	664.	26.	6.9	535.	31.5
4H1	417.	-60.?	707.	742.	35.	8.6	575.	40.5
4H1.5	511.	-53.?	776.	813.	37.	12.0	649.	49.6
4H2	507.	-59.2	1006.	1069.	63.	15.6	770.	69.2
4H4	766.	-69.2	1466.	1739.	273.	65.6	336.	231.5
4H6	709.	-51.2	1601.	2178.	577.	118.0	1014.	675.0
8D6	519.	-63.?	1485.	2390.	605.	103.9	946.	459.8
8D6.5	554.	-53.?	1418.	2144.	726.	159.1	966.	541.7
8D7	598.	-60.?	1390.	1980.	581.	159.3	692.	612.9
8D8	537.	-53.?	1284.	2081.	797.	191.9	935.	695.7
8D9	401.	-63.?	930.	1869.	961.	259.0	434.	760.1
8D10	391.	-69.?	768.	1657.	907.	382.0	774.	717.1
8D11	259.	-61.2	586.	1498.	917.	324.3	952.	658.8
8D12	165.	-57.?	239.	568.	329.	283.3	176.	665.7
5F0	* * BAD THERMOCOUPLE DATA * *							
5F0.5	397.	-59.2	620.	650.	71.	5.0	536.	37.5
5F1	395.	-69.2	691.	710.	19.	6.8	597.	44.9
5F1.5	* * BAD THERMOCOUPLE DATA * *							
5F2	577.	-63.?	971.	1028.	53.	17.0	565.	74.9
5F3	715.	-69.2	1254.	1378.	124.	48.0	776.	131.9
5F4	759.	-63.?	1461.	1741.	287.	57.6	835.	225.7
5F6	645.	-69.?	1544.	2194.	653.	173.?	949.	659.1
5G6	559.	-69.2	1568.	2235.	667.	122.?	1144.	456.0
5G6.5	676.	-53.?	1507.	2189.	689.	173.0	945.	487.5
5G7	562.	-60.9	1445.	2189.	681.	169.0	868.	553.6
5G8	562.	-51.?	136?.	2194.	82?.	218.?	936.	626.9
5G9	357.	-63.?	1117.	1968.	831.	259.1	779.	719.4
5G11	395.	-69.2	887.	1937.	761.	282.8	679.	746.0
5G12	358.	-59.2	557.	1158.	606.	247.8	545.	739.?
1E6	379.	-63.2	1390.	1517.	127.	36.6	939.	193.0
1E8	360.	-69.?	1530.	1829.	301.	97.9	847.	447.9
1E10	391.	-69.?	996.	1286.	367.	179.0	686.	775.6
3H2	331.	-53.?	1307.	1367.	59.	12.?	711.	49.1
3H6	331.	-61.2	1597.	2116.	527.	197.9	897.	655.7
3H8	711.	-61.?	1798.	2379.	581.	161.9	857.	690.5
3H10	356.	-69.?	958.	1629.	659.	21?.?	461.	716.5
5F?	736.	-63.?	1392.	1664.	264.	66.?	475.	213.0
5F5	570.	-63.9	140?.	2183.	763.	141.9	1136.	451.0
5F8	392.	-59.?	1318.	2309.	1097.	[illegible]	1036.	693.2
5F10	157.	-69.2	751.	1860.	1039.	392.?	656.	779.?

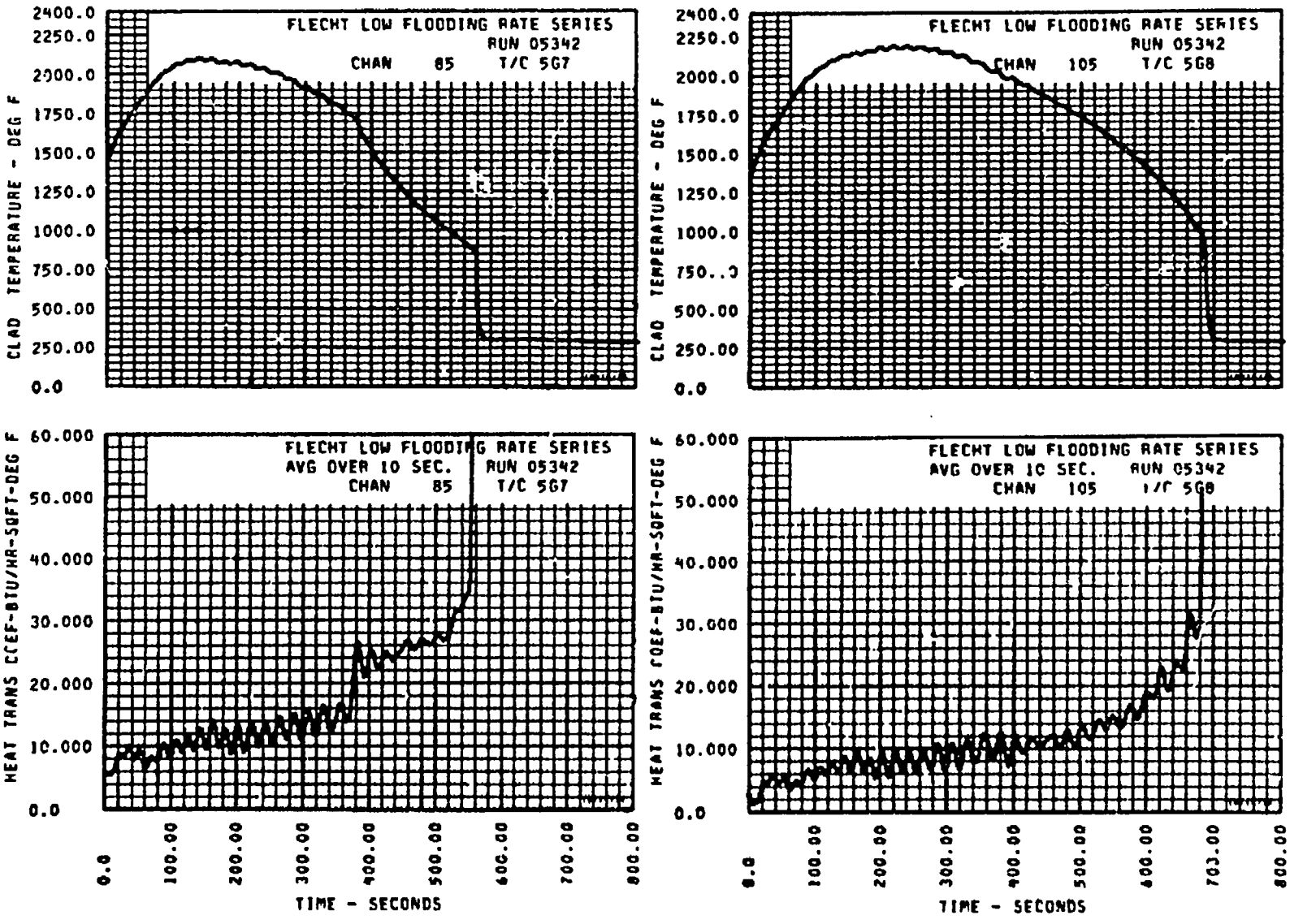

FLECHT LOW FLOODING RATE SERIES
RUN 05342
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05342
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05342
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05342
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

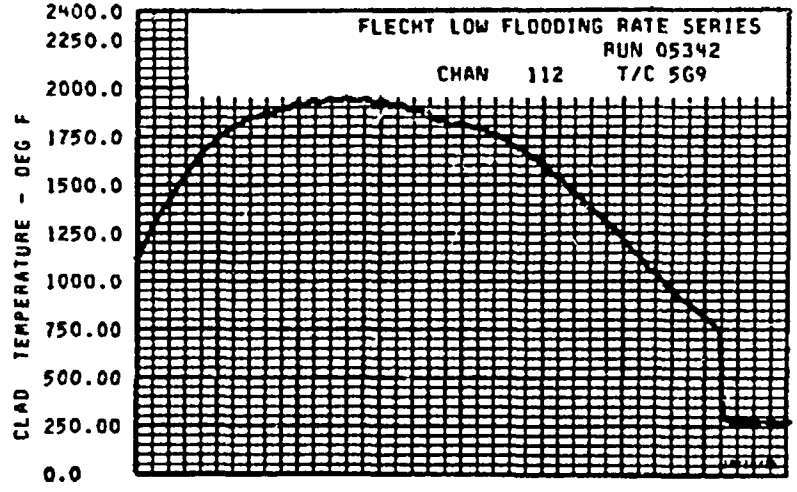

FLECHT LOW FLOODING RATE SERIES
RUN 05342
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

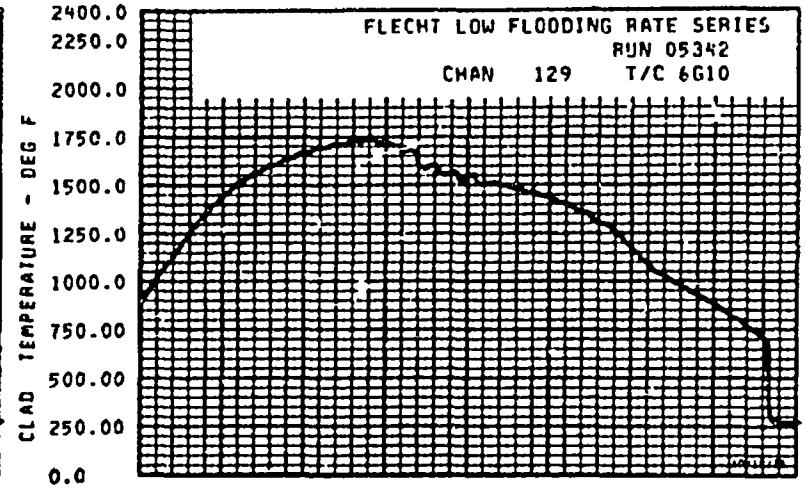

FLECHT LOW FLOODING RATE SERIES
RUN 05342
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

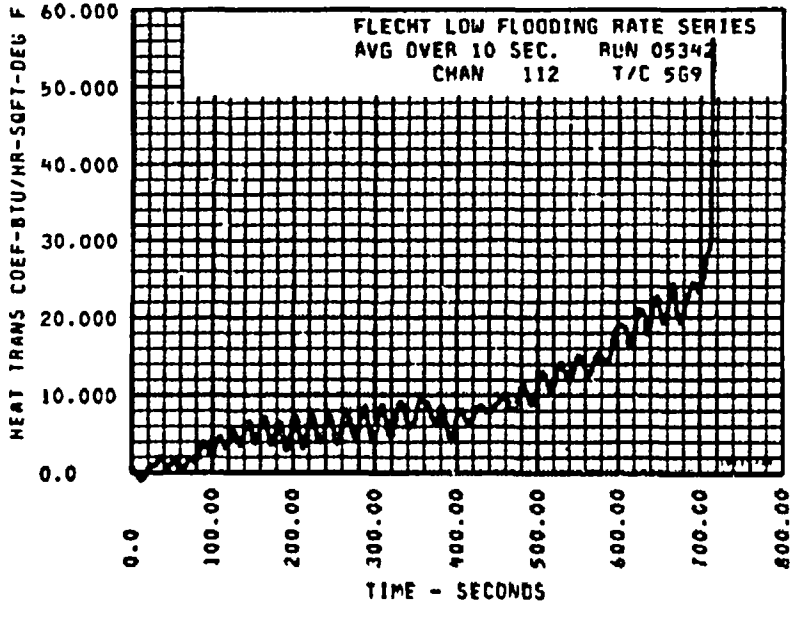

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05342
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

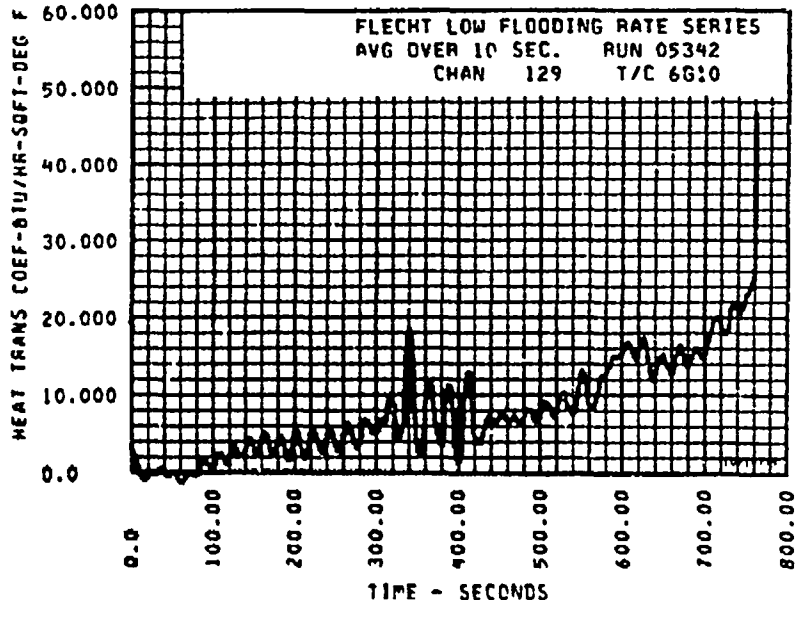

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05342
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

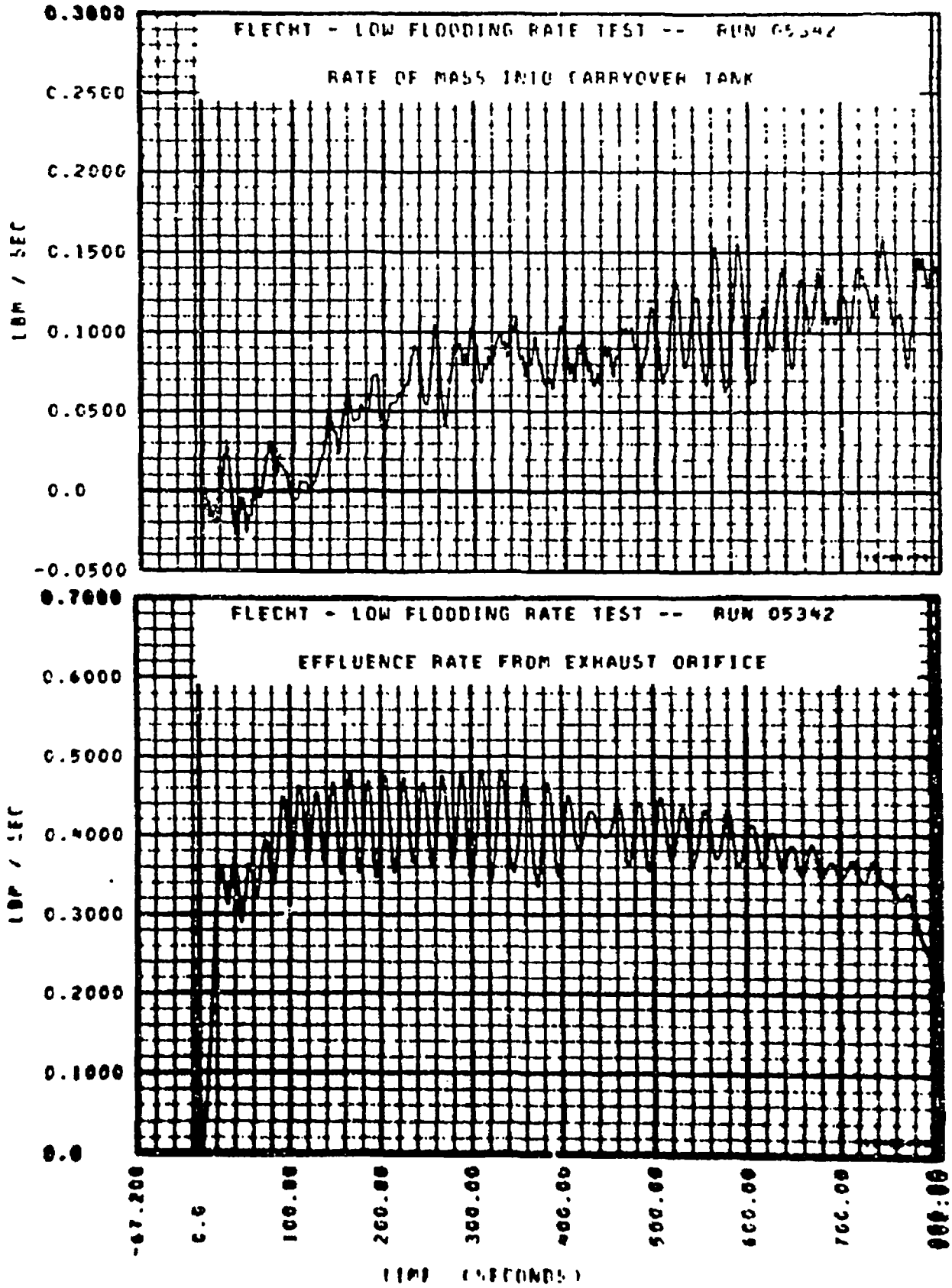

FLECHT LOW FLOODING RATE SERIES
RUN 05342
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05342
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05342
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05342
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

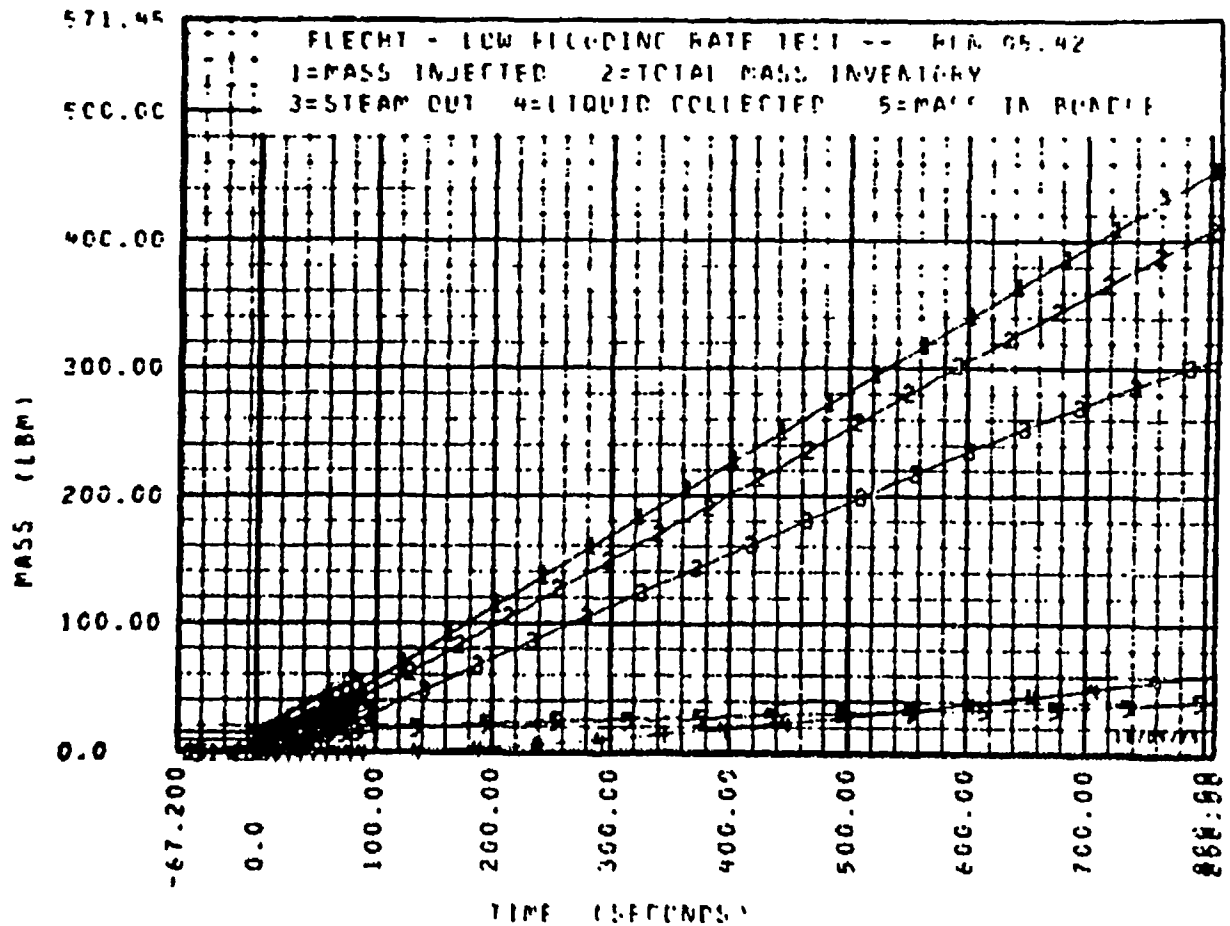

FLECHT LOW FLOODING RATE SERIES
RUN 05342
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

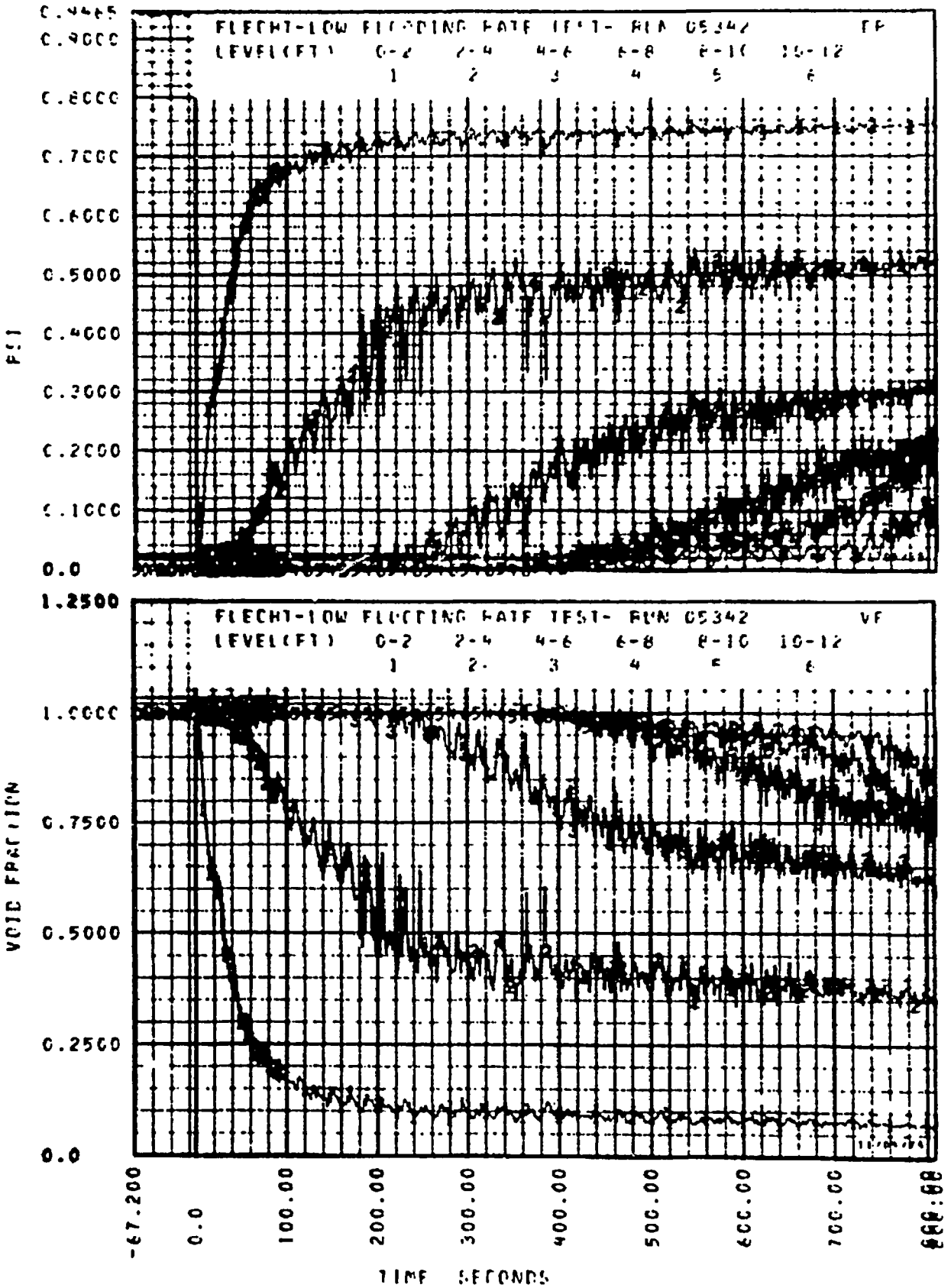

FLECHT LOW FLOODING RATE SERIES
RUN 05342
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

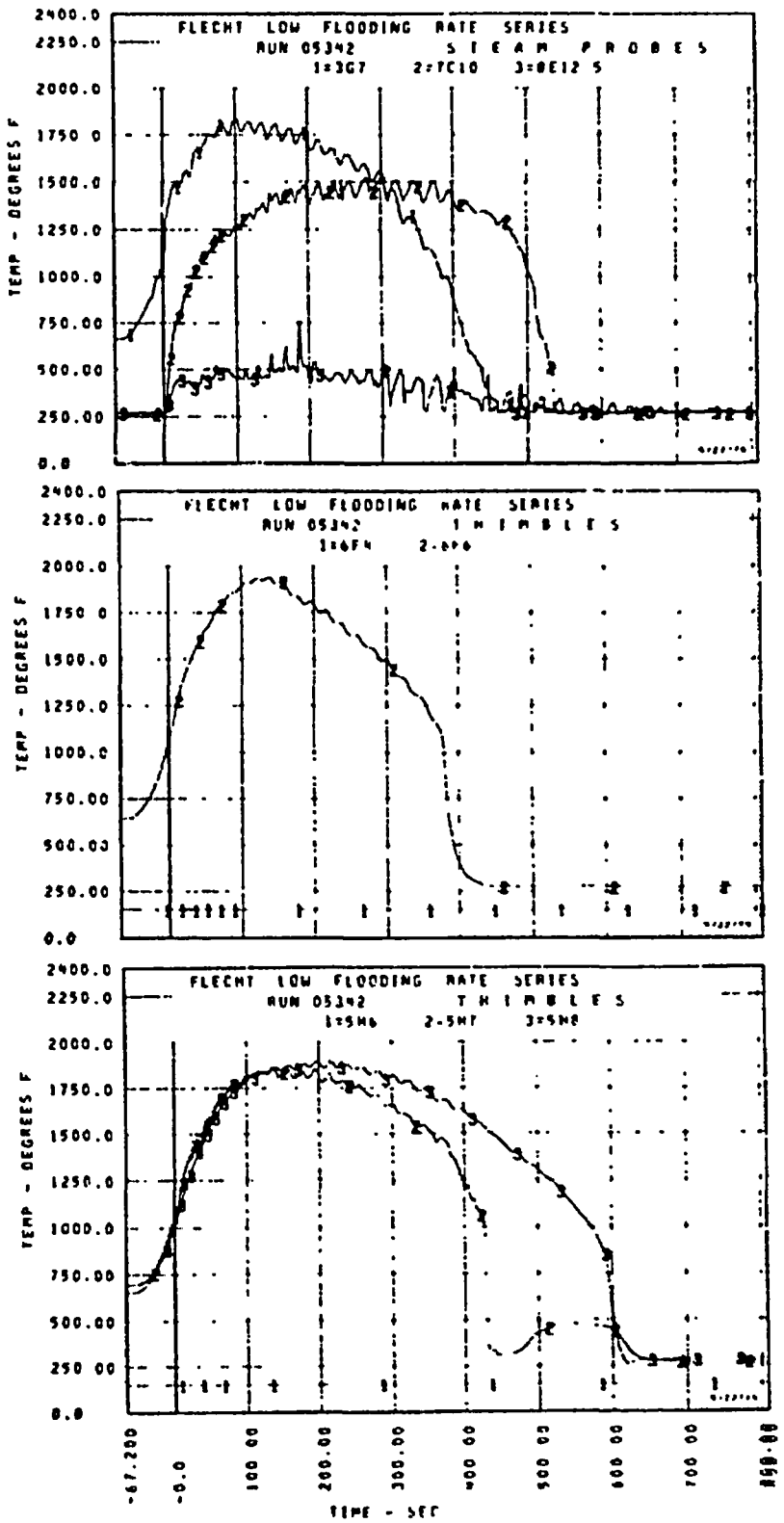

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05342
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

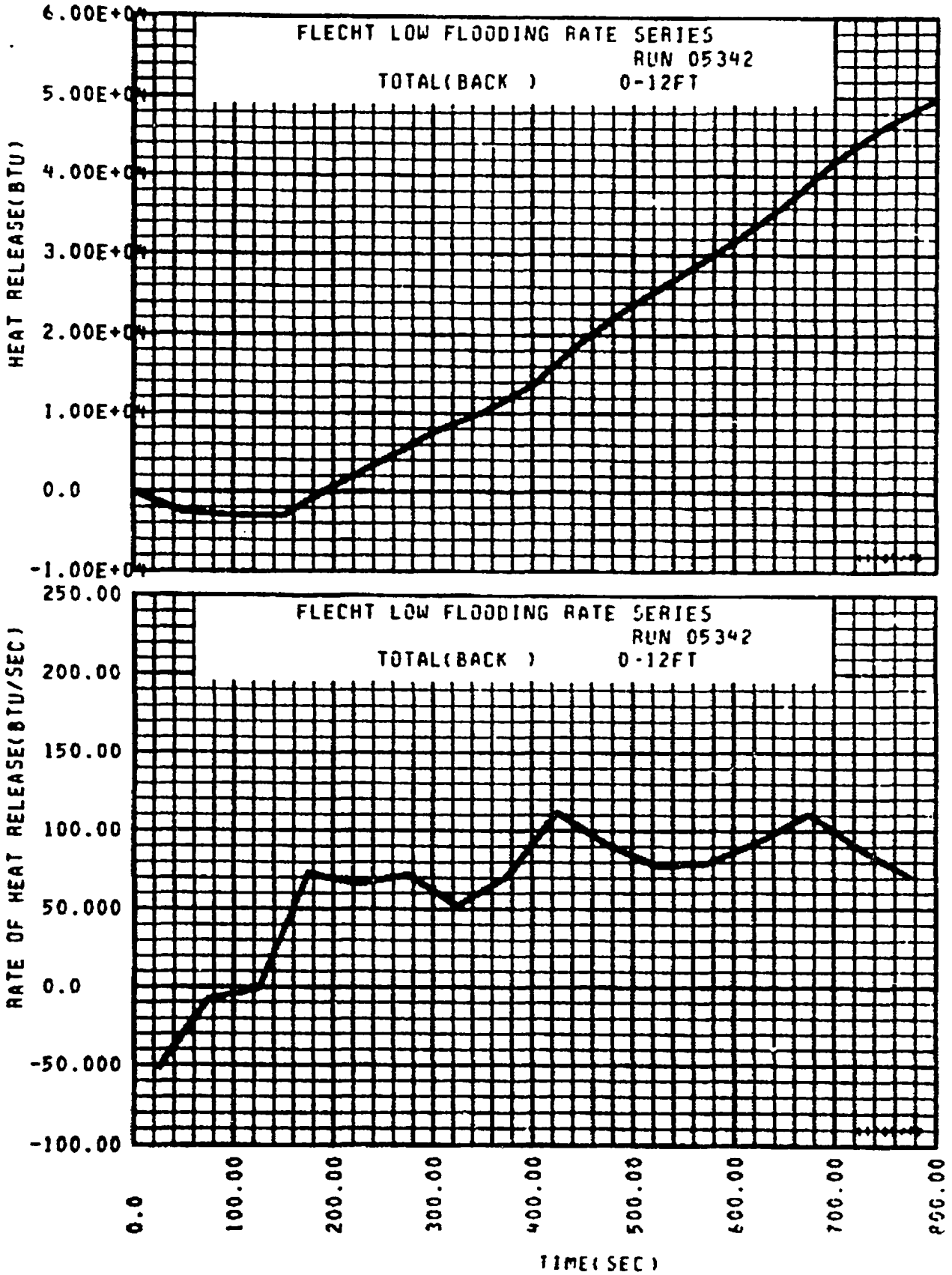

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05342
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 05342
RATE OF MASS INTO CARRYOVER TANK
LBM / SEC
0.3000
0.2500
0.2000
0.1500
0.1000
0.0500
0.0
-0.0500
FLECHT - LOW FLOODING RATE TEST -- RUN 05342
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
0.7000
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
-47.200
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 05.42
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
571.45
500.00
400.00
300.00
200.00
100.00
0.0
MASS (LBM)
-67.200
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 05342
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
EF
0.9000
0.8000
0.7000
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
FLECHT-LOW FLOODING RATE TEST- RUN 05342
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
VF
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-67.200
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 05342
STEAM PROBES
1=3G7 2=TC10 3=8E12 S
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05342
THIMBLES
1=6FN 2-6F6
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 05342
THIMBLES
1=5N6 2-5N7 3=5N8
TEMP - DEGREES F
-67.200
-0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 05342
TOTAL(BACK) 0-12FT
HEAT RELEASE(BTU)
6.00E+04
5.00E+04
4.00E+04
3.00E+04
2.00E+04
1.00E+04
0.0
-1.00E+04
FLECHT LOW FLOODING RATE SERIES
RUN 05342
TOTAL(BACK) 0-12FT
RATE OF HEAT RELEASE(BTU/SEC)
250.00
200.00
150.00
100.00
50.000
0.0
-50.000
-100.00
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME(SEC)

BLANK PAGE

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 05543

DATE: 5/23/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40		
Initial Clad Temperature (6 Ft)°F At Flood	1,600	Rod T/C	4H6
Rod Peak Power, kw/ft	0.95		
Flooding Rate, in/sec	0.81		

Coolant Temperature, °F	188		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

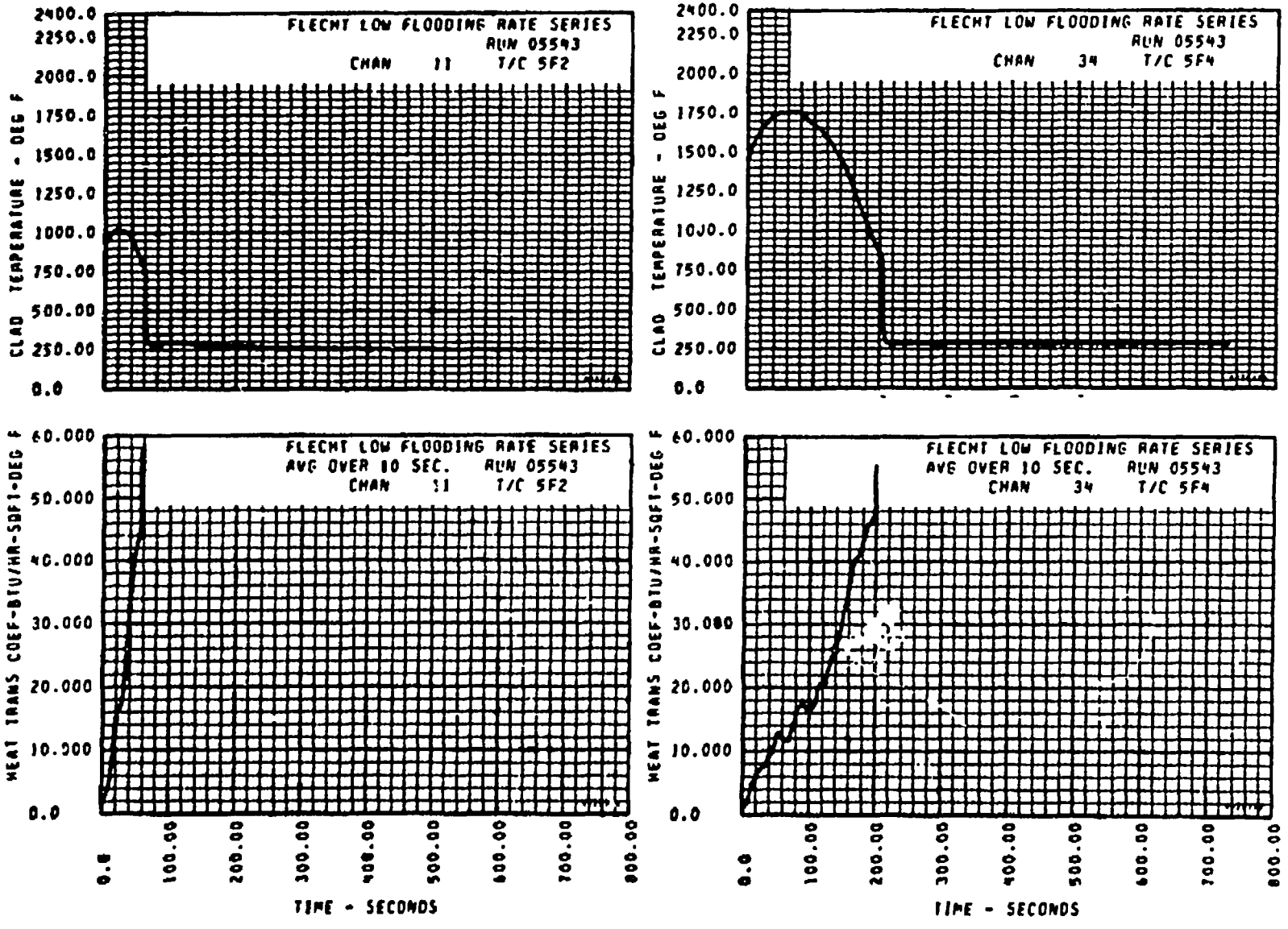
B. INITIAL HOUSING TEMPERATURE

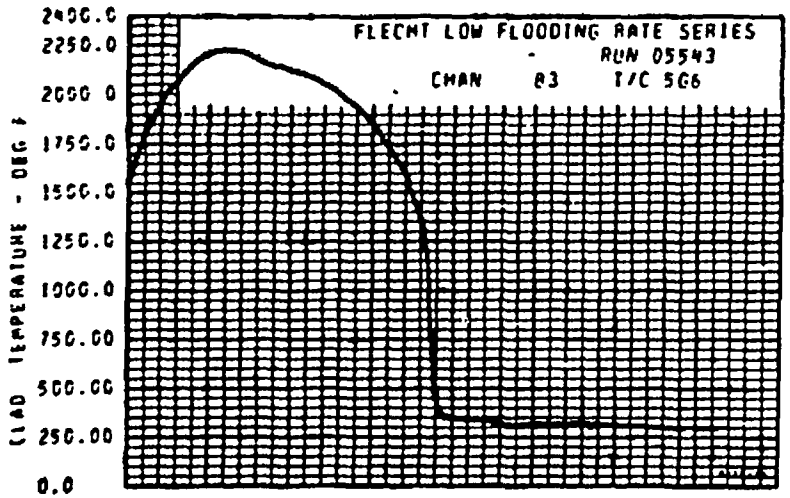
Back Side Elevation, Ft.	Temperature, °F
0	262
2	578
4	774
5.5	804
6	817
6.5	666
7	676
7.5	700
8	769
10	603
12	306
Average	632
Lower Plenum	166
Upper Plenum	270

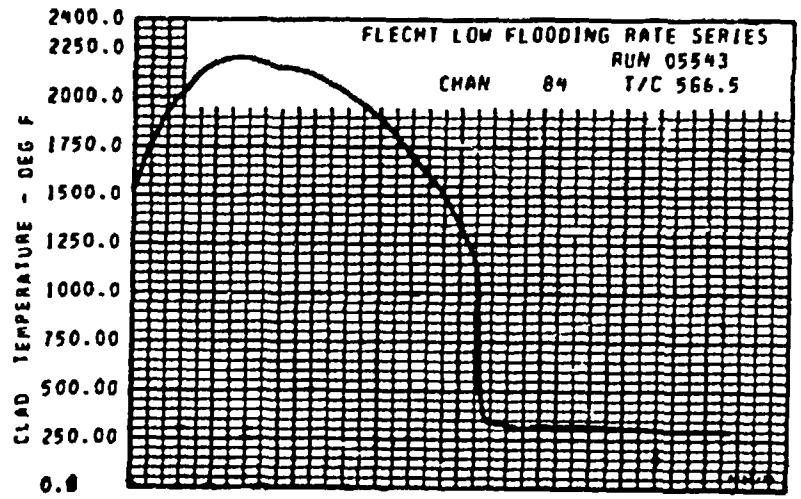
FLECHT-LOW FLOODING RATE 2.0 THERMOCOUPLE DATA

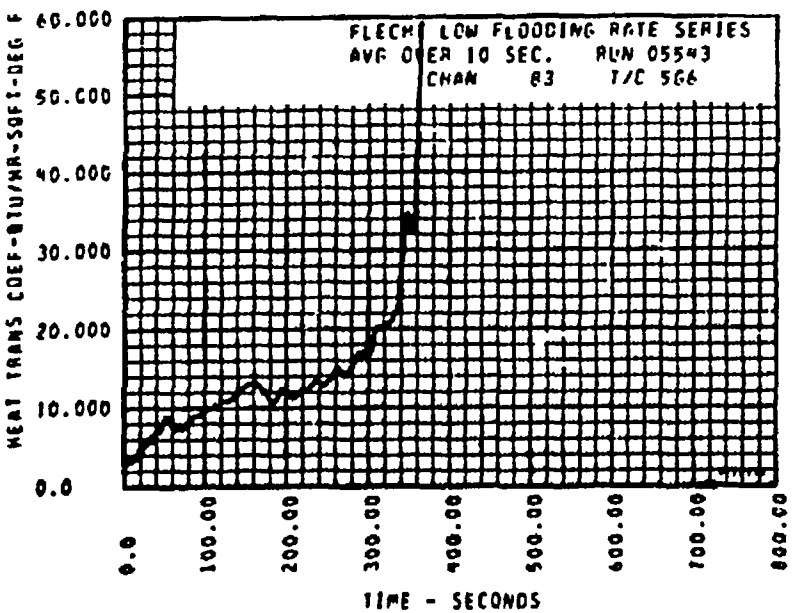
RUN NUMBER 35543

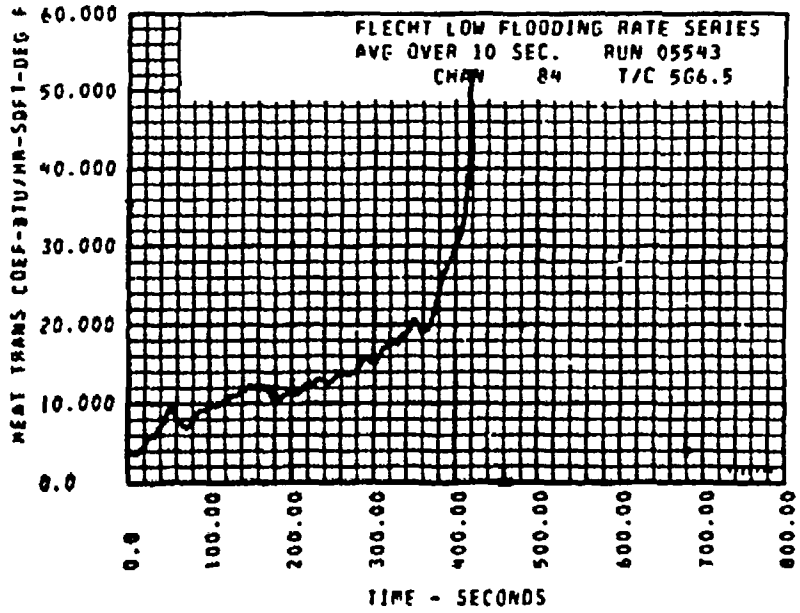
ROD/ELEV.	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
6H0.5	517.	-51.	627.	662.	49.	10.3	547.	26.8
6H1	583.	-53.4	556.	731.	52.	13.6	579.	37.6
6H1.5	471.	-53.4	747.	795.	87.	15.7	656.	66.5
6H2	367.	-53.4	978.	1070.	92.	23.9	709.	66.0
6H4	762.	-51.4	1461.	1774.	313.	72.0	869.	286.6
6H6	71.	-53.	1606.	2223.	623.	119.8	712.	484.6
8B6	576.	-53.4	1491.	2113.	627	111.8	1897.	347.7
8B6.5	431.	-54.4	1445.	2138.	693.	140.0	975.	461.7
8B7	549.	-51.4	1447.	1981.	539.	170.8	754.	531.5
8B8	712.	-51.8	1376.	2104.	776.	262.8	396.	578.7
8B9	745.	-53.4	1107.	1587.	780.	356.3	712.	668.9
8B10	431.	-53.1	830.	1675.	844.	2 2.3	827.	550.2
8B11	277.	-53.	546.	1536.	959.	308.8	656.	577.7
8B12	121.	-53.1	158.	347.	194.	396.0	237.	466.5
5F3	387.	-53.0	473.	479.	5.	2.-	427.	4.1
5F3.5	391.	-53.0	617.	667.	37.	9.2	539.	26.3
5F4	359.	-53.4	556.	715.	41.	13.6	697.	31.9
5F4.5	BAD THERMOCOUPLE DATA							
5F2	333.	-51.0	341.	1028.	43.	17.7	259.	51.5
5F3	796.	-53.1	1347.	1393.	165.	47.7	761.	125.7
5F4	730.	-51.8	1457.	1765.	303.	68.6	515.	234.9
5F6	319.	-53.0	1591.	2216.	649.	133.0	1395.	377.6
5G6	636.	-54.1	1567.	2212.	663.	117.6	1153.	369.7
5G6.5	467.	-53.0	1510.	2287.	677.	1[illegible]	1041.	627.6
5G7	467.	-53.4	1461.	2116.	655.	173.1	973.	631.5
5G8	514.	-51.1	1424.	2216.	811.	277.1	597.	536.7
5G9	157.	-52.	1198.	2103.	910.	367.3	413.	666.9
5G11	593.	-53.	68 .	1476.	796.	216.0	513.	715.3
5G12	176.	-53.4	557.	1198.	669.	176.0	557.	727.3
1G6	511.	-53.1	1306.	1567.	163.	47.6	379.	168.3
1G8	593.	-51.1	1518.	1867.	339.	47.3	816.	395.6
1G10	677.	-53.4	11[illegible]	1347.	375.	133.0	536.	692.0
3H2	587.	-53.	338.	1066.	84.	71.3	753.	61.6
3H6	741.	-53.4	1531.	2157.	572.	178.3	496.	389.1
3H8	939.	-53.9	1432.	2843.	653.	366.3	71.	596.5
3H10	379.	-53.4	971.	1659.	683.	176.0	495.	658.7
8F4	717.	-53.1	1346.	1858.	376.	54.4	84	198.8
8F6	537.	-53.	1920.	2287.	607.	133.4	1862.	387.5
8F8	784.	-53.0	1152.	2143.	983.	989.0	1375.	612.4
8F10	537.	-53.1	95[illegible]	1878.	1822.	276.0	675.	786.9

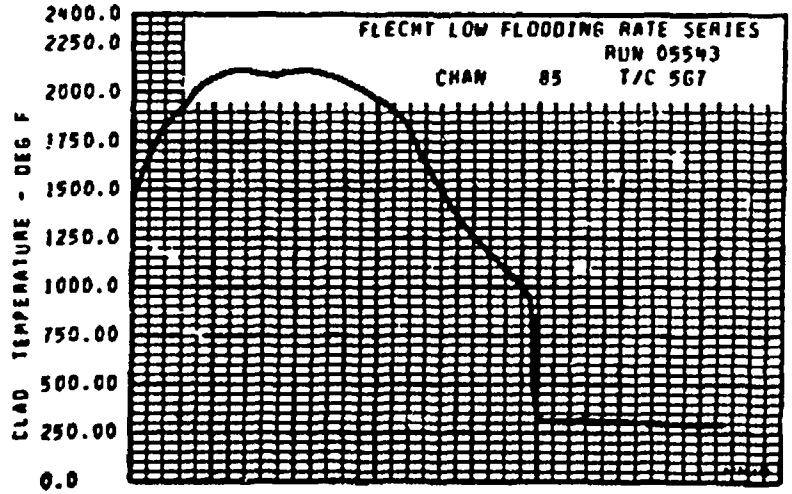

FLECHT LOW FLOODING RATE SERIES
RUN 05543
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05543
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05543
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05543
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

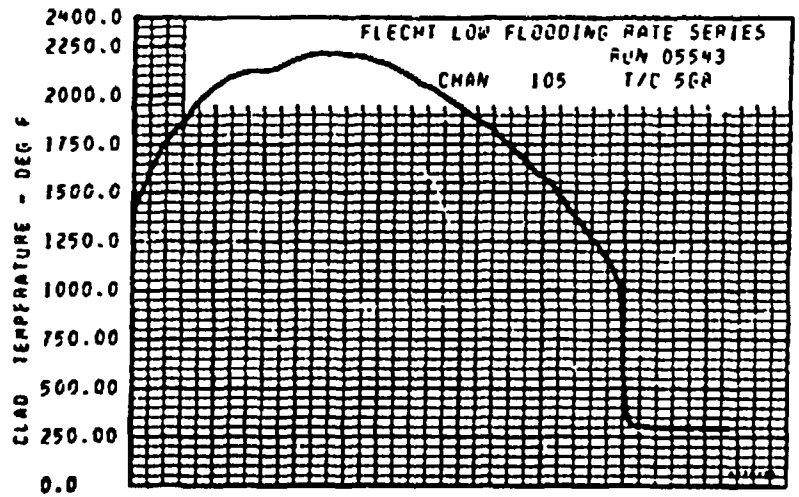

FLECHT LOW FLOODING RATE SERIES
RUN 05543
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

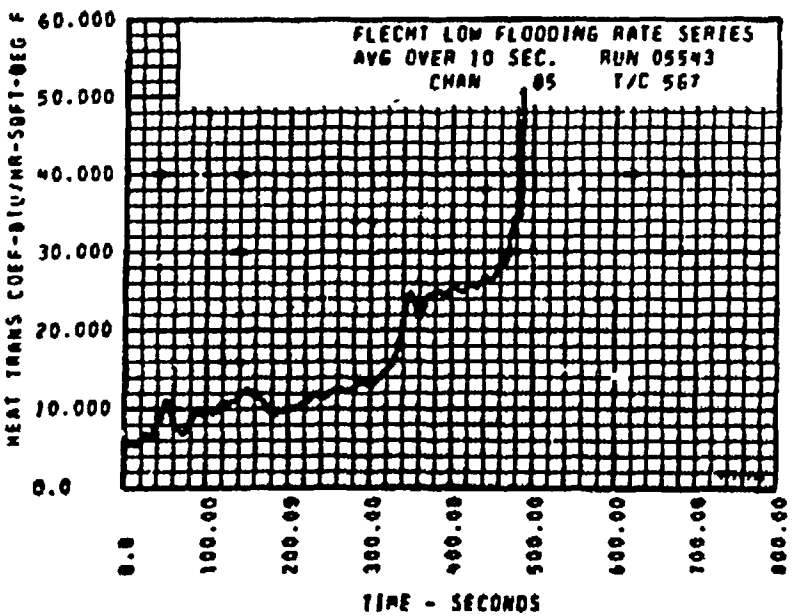

FLECHT LOW FLOODING RATE SERIES
RUN 05543
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

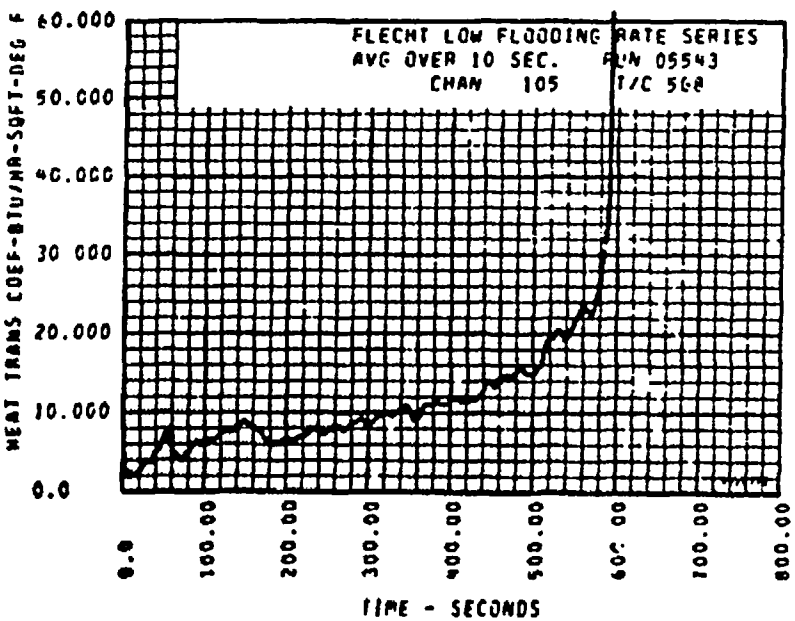

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05543
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

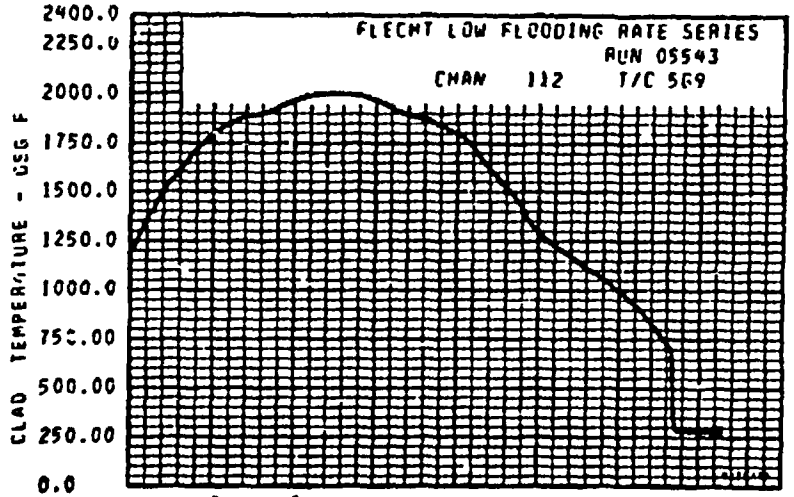

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05543
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

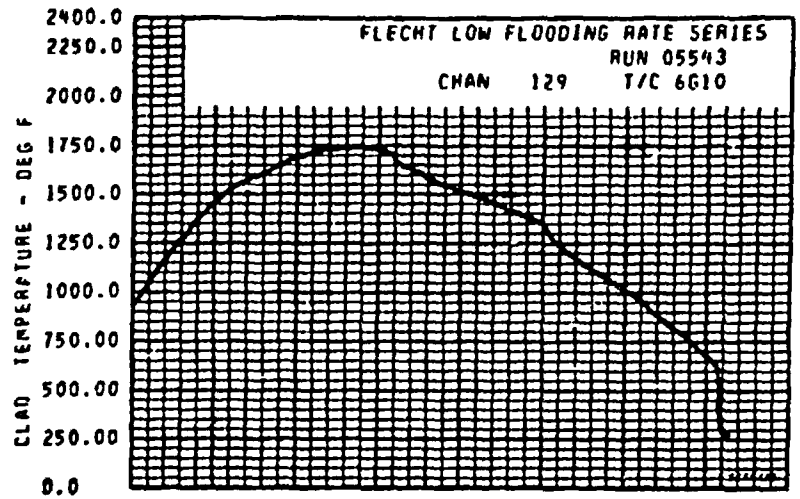

FLECHT LOW FLOODING RATE SERIES
RUN 05543
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

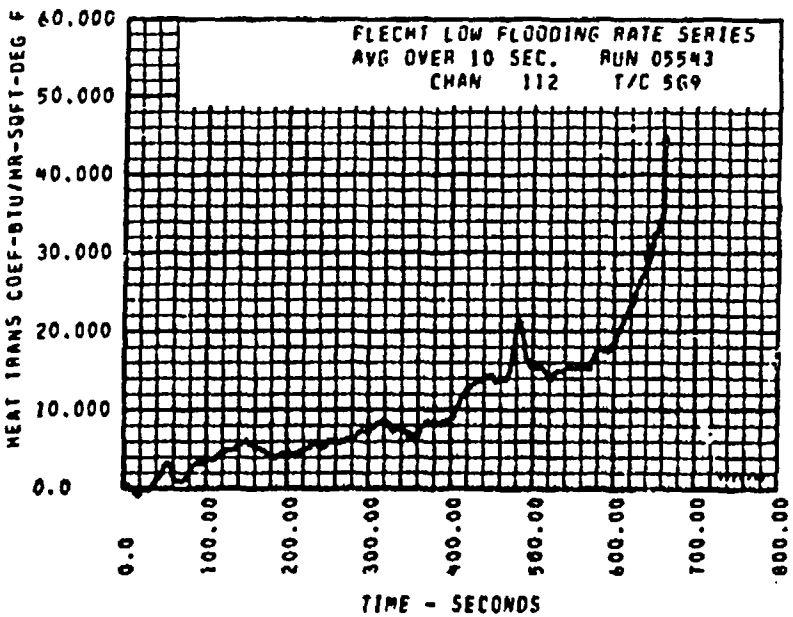

FLECHT LOW FLOODING RATE SERIES
RUN 05543
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

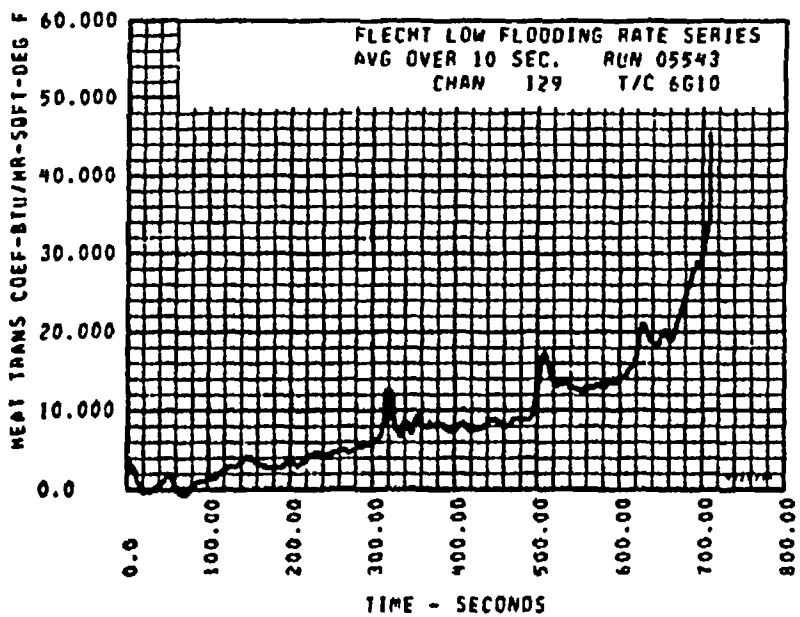

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05543
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

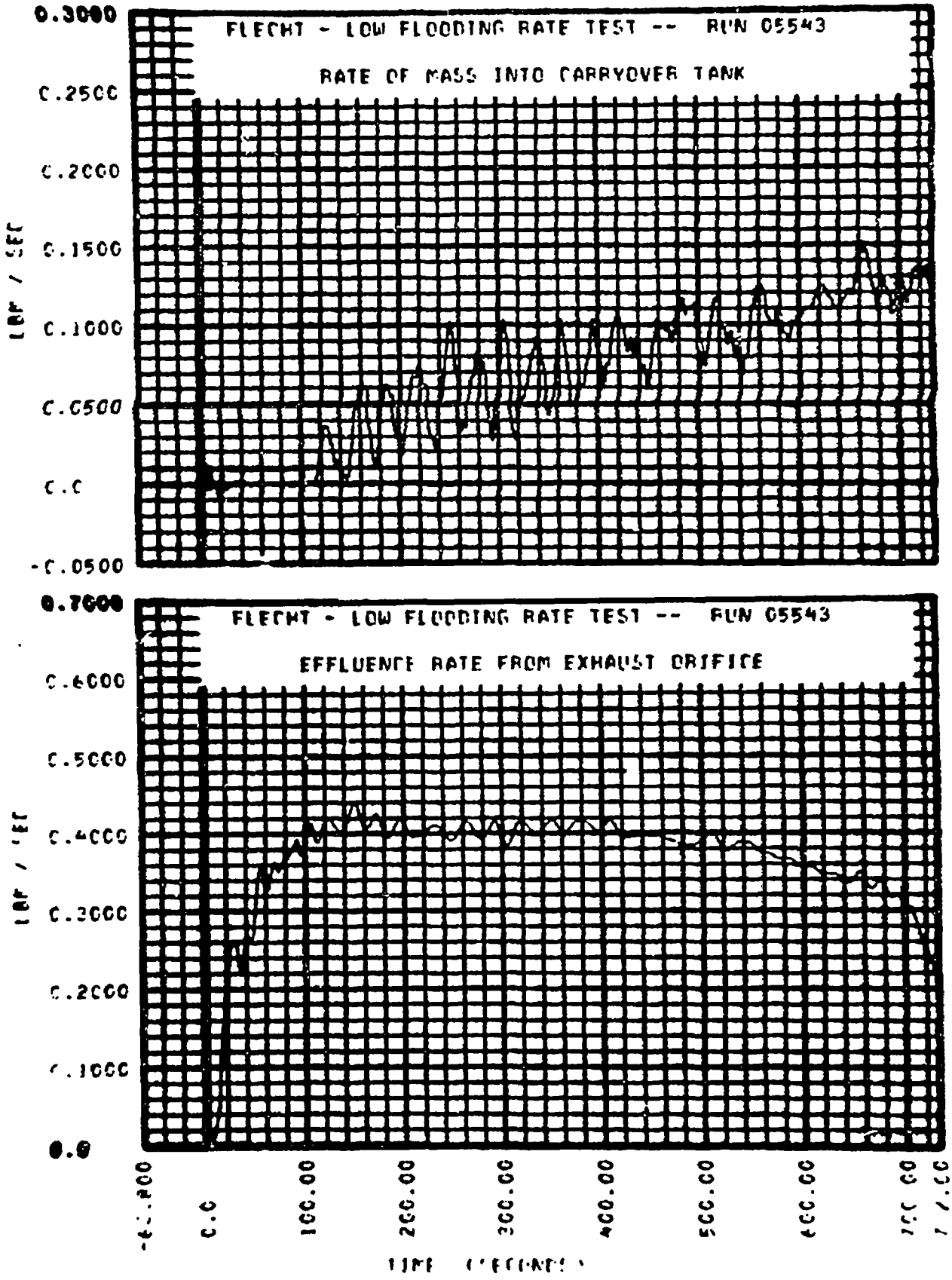

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05543
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

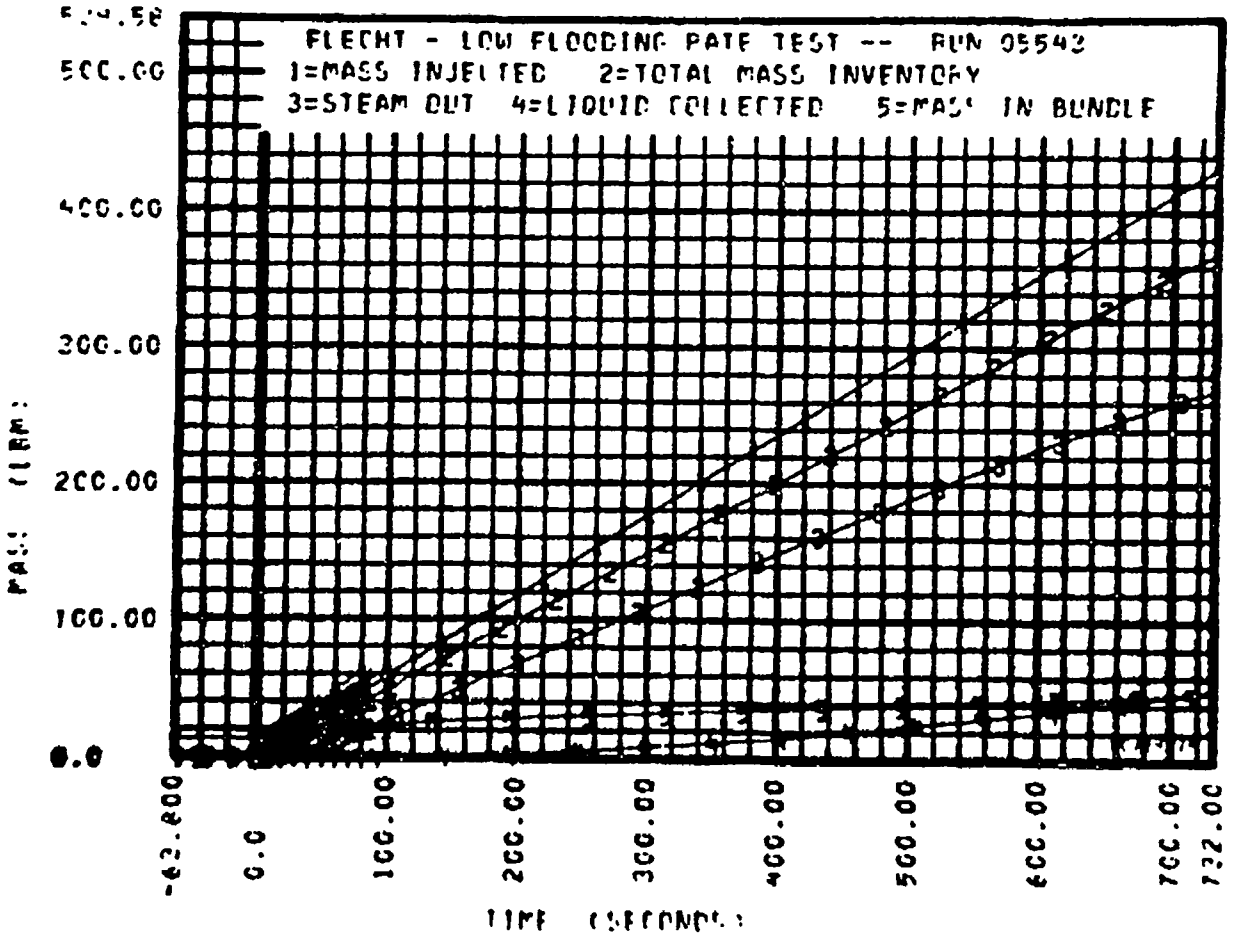

FLECHT LOW FLOODING RATE SERIES
RUN 05543
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

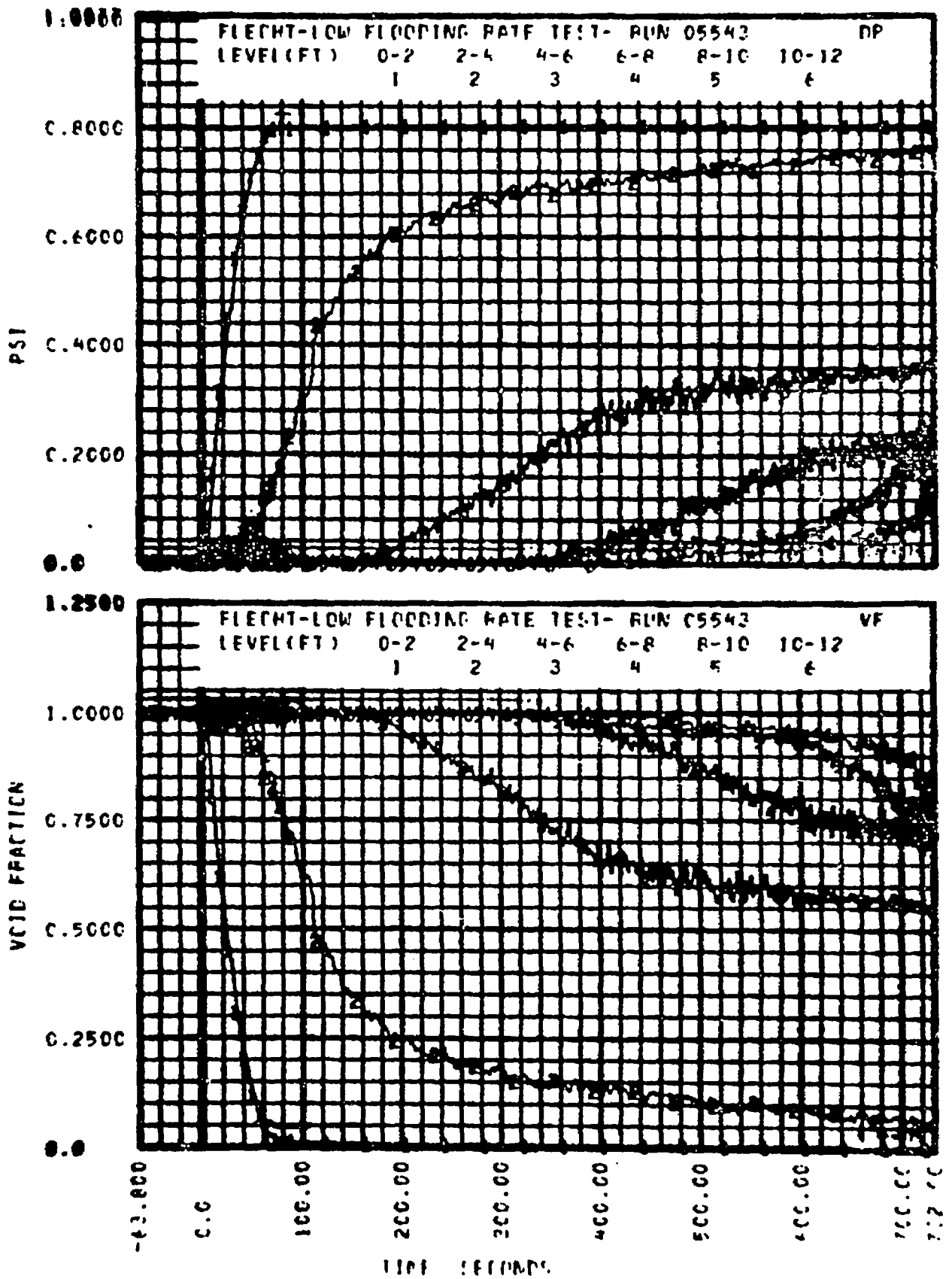

FLECHT LOW FLOODING RATE SERIES
RUN 05543
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

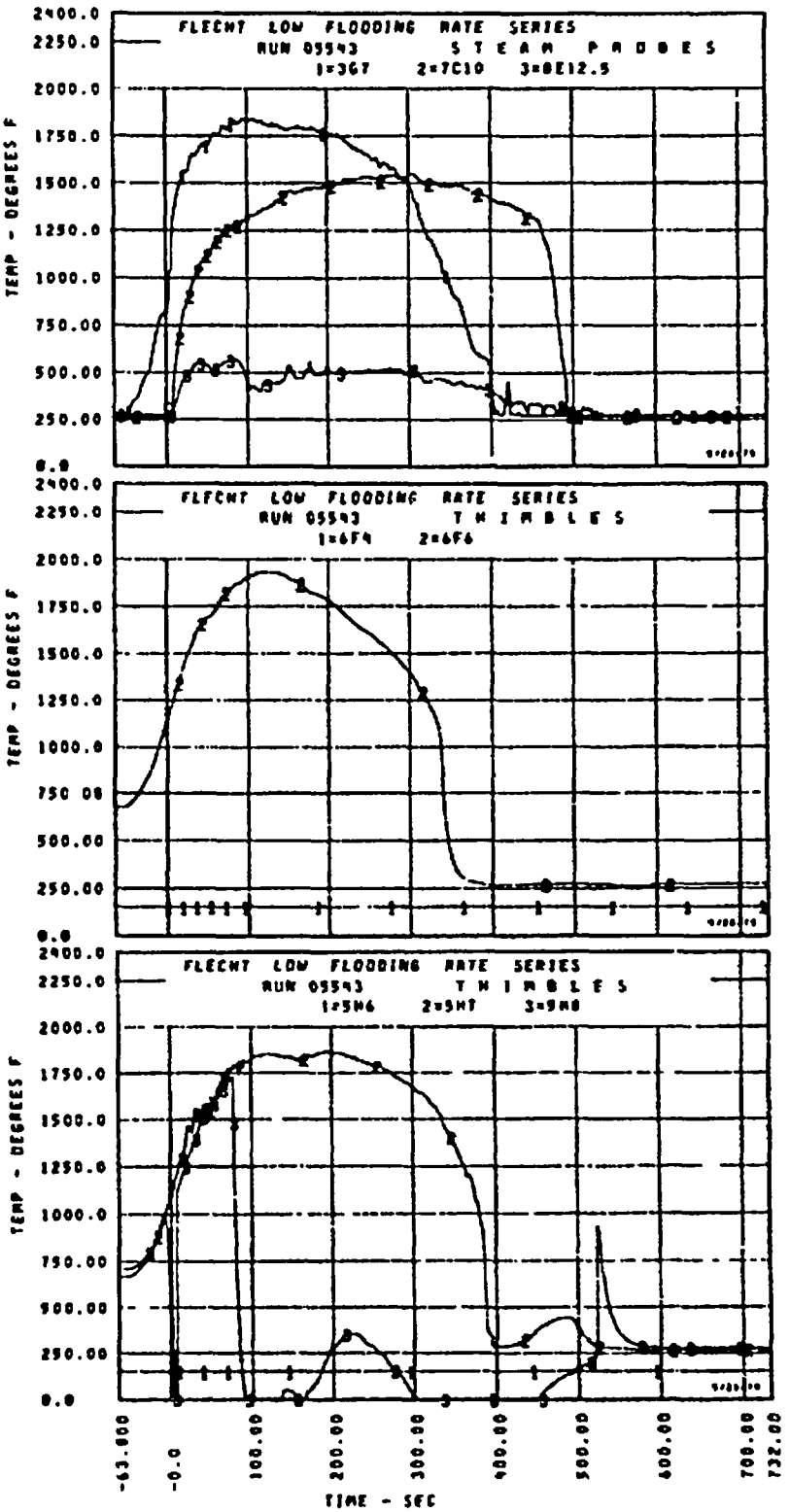

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05543
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

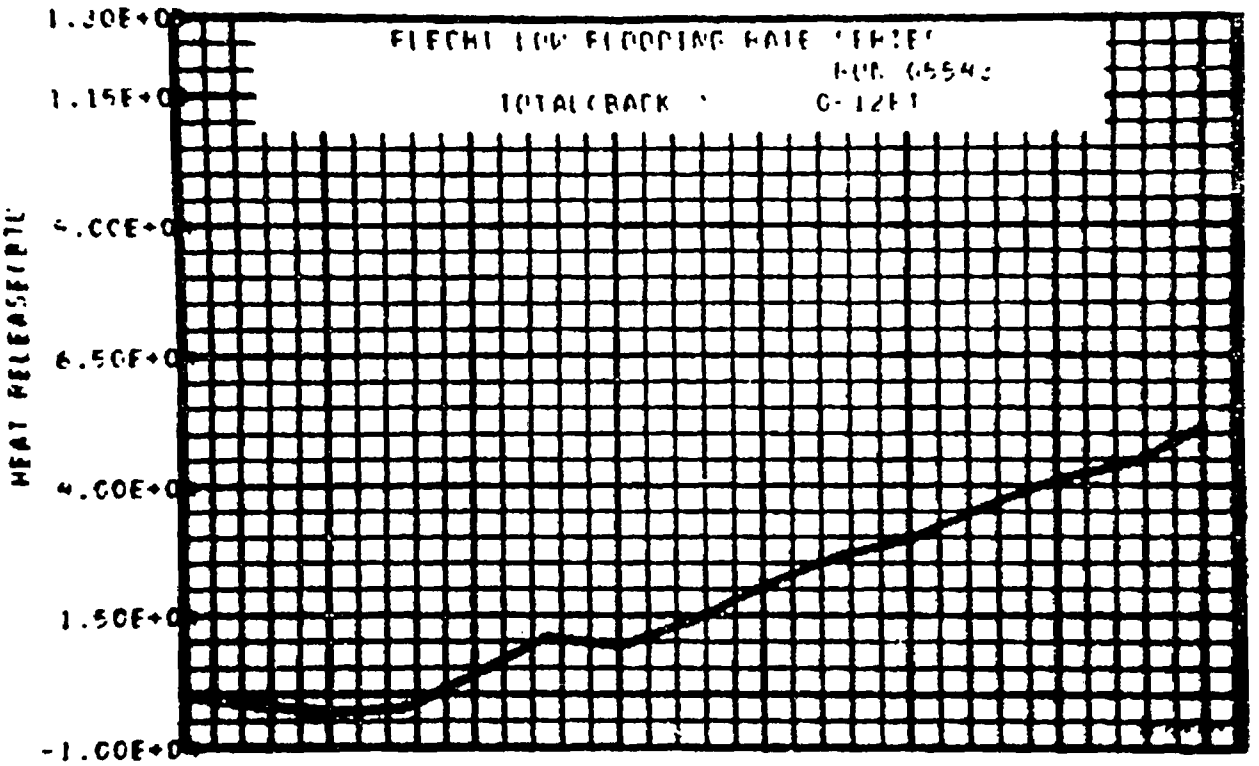

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05543
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

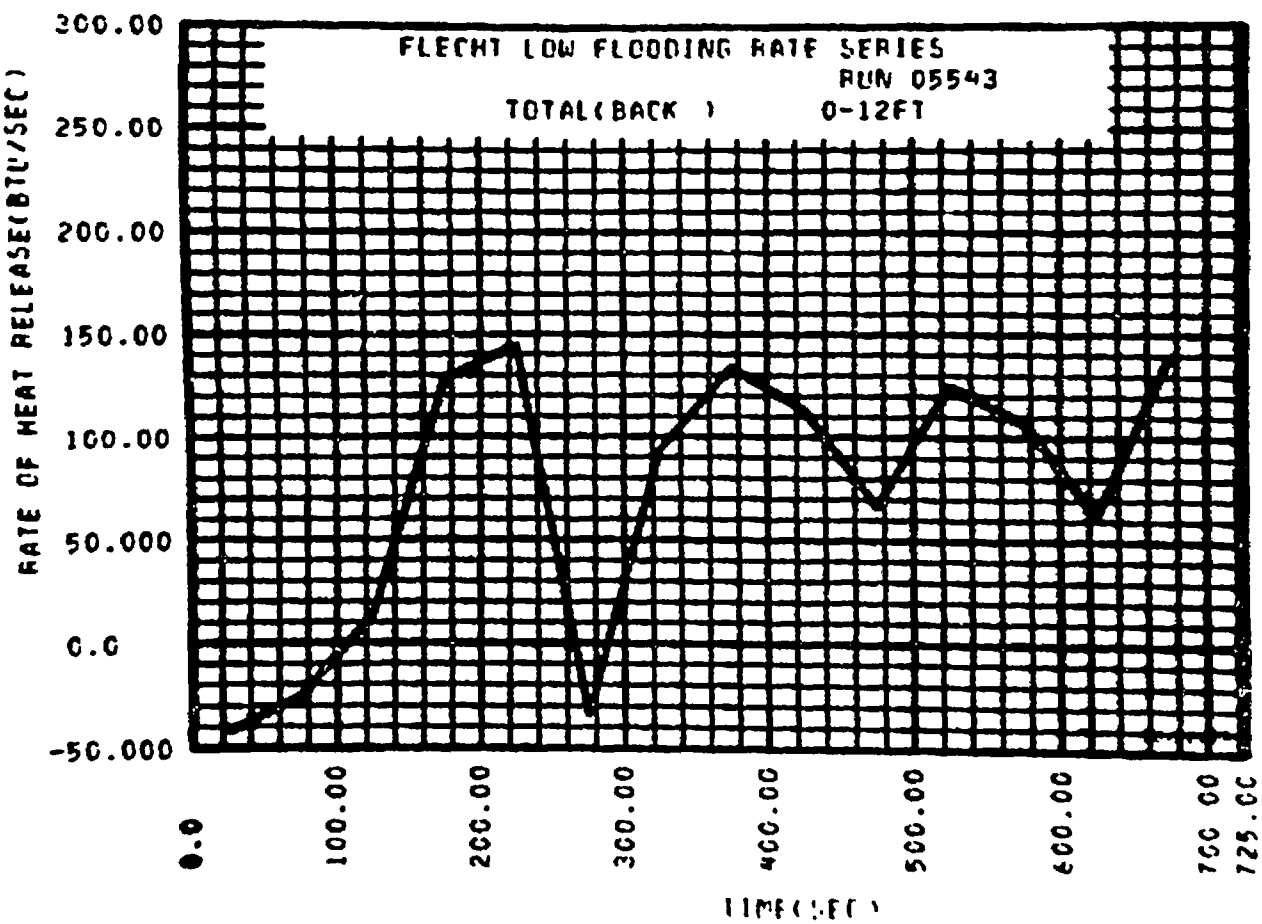

FLECHT - LOW FLOODING RATE TEST -- RUN 05543
RATE OF MASS INTO CARRYOVER TANK
0.3000
0.2500
0.2000
0.1500
0.1000
0.0500
0.0
-0.0500
LBM / SEC
FLECHT - LOW FLOODING RATE TEST -- RUN 05543
EFFLUENCE RATE FROM EXHAUST ORIFICE
0.7000
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
LBM / SEC
0.0
100.00
200.00
300.00
400.00
500.00
600.00
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 05542
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
500.00
400.00
300.00
200.00
100.00
0.0
-42.800
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
732.00


FLECHT-LOW FLOODING RATE TEST- RUN 05543 DP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 05543 VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-43.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
TIME (SECONDS)


FLECHT LOW FLOODING RATE SERIES
RUN 05593
STEAM PROBES
1=3G7 2=7C10 3=8E12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05593
THIMBLES
1=6F4 2=6F6
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 05593
THIMBLES
1=5H6 2=5H7 3=5H8
TEMP - DEGREES F
-63.000
-0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 05543
TOTAL(BACK) 0-12FT
HEAT RELEASE(BTU/SEC)
1.30E+0
1.15E+0
6.50E+0
4.00E+0
1.50E+0
-1.00E+0


FLECHT LOW FLOODING RATE SERIES
RUN 05543
TOTAL(BACK) 0-12FT
RATE OF HEAT RELEASE(BTU/SEC)
300.00
250.00
200.00
150.00
100.00
50.000
0.0
-50.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
725.00
TIME(SEC)

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 05636

DATE: 5/27/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40	
Initial Clad Temperature (6 Ft)°F At Flood	1,601	Rod T/C 4116
Rod Peak Power, kw/ft	0.73	
Flooding Rate, in/sec	0.6	

Coolant Temperature, °F	127	
Bundle Radial Power Profile	FLECHT	
Disconnected Rods	7F	

B. INITIAL HOUSING TEMPERATURE

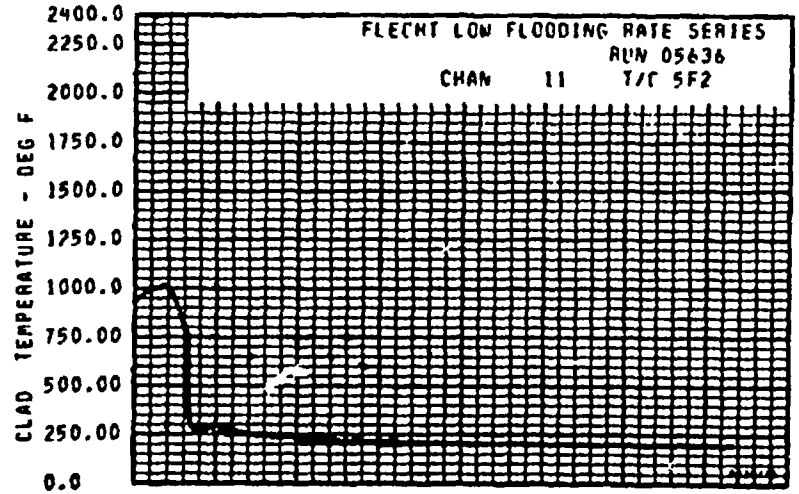
Back Side Elevation, Ft.	Temperature, °F
0	274
2	562
4	776
5.5	817
6	825
6.5	692
7	704
7.5	725
8	774
10	668
12	280
Average	636
Lower Plenum	121
Upper Plenum	269

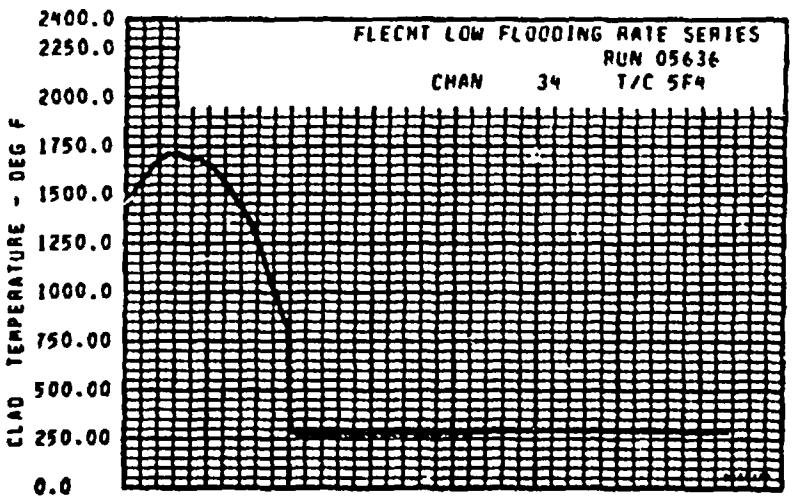
BLANK PAGE

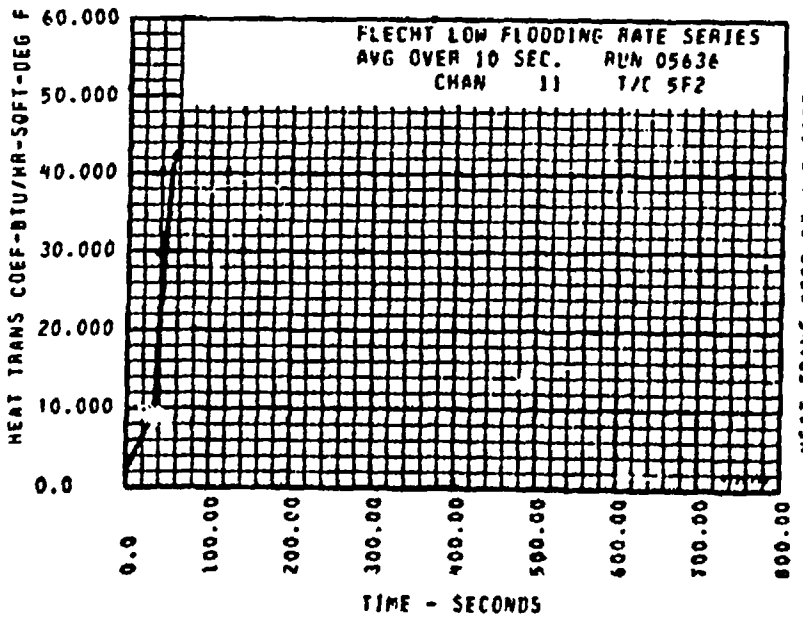
FLECHT-LOW FLOODING RATE [illegible] THERMOCOUPLE DATA

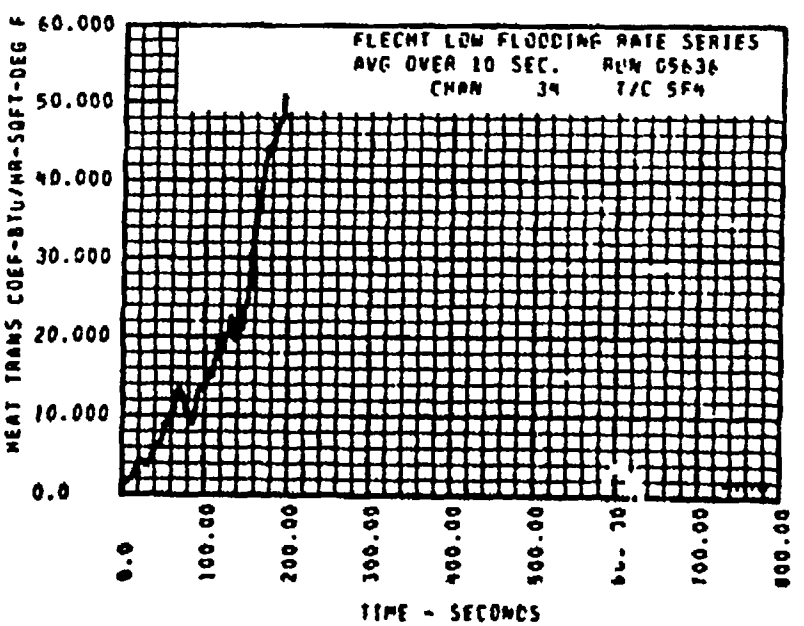
RUN NUMBER 05636

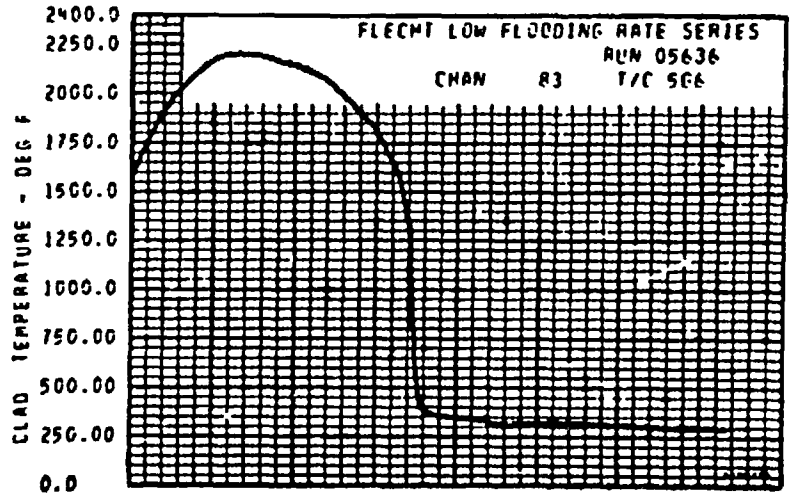
ELEVATION	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
6H1.5	172.	-75.[illegible]	62[illegible].	65[illegible].	29.	10.[illegible]	585.	22.4
6H1	[illegible]	-75.[illegible]	697.	727.	43.	17.0	693.	31.4
6H1.5	[illegible]	-76.[illegible]	73[illegible].	787.	45.	21.[illegible]	674.	44.7
6H2	[illegible]	-75.[illegible]	167.	1951.	[illegible]	35.2	776.	68.9
6H4	[illegible]	-74.2	1[illegible].	1713.	286.	63.0	[illegible]	291.[illegible]
6H6	[illegible]	-75.[illegible]	1[illegible].	[illegible]176.	575.	132.0	924.	373.0
[illegible]	[illegible]	-75.[illegible]	[illegible]	2065.	576.	[illegible]	103[illegible].	357.[illegible]
[illegible]	576.	-7[illegible].[illegible]	145[illegible].	[illegible]101.	642.	145.0	1076.	424.[illegible]
[illegible]	[illegible]	-76.	1447.	1004.	539.	145.3	739.	489.8
[illegible]	[illegible]	-76.[illegible]	[illegible]	2384.	740.	225.0	897.	570.9
[illegible]	[illegible]	-75.[illegible]	1357.	1919.	[illegible]	247.0	713.	656.0
[illegible]	[illegible]	-75.[illegible]	74[illegible].	1707.	952.	792.9	62[illegible].	709.4
[illegible]	[illegible]	-75.[illegible]	57[illegible].	1569.	993.	[illegible]	665.	719.5
[illegible]	190.	-46.[illegible]	177.	443.	267.	346.0	190.	15.8
[illegible]	[illegible]	-75.[illegible]	397.	397.	1.	0.0	336.	.9
[illegible]	113.	-75.2	61[illegible].	635.	25.	8.4	547.	23.4
5F1	179.	-75.[illegible]	667.	701.	35.	15.2	592.	33.[illegible]
5F1.5	[illegible]							
5F2	531.	-75.[illegible]	72[illegible].	1013.	87.	35.2	758.	64.9
5F3	445.	-75.2	1217.	1354.	141.	40.4	730.	127.8
5F4	743.	-75.[illegible]	1430.	1720.	290.	60.0	810.	198.9
5F6	7[illegible].	-75.2	1572.	2169.	597.	133.9	1099.	349.6
5G6	[illegible]	-76.[illegible]	1574.	2207.	6[illegible].	132.0	1319.	361.4
5G6.5	696.	-76.[illegible]	154[illegible].	2189.	644.	130.0	1022.	403.7
5G7	485.	-75.2	146[illegible].	2151.	602.	701.0	983.	452.7
5G8	[illegible]	-76.[illegible]	1390.	2736.	944.	236.0	923.	565.6
5G9	635.	-76.[illegible]	116[illegible].	2054.	894.	247.0	745.	655.9
5G11	[illegible]	-75.[illegible]	635.	1634.	9[illegible].	373.0	593.	728.9
5G12	2[illegible].	-76.2	547.	146[illegible].	923.	268.0	533.	737.0
1G4	[illegible]	-76.[illegible]	1362.	1518.	156.	50.4	915.	156.6
1G6	781.	-75.2	1521.	1827.	306.	111.0	936.	355.6
1G10	542.	-75.[illegible]	980.	1330.	443.	190.8	622.	695.9
3H2	[illegible]	-76.2	9[illegible].	1045.	82.	33.8	747.	64.9
3H4	762.	-75.2	1547.	2125.	543.	116.0	932.	362.9
3H8	748.	-75.2	1397.	2100.	70[illegible].	281.8	883.	576.9
3H10	560.	-75.[illegible]	9[illegible].	1688.	732.	215.0	925.	652.2
5F4	742.	-75.[illegible]	1365.	1627.	261.	84.0	841.	188.9
5E6	738.	-74.[illegible]	153[illegible].	2159.	623.	133.0	1062.	359.6
5E8	6[illegible].	-74.2	1326.	2322.	996.	250.0	1149.	596.3
5E10	[illegible]	-76.[illegible]	772.	1895.	1123.	361.0	674.	711.0

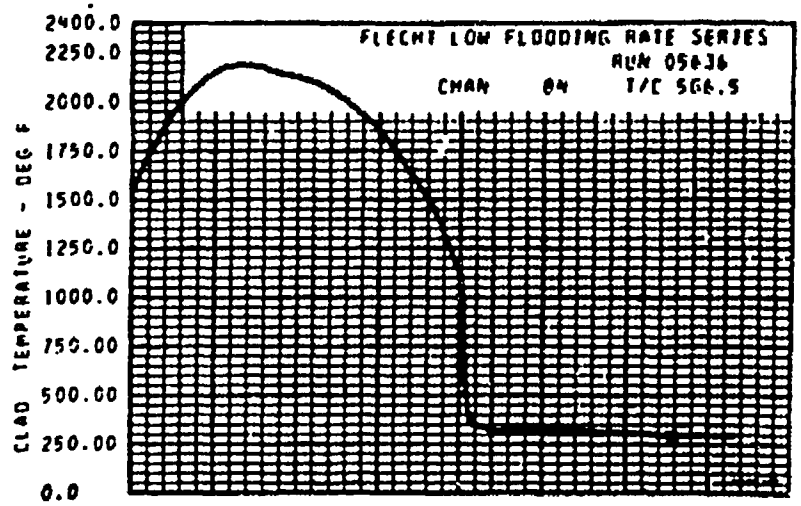

FLECHT LOW FLOODING RATE SERIES
RUN 05636
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

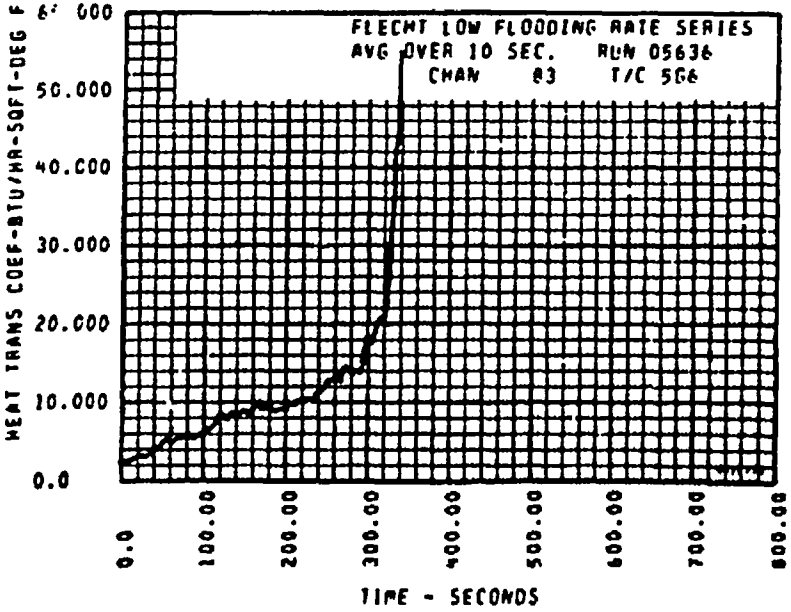

FLECHT LOW FLOODING RATE SERIES
RUN 05636
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

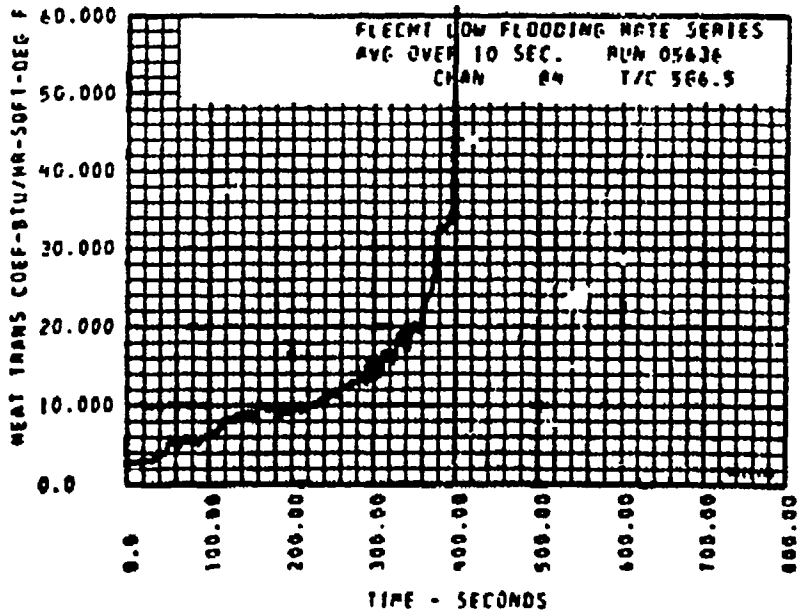

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05636
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

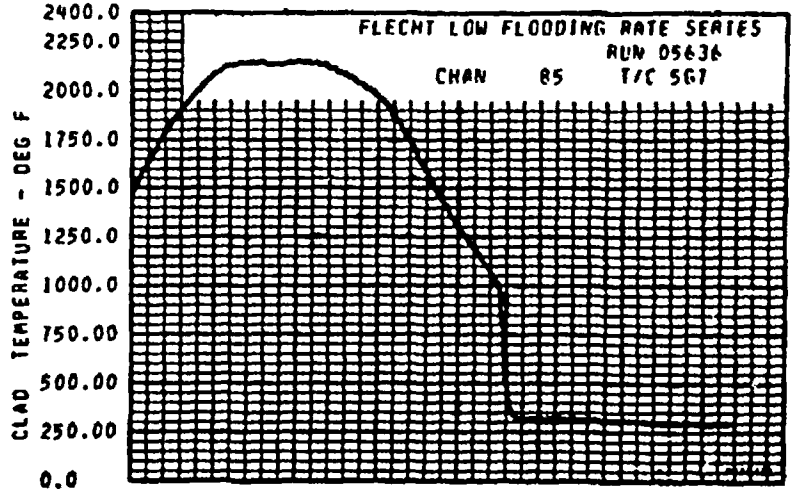

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05636
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

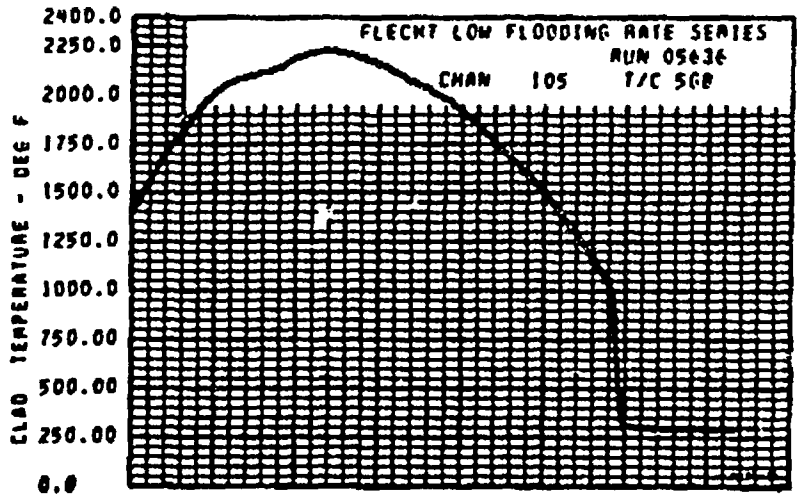

FLECHT LOW FLOODING RATE SERIES
RUN 05636
CHAN 83 T/C 566
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

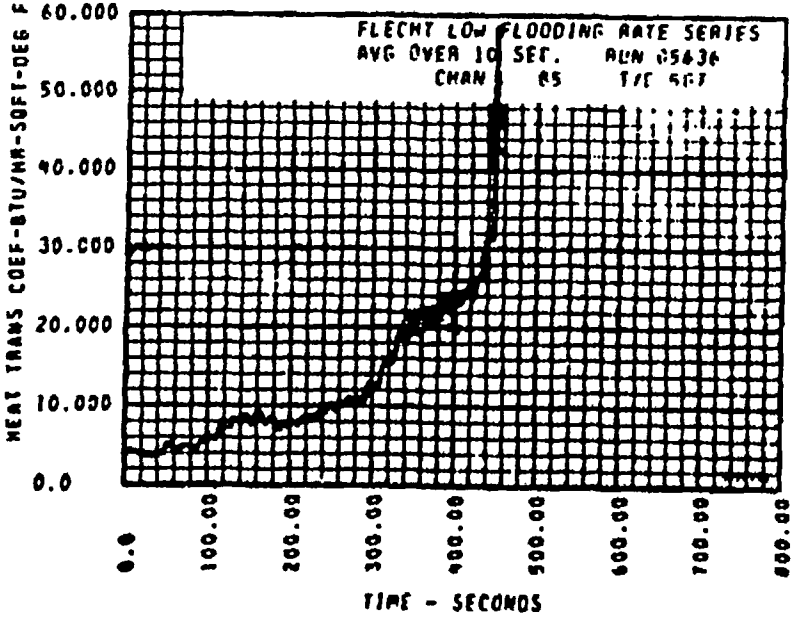

FLECHT LOW FLOODING RATE SERIES
RUN 05636
CHAN 84 T/C 566.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

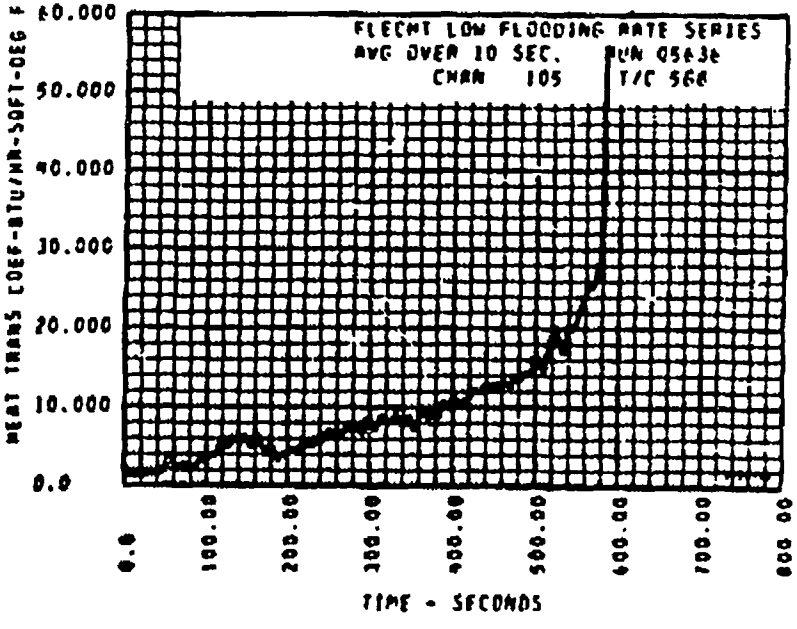

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05636
CHAN 83 T/C 566
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

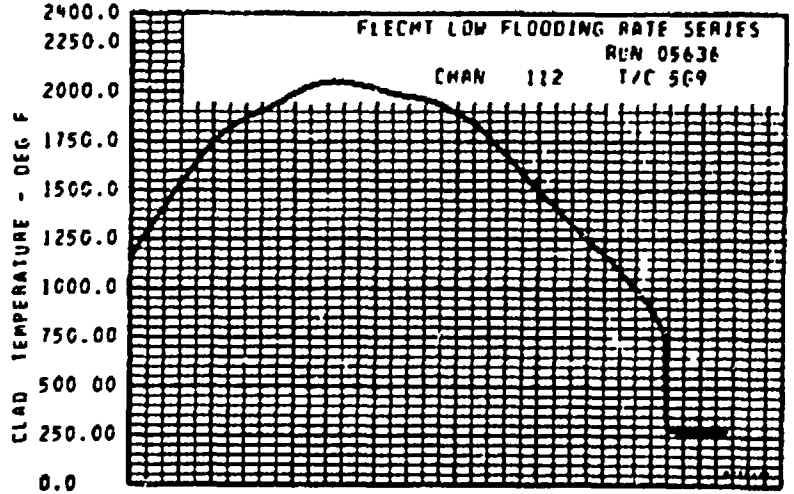

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05636
CHAN 84 T/C 566.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
TIME - SECONDS

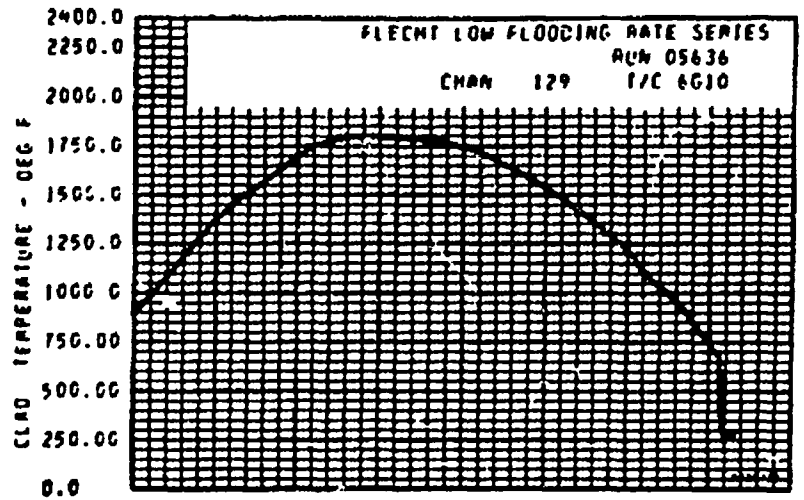

FLECHT LOW FLOODING RATE SERIES
RUN 05636
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

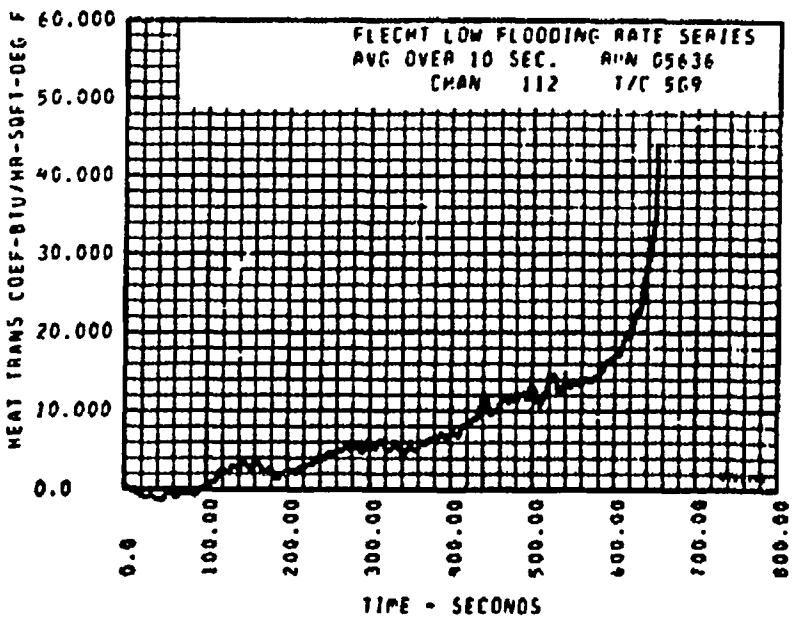

FLECHT LOW FLOODING RATE SERIES
RUN 05636
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

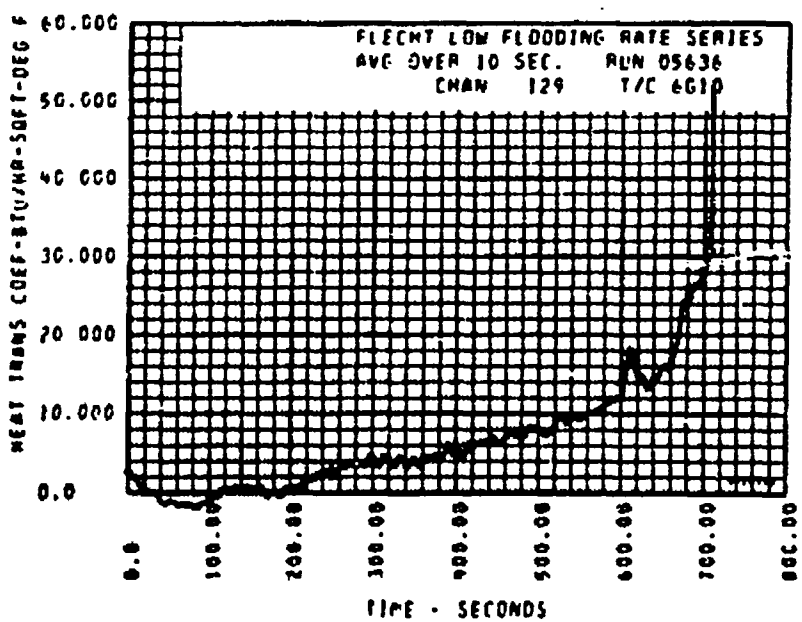

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05636
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

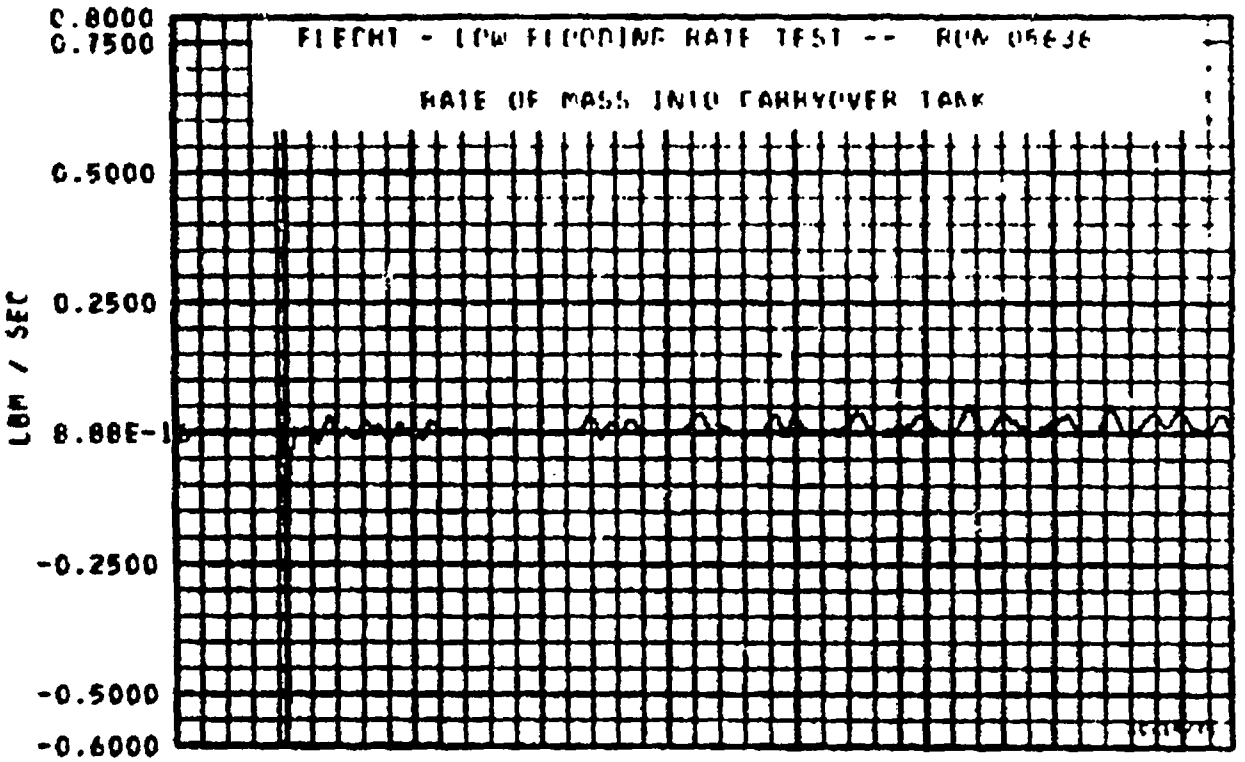

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05636
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

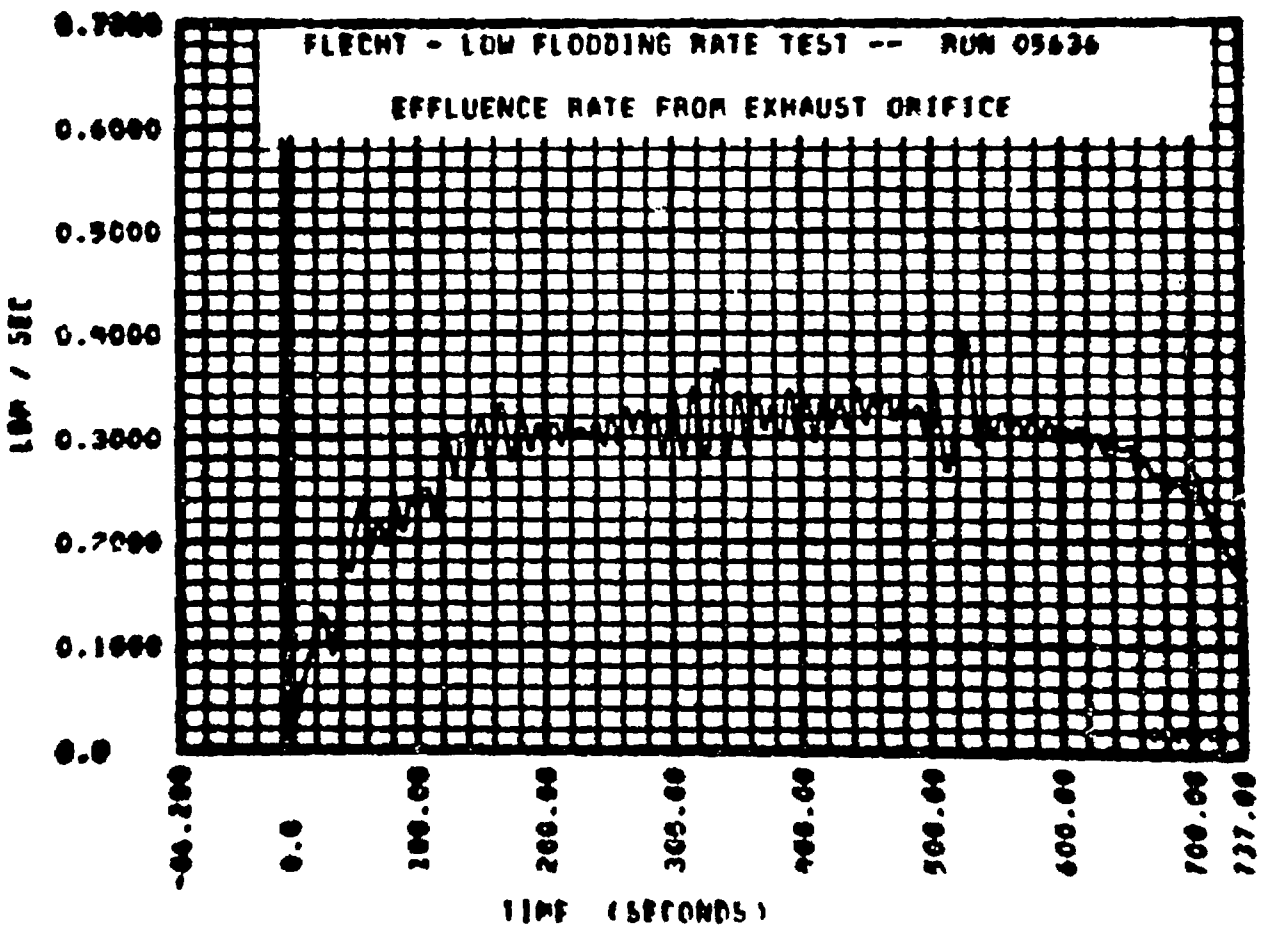

FLECHT LOW FLOODING RATE SERIES
RUN 05636
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

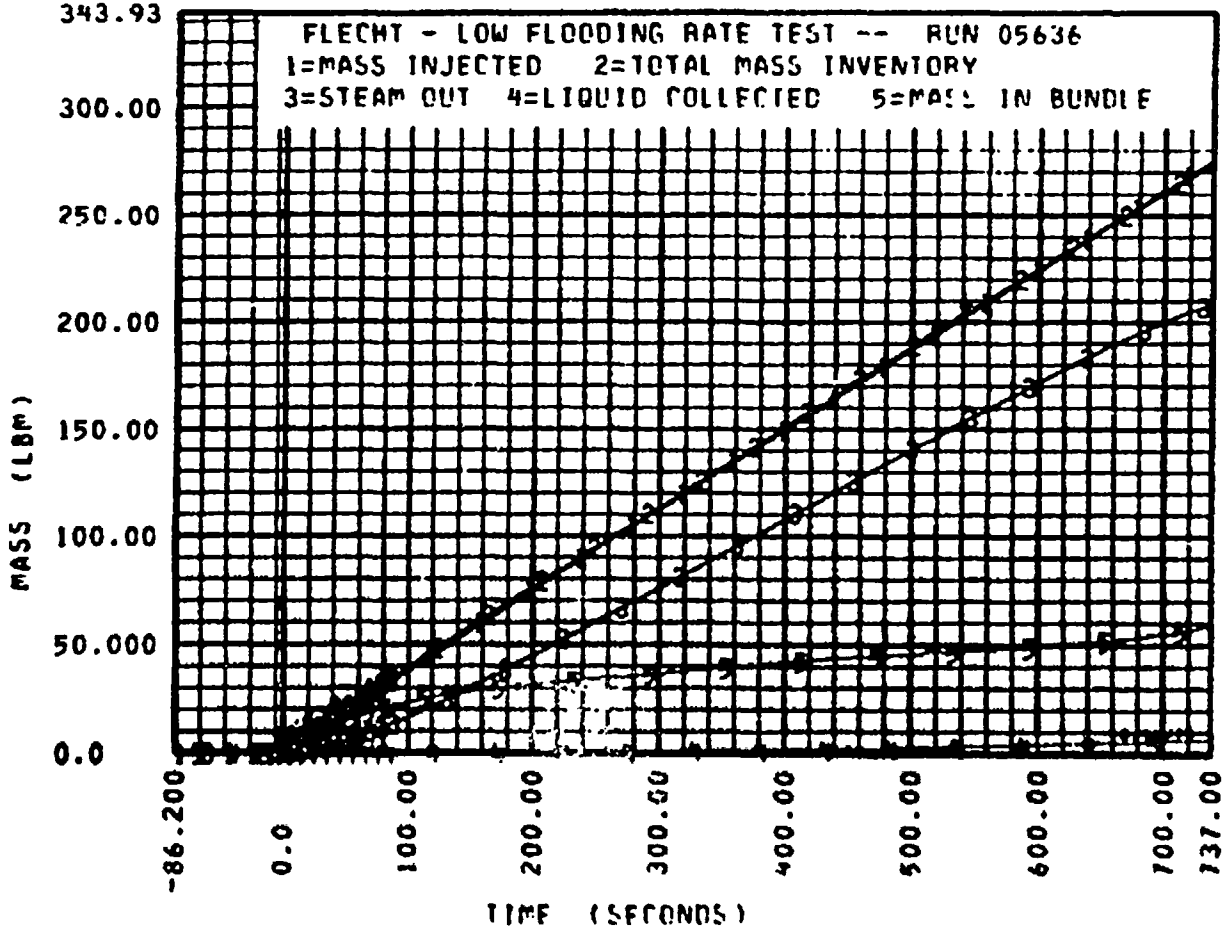

FLECHT LOW FLOODING RATE SERIES
RUN 05636
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

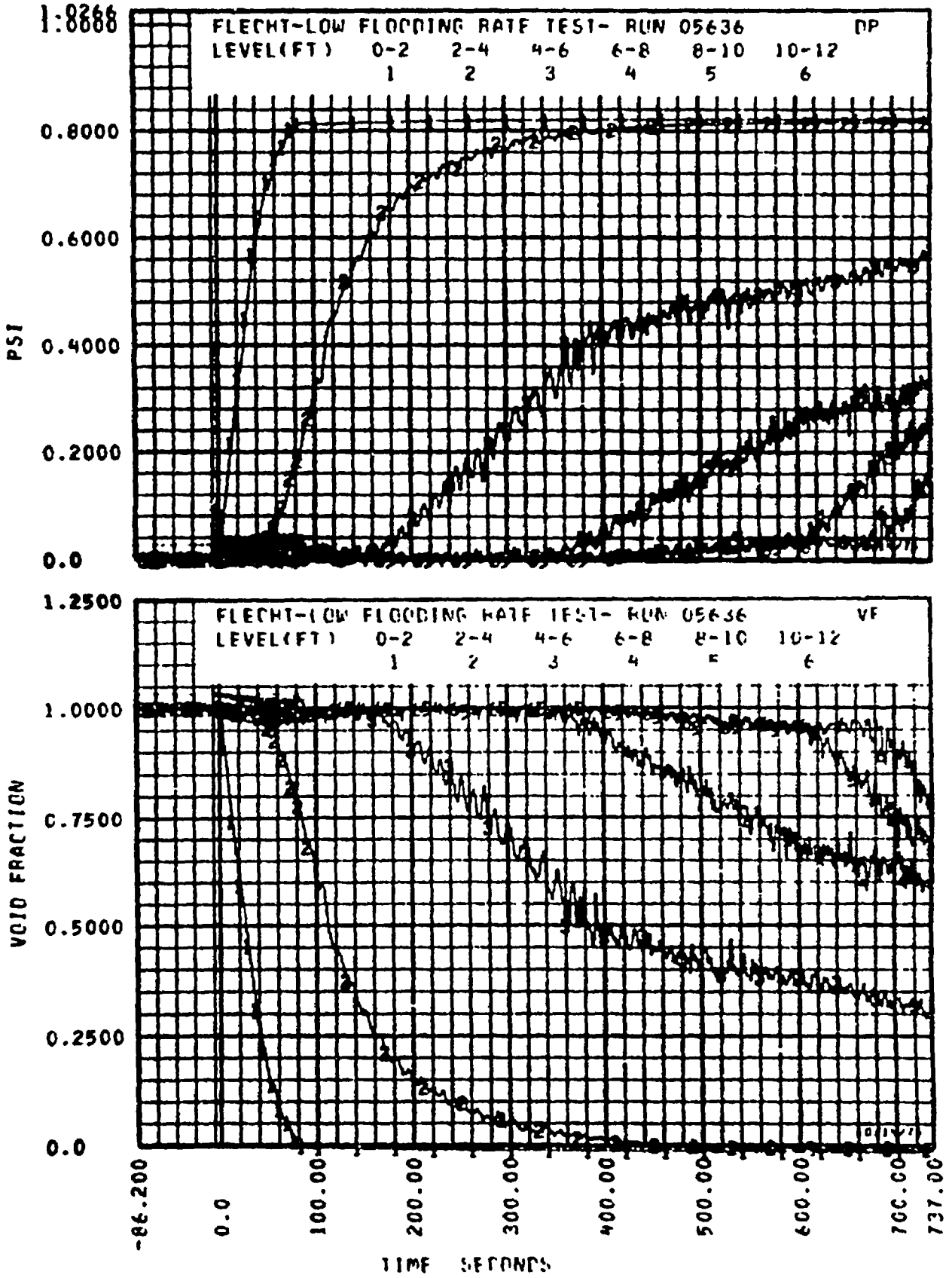

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05636
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

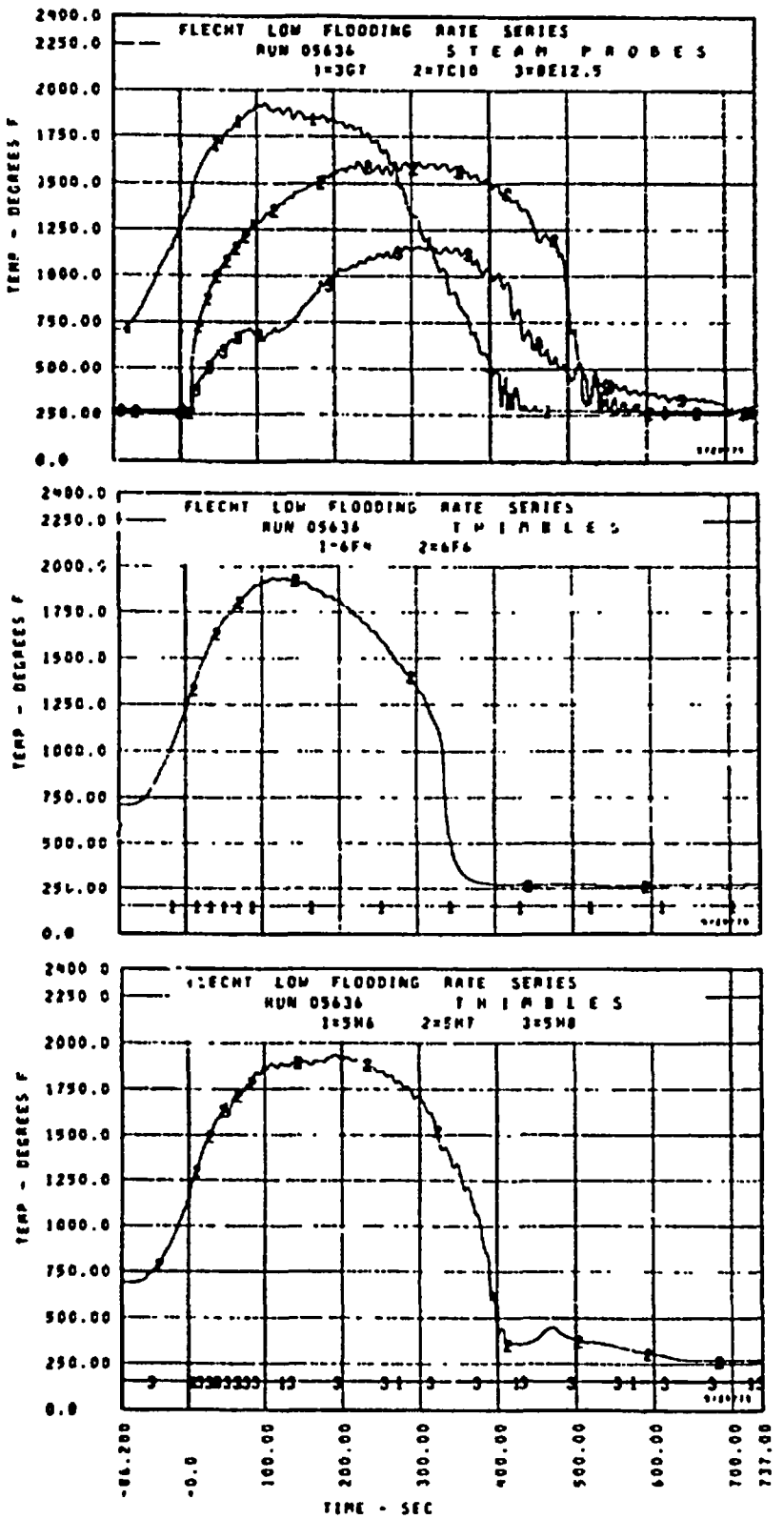

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05636
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
TIME - SECONDS

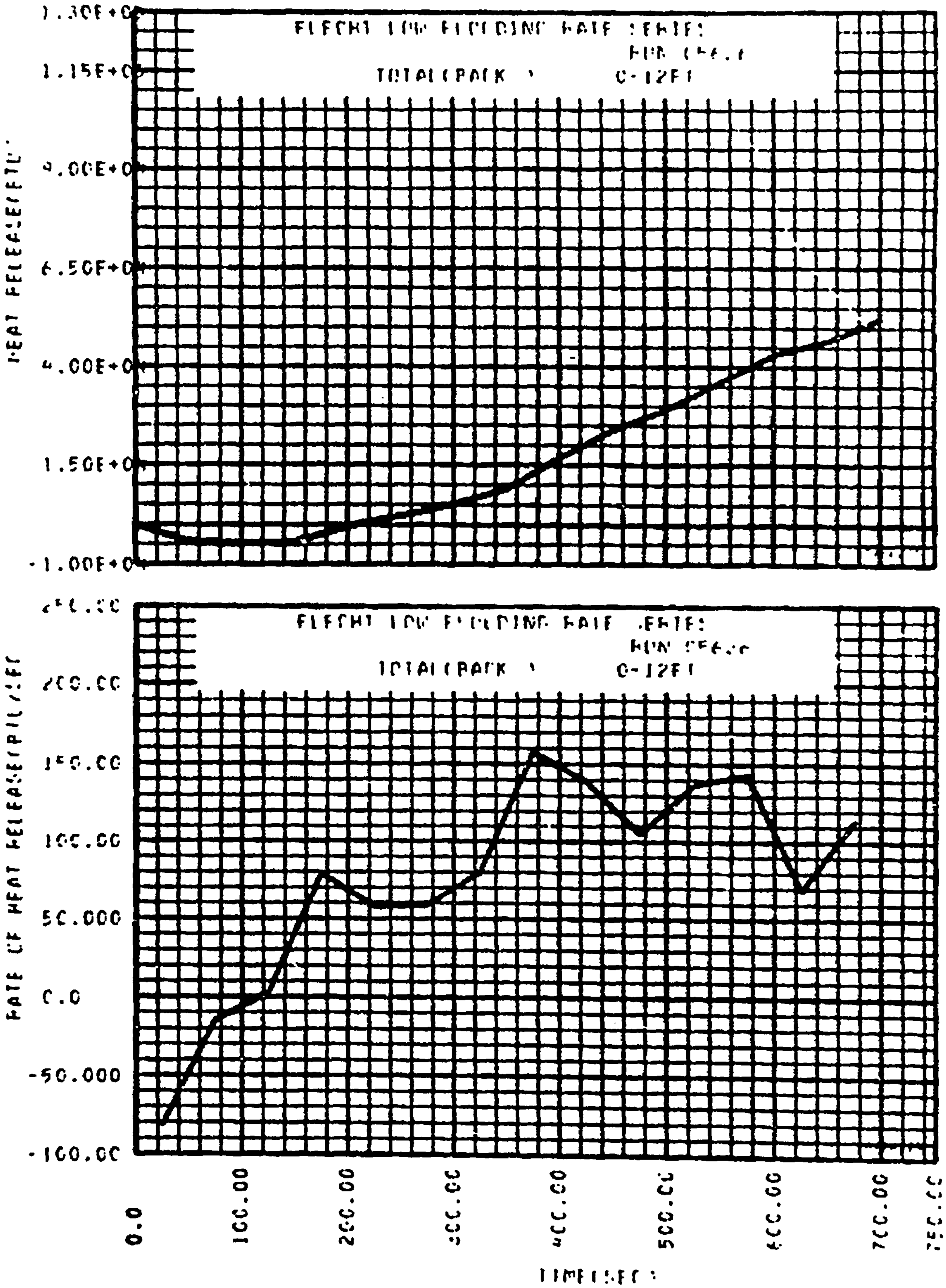

FLECHT - LOW FLOODING RATE TEST -- RUN 05636
RATE OF MASS INTO CARRYOVER TANK
LBM / SEC
0.8000
0.7500
0.5000
0.2500
8.88E-16
-0.2500
-0.5000
-0.6000


FLECHT - LOW FLOODING RATE TEST -- RUN 05636
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
0.6000
0.5000
0.4000
0.3000
0.1000
0.0
-50.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
727.00
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 05636
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
343.93
300.00
250.00
200.00
150.00
100.00
50.000
0.0
MASS (LBM)
-86.200
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
737.00
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 05636
DP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.8000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 05636
VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-86.200
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
737.00
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 05636
STEAM PROBES
1=3G7 2=TC10 3=BE12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05636
THIMBLES
1=6F4 2=6F6
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 05636
THIMBLES
1=5H6 2=5H7 3=5H8
TEMP - DEGREES F
-86.200
-0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
737.00
TIME - SEC


1.15E+0
4.00E+0
1.50E+0
-1.00E+0
200.00
100.00
50.000
0.0
-50.000
-100.00
0.0
100.00
500.00
700.00

BLANK PAGE

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 05715

DATE: 6/2/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40	
Initial Clad Temperature (6 Ft)°F At Flood	1,603	Rod T/C 4H6
Rod Peak Power, kw/ft	0.95	
Flooding Rate, in/sec	12 (5.4 sec)	
	0.79	

Coolant Temperature, °F	127	
Bundle Radial Power Profile	FLECHT	
Disconnected Rods	7F	

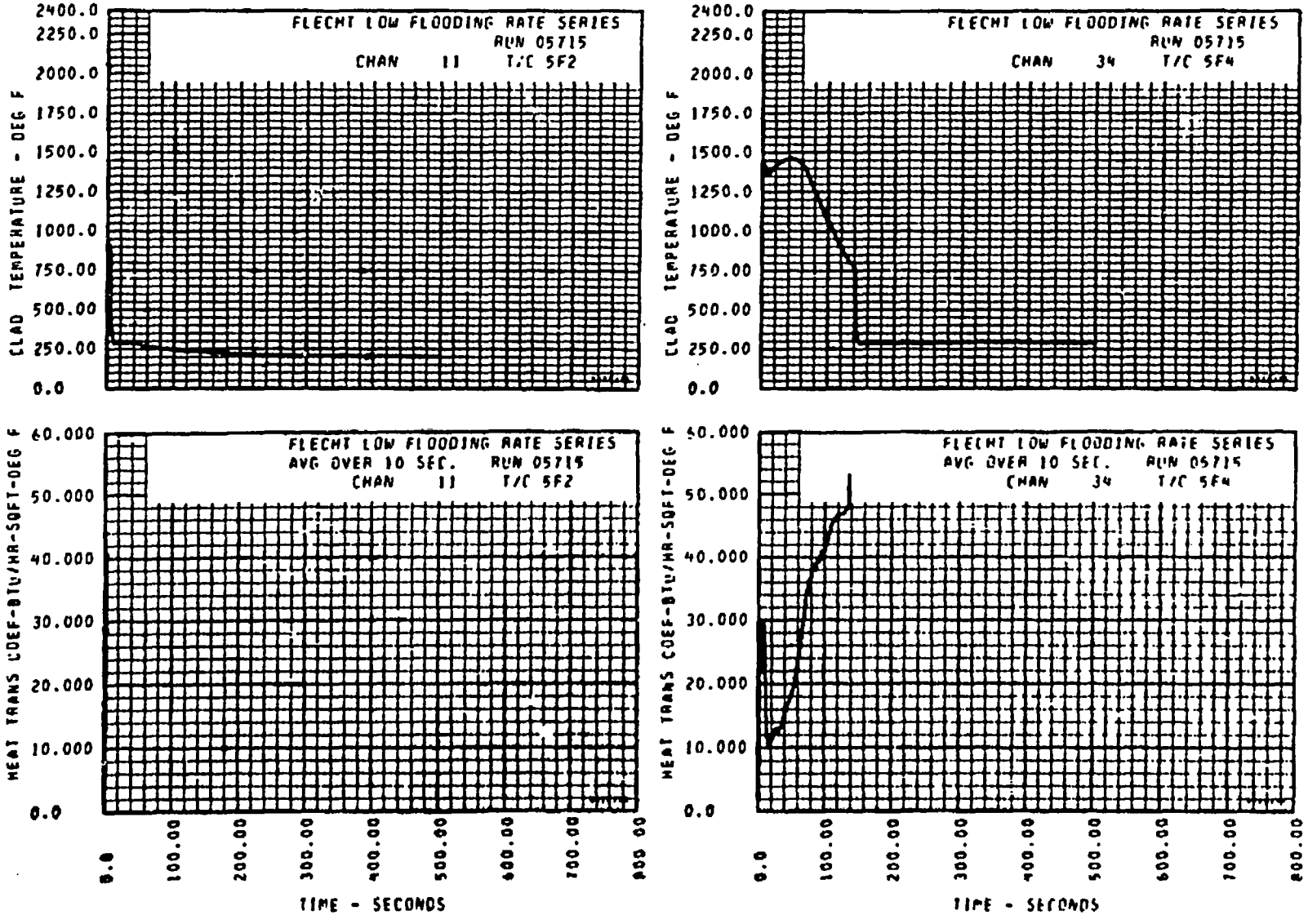
B. INITIAL HOUSING TEMPERATURE

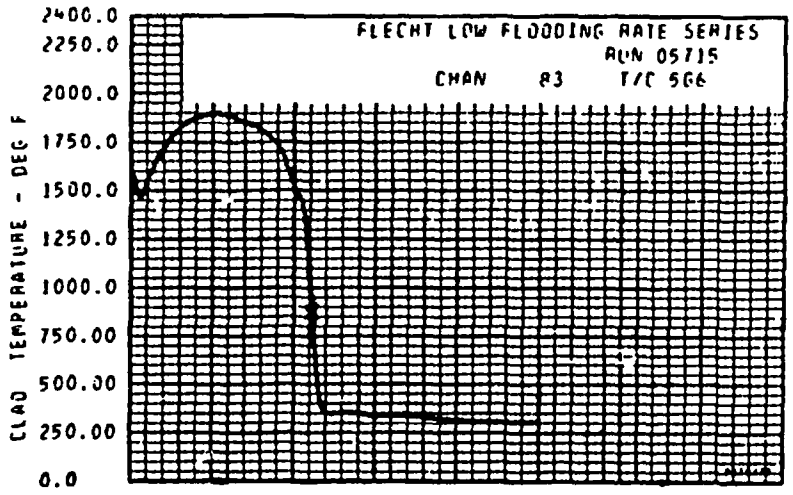
Back Side Elevation, Ft.	Temperature, °F
0	277
2	556
4	720
5.5	811
6	816
6.5	646
7	646
7.5	658
8	716
10	569
12	272
Average	608
Lower Plenum	119
Upper Plenum	270

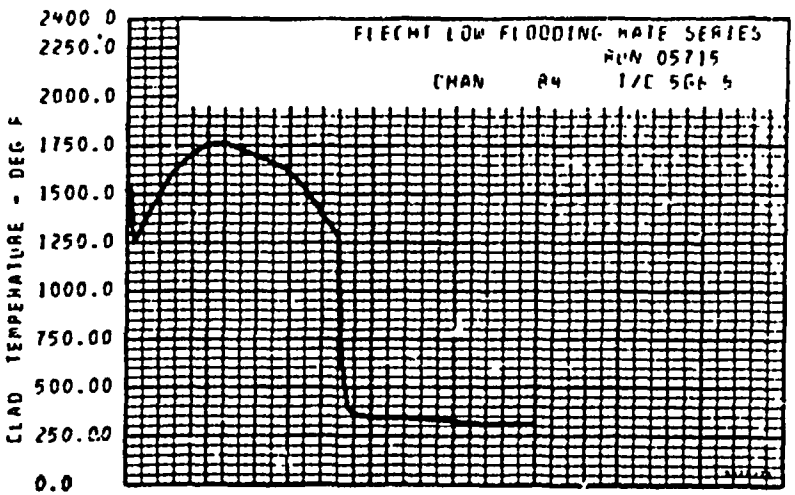
FLIGHT-LOW FLOODING RATE RED THERMOCOUPLE DATA

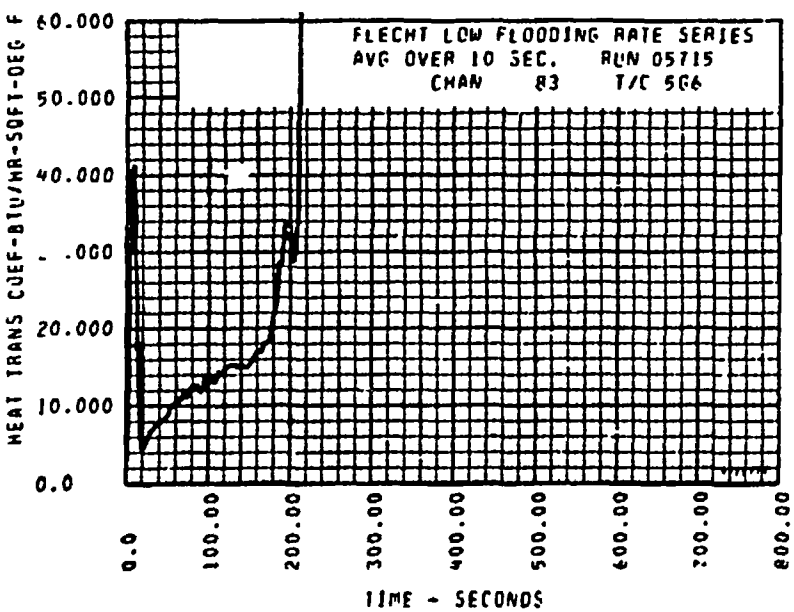
RUN NUMBER [illegible]

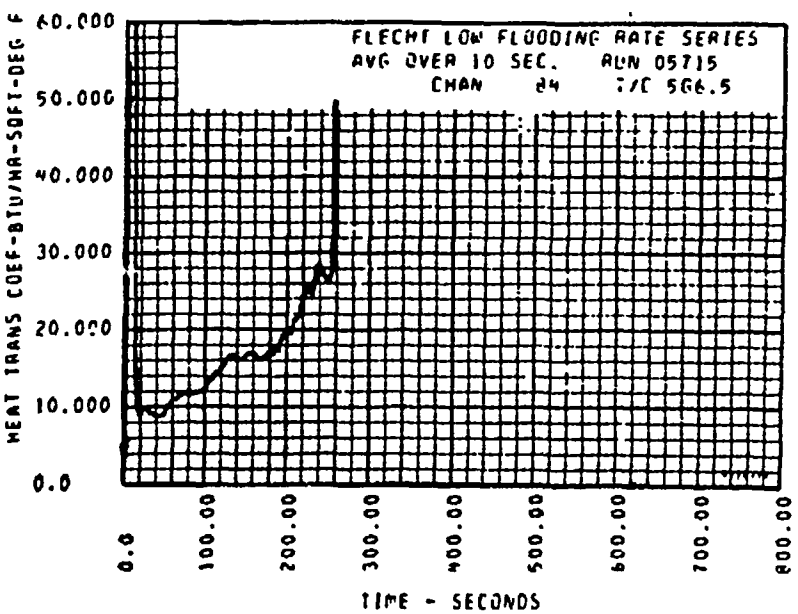
[illegible]	[illegible] (DEG.F)	TIME OF [illegible] (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
[illegible]	[illegible]	[illegible]	[illegible]	611.	3.	[illegible]	595.	1.9
[illegible]	[illegible]	[illegible]	[illegible]	472.	[illegible]	[illegible]	641.	2.5
[illegible]	[illegible]	[illegible]	713.	719.	[illegible]	1.2	[illegible]	3.8
[illegible]	[illegible]	[illegible]	[illegible]	741.	[illegible]	[illegible]	931.	5.1
[illegible]	[illegible]	[illegible]	1417.	[illegible]	52.	43.4	944.	135.9
[illegible]	[illegible]	[illegible]	[illegible]	1867.	276.	49.7	1103.	257.6
[illegible]	[illegible]	[illegible]	1477.	1741.	264.	90.4	953.	249.9
[illegible]	[illegible]	[illegible]	1514.	[illegible]	474.	117.2	1027.	311.8
[illegible]	[illegible]	[illegible]	1344.	1436.	71.	[illegible]	743.	350.9
[illegible]	[illegible]	[illegible]	1244.	1697.	453.	143.0	835.	375.0
[illegible]	[illegible]	[illegible]	376.	1532.	556.	150.0	676.	449.0
[illegible]	[illegible]	[illegible]	717.	1364.	646.	214.0	677.	449.0
[illegible]	[illegible]	[illegible]	577.	1160.	583.	260.0	714.	375.3
[illegible]	[illegible]	[illegible]	257.	974.	717.	214.0	261.	7.4
[illegible]	[illegible]	[illegible]	446.	446.	[illegible]	.2	446.	.6
[illegible]	[illegible]	[illegible]	532.	[illegible]	3.	.6	543.	1.7
[illegible]	[illegible]	[illegible]	674.	741.	[illegible]	1.2	672.	2.5
[illegible]	THERMOCOUPLE				DATA			
[illegible]	[illegible]	[illegible]	914.	[illegible]	[illegible]	1.6	451.	5.4
[illegible]	[illegible]	[illegible]	1156.	1715.	19.	1.5	732.	49.5
[illegible]	[illegible]	[illegible]	1413.	1466.	[illegible]	47.4	764.	141.9
[illegible]	[illegible]	[illegible]	1357.	[illegible]	297.	135.0	1240.	215.2
[illegible]	[illegible]	[illegible]	1527.	1937.	371.	47.6	1360.	214.9
[illegible]	[illegible]	[illegible]	1516.	1760.	243.	115.2	1204.	260.6
[illegible]	[illegible]	[illegible]	1415.	1438.	23.	2.2	1192.	262.1
[illegible]	[illegible]	[illegible]	1209.	1540.	341.	173.0	1132.	351.5
[illegible]	[illegible]	[illegible]	1076.	1344.	265.	133.0	701.	418.0
[illegible]	[illegible]	[illegible]	671.	930.	323.	265.0	500.	455.0
[illegible]	[illegible]	[illegible]	445.	910.	424.	219.0	546.	465.0
[illegible]	726.	[illegible]	1347.	1360.	14.	2.4	554.	130.9
[illegible]	776.	[illegible]	1331.	1432.	101.	64.6	913.	265.0
[illegible]	507.	[illegible]	663.	678.	11.	2.0	526.	416.0
3H2	531.	-58.0	952.	961.	9.	1.4	384.	5.1
3H4	742.	-58.0	1581.	1824.	243.	76.2	1033.	257.8
3H6	[illegible]	-58.0	1336.	1604.	269.	134.0	1305.	323.6
3H10	529.	-58.0	928.	1164.	236.	145.0	977.	277.6
6E6	645.	-58.0	1483.	1909.	426.	114.4	909.6	282.6
6E6.5	594.	-58.0	1377.	1777.	401.	113.8	1078.3	308.7
6E7	607.	-58.0	1361.	1441.	79.	87.4	1054.2	291.7
6E8	555.	-58.0	1234.	1726.	493.	177.0	998.5	390.7
6E9	414.	-58.0	908.	1491.	583.	194.0	780.9	428.0
6E10	287.	-58.0	703.	1412.	709.	218.0	815.9	432.5
6E11	278.	-58.0	598.	1213.	615.	233.0	877.0	372.0

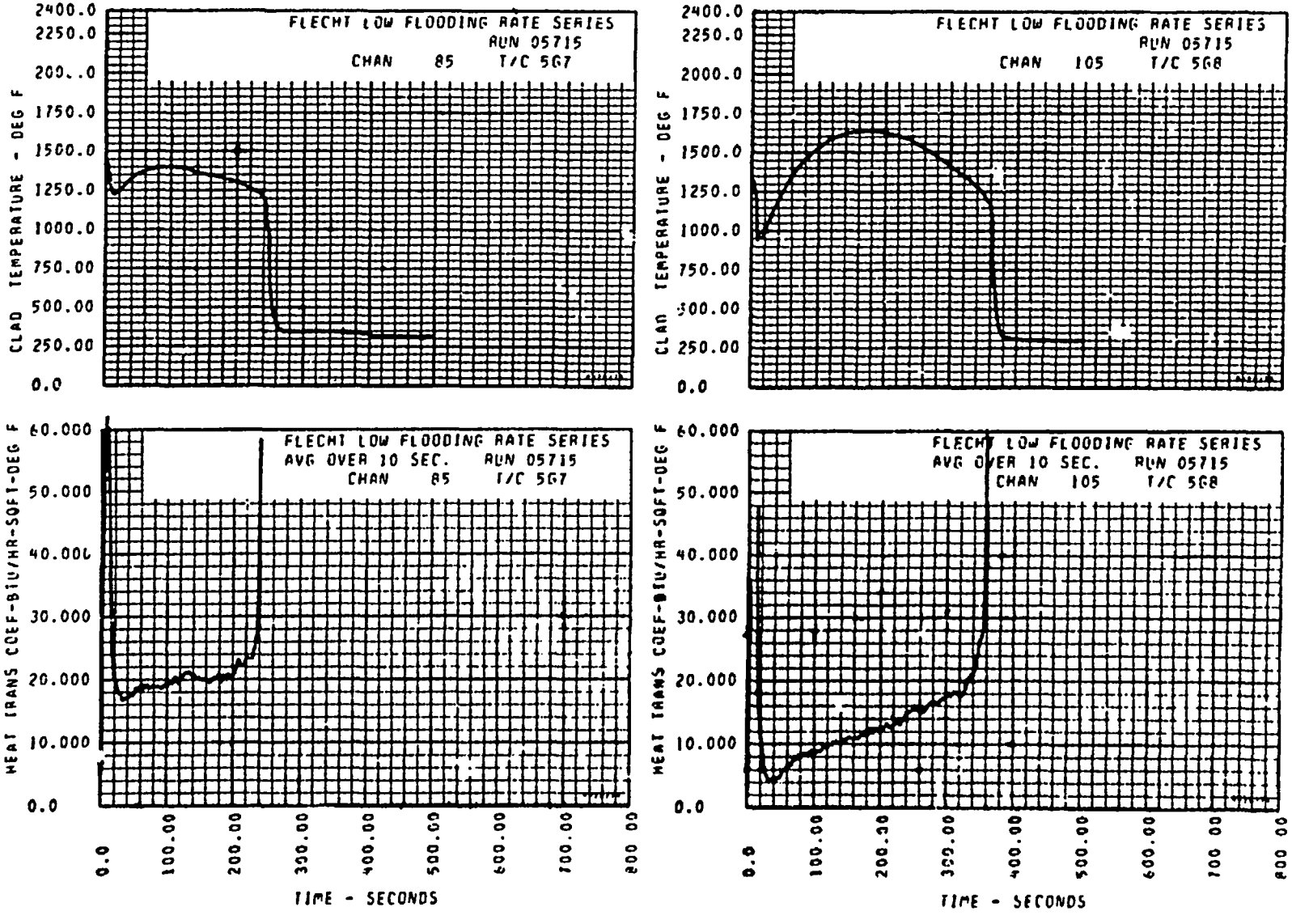

FLECHT LOW FLOODING RATE SERIES
RUN 05715
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05715
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05715
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05715
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

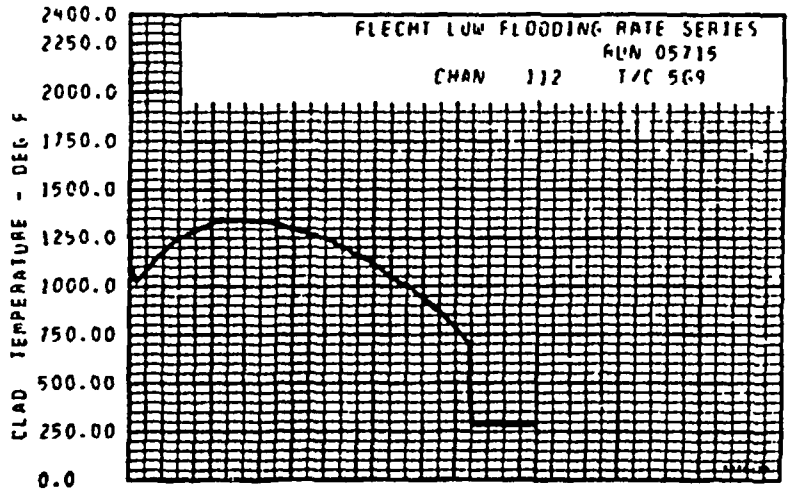

FLECHT LOW FLOODING RATE SERIES
RUN 05715
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

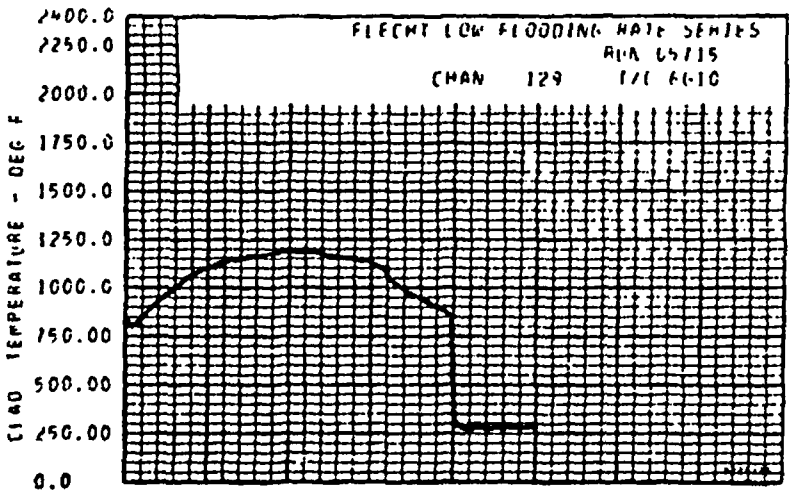

FLECHT LOW FLOODING RATE SERIES
RUN 05715
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

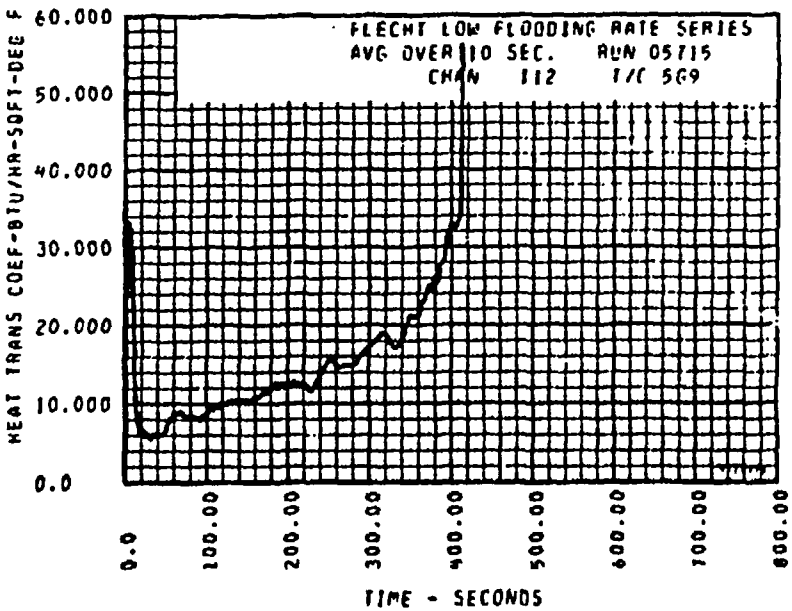

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05715
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

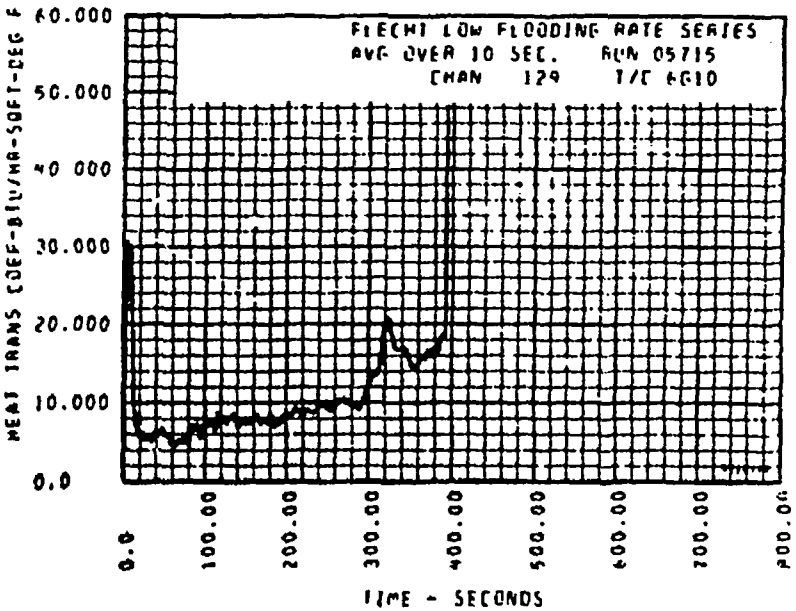

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05715
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

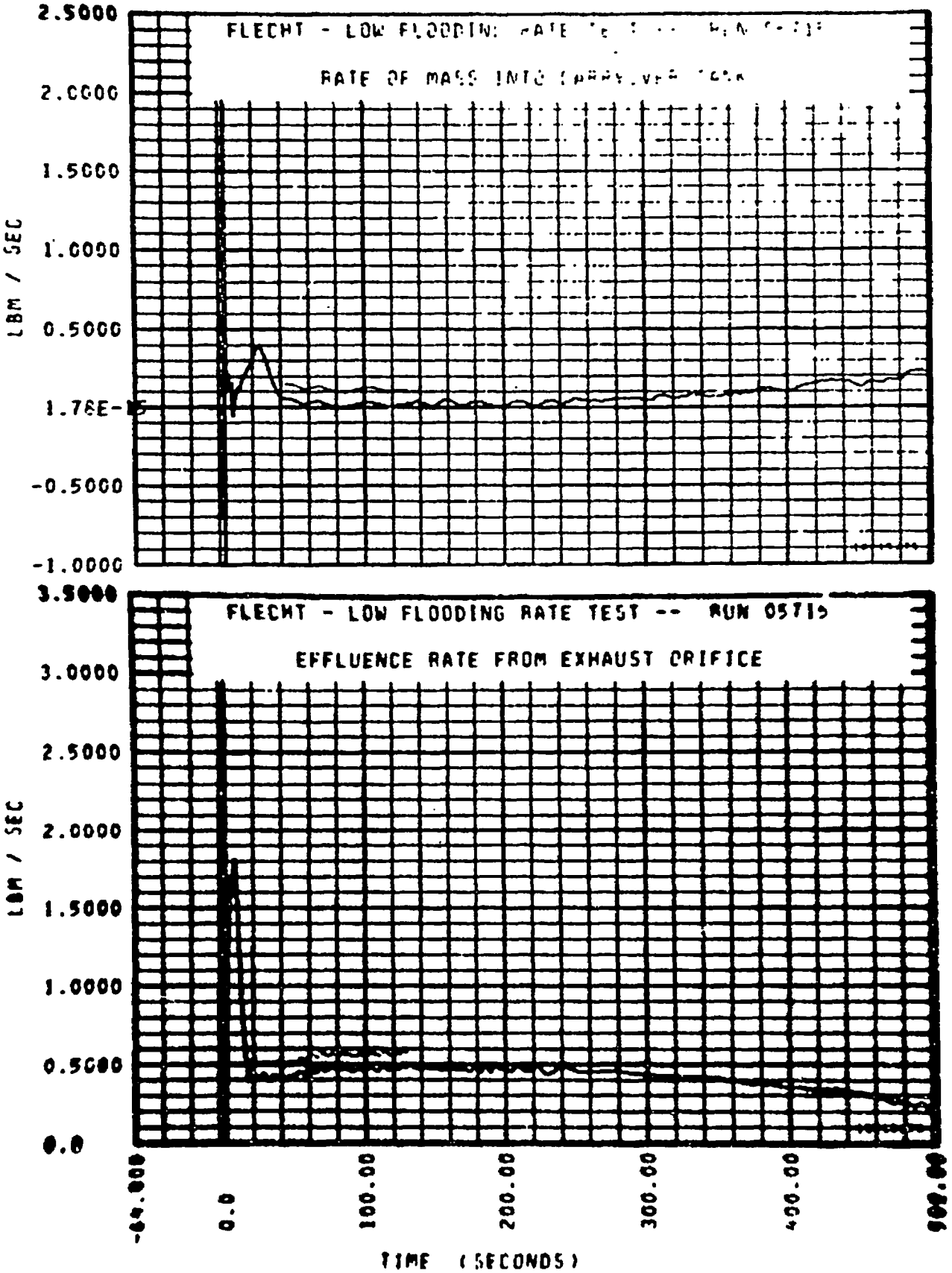

FLECHT LOW FLOODING RATE SERIES
RUN 05715
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05715
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05715
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05715
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

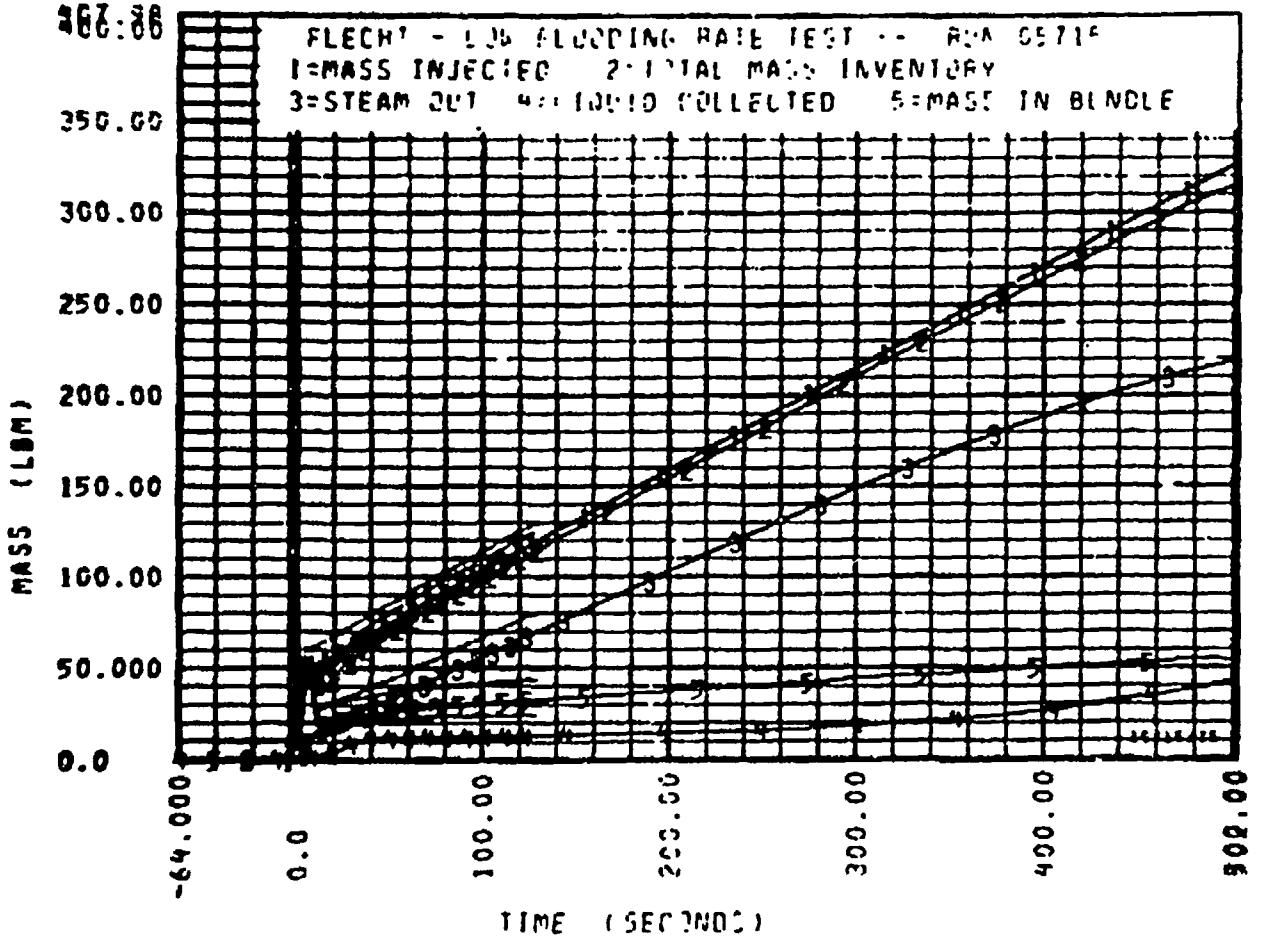

FLECHT LOW FLOODING RATE SERIES
RUN 05715
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

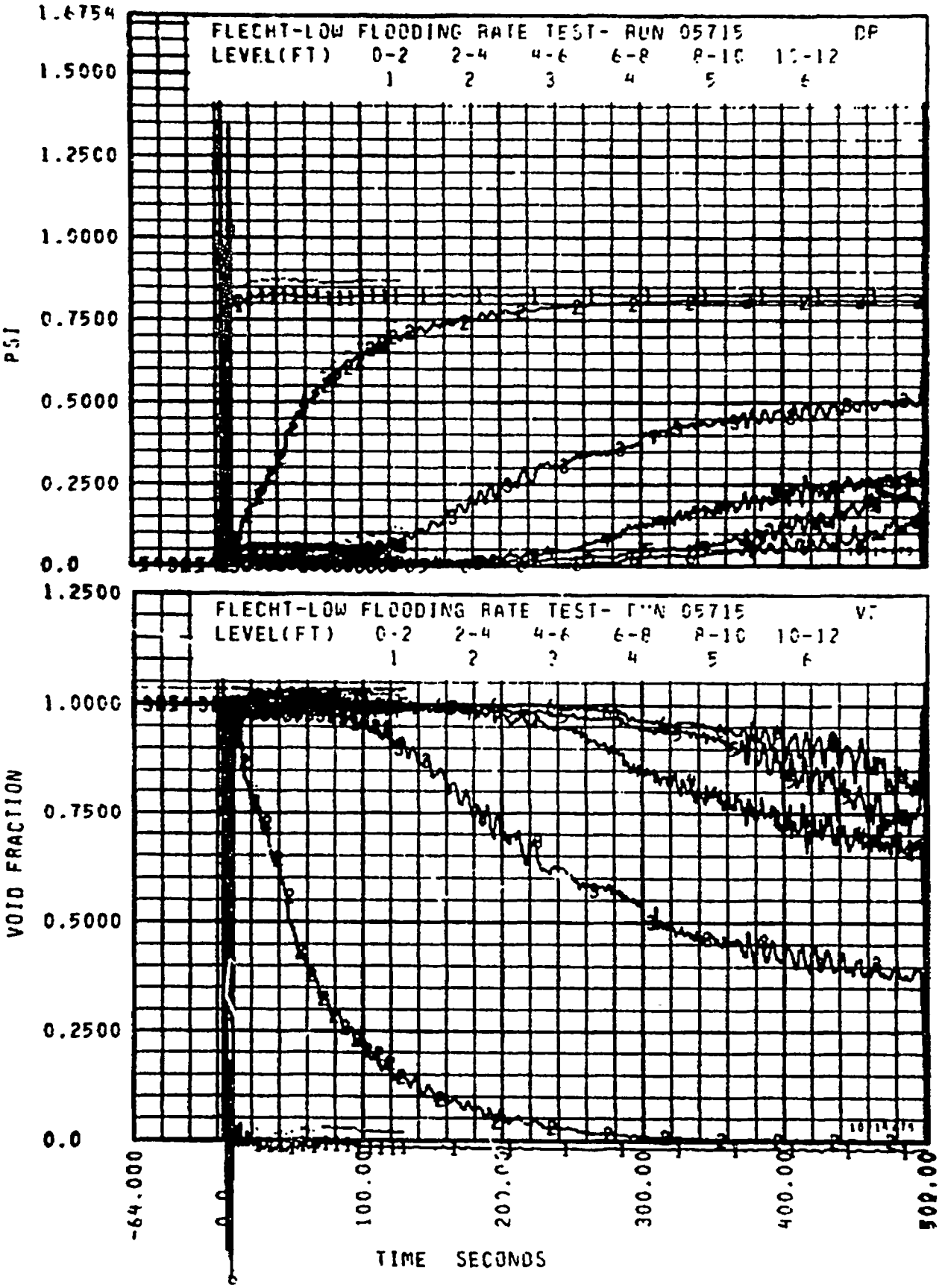

FLECHT LOW FLOODING RATE SERIES
RUN 05715
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

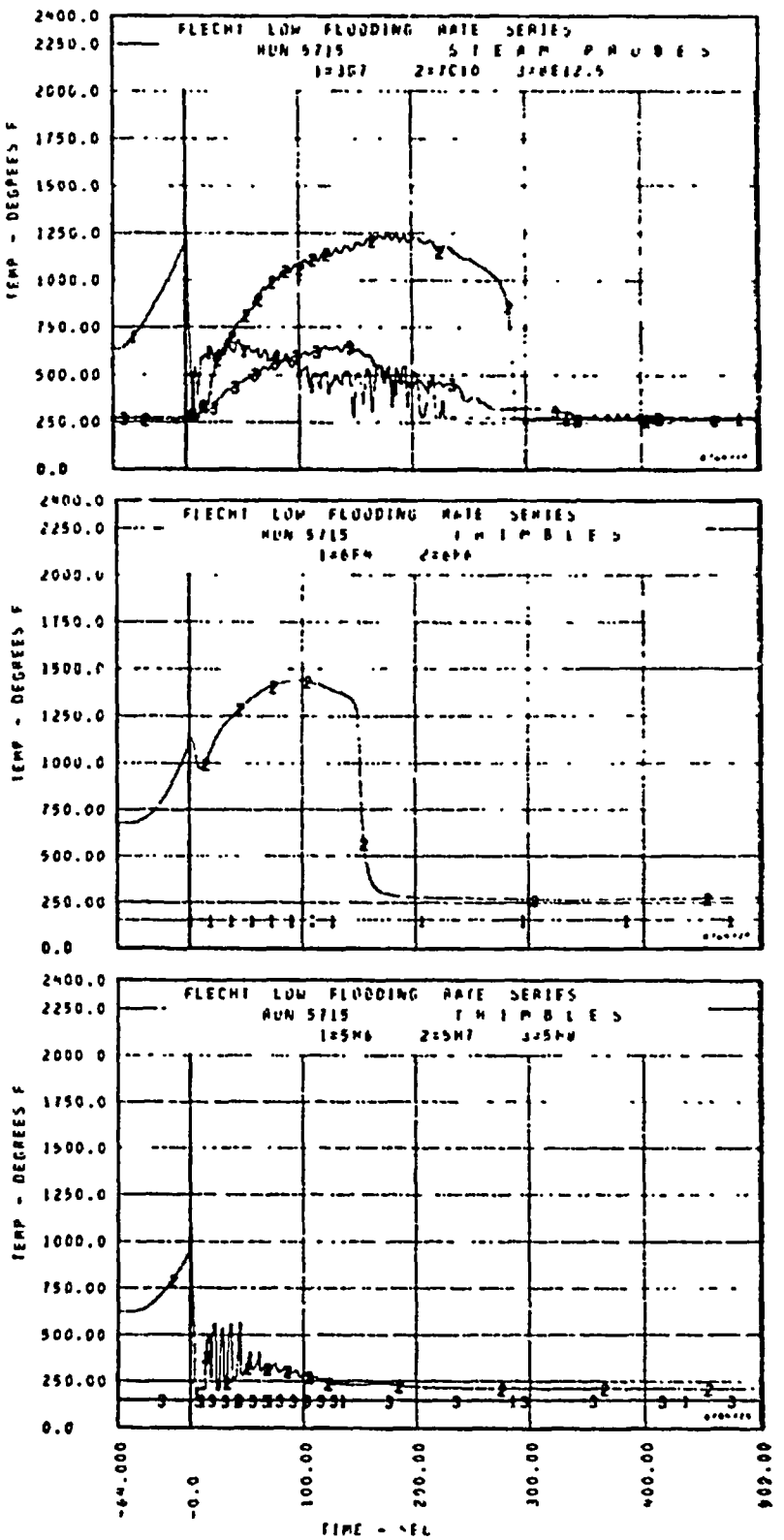

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05715
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

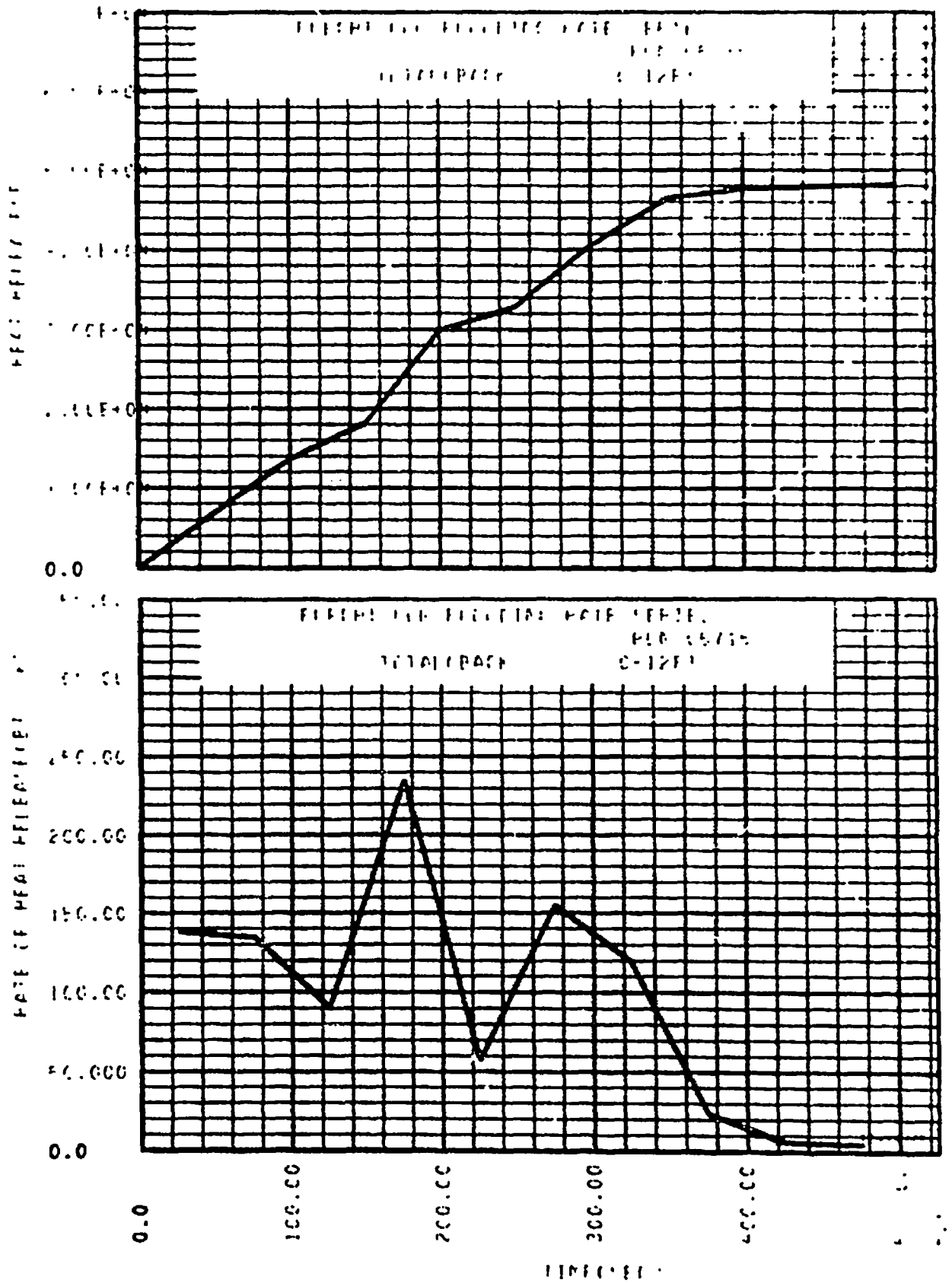

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05715
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 0571
RATE OF MASS INTO
2.5000
2.0000
1.5000
1.0000
0.5000
1.78E-
-0.5000
-1.0000
LBM / SEC
FLECHT - LOW FLOODING RATE TEST -- RUN 0571
EFFLUENCE RATE FROM EXHAUST ORIFICE
3.5000
3.0000
2.5000
2.0000
1.5000
1.0000
0.5000
0.0
LBM / SEC
0.0
100.00
200.00
300.00
400.00
TIME (SECONDS)


1=MASS INJECTED
5=MASS IN BUNDLE
MASS (LBM)
350.00
300.00
250.00
200.00
150.00
100.00
50.000
0.0
-64.000
0.0
100.00
300.00
400.00
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 05715 DP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.6754
1.5000
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 05715 VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-64.000
0
100.00
200.00
300.00
400.00
500.00
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 5715
STEAM PROBES
1=3G7 2=7C10 3=8E12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 5715
THIMBLES
1=6F4 2=6F6
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 5715
THIMBLES
1=5H6 2=5H7 3=5H8
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
-64.000
-0.0
100.00
200.00
300.00
400.00
500.00
TIME - SEC


0.0
0.0
100.00
200.00
300.00

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 05821

DATE: 6/3/75

A. RUN CONDITIO

Upper Plenum Pressure, psia	62		
Initial Clad Temperature (6 Ft)°F At Flood	1,101	Rod T/C	4G6
Rod Peak Power, kw/ft	0.77		
Flooding Rate, in/sec	FLECHT SET PHASE B RUN 1001B		

Coolant Temperature, °F	147		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

B. INITIAL HOUSING TEMPERATURE

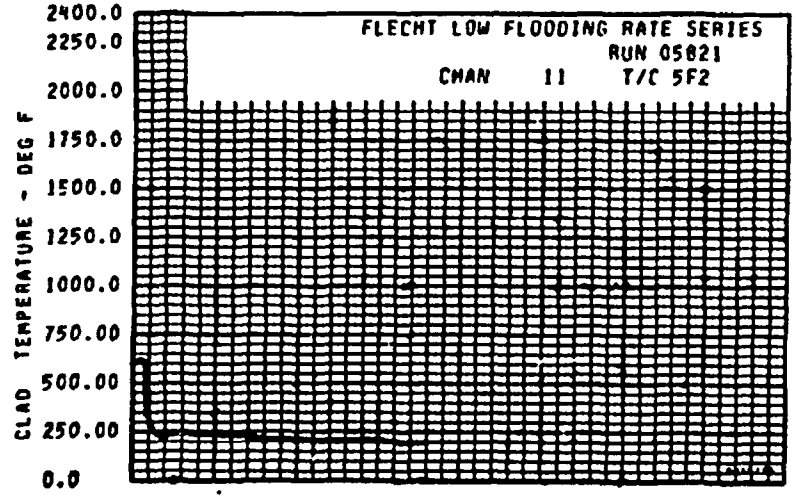
Back Side Elevation, Ft.	Temperature, °F
0	300
2	339
4	455
5.5	511
6	524
6.5	445
7	429
7.5	421
8	437
10	379
12	297
Average	412
Lower Plenum	138
Upper Plenum	297

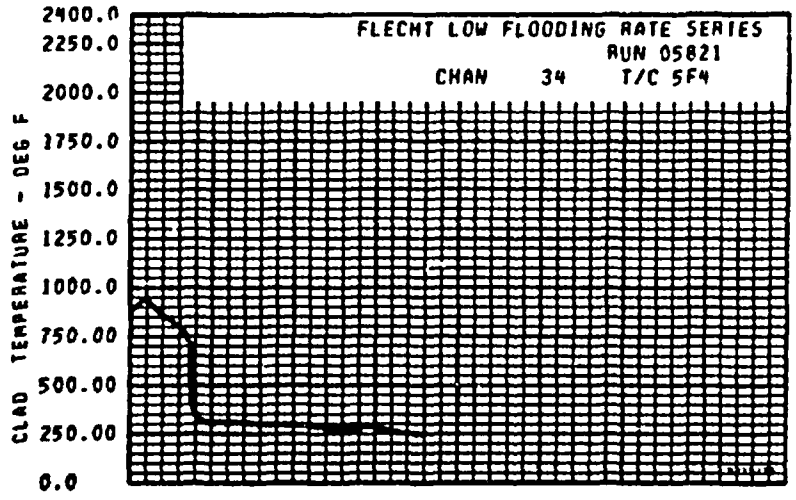
BLANK PAGE

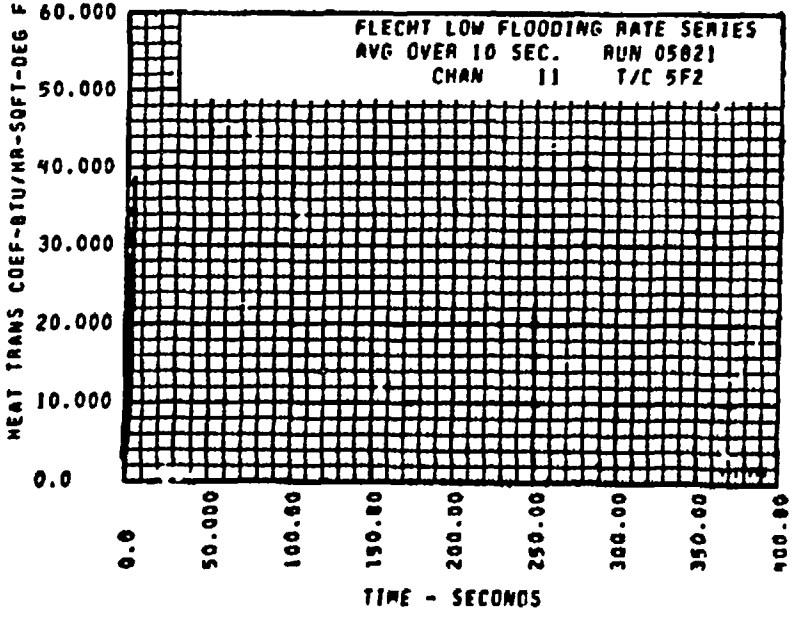
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

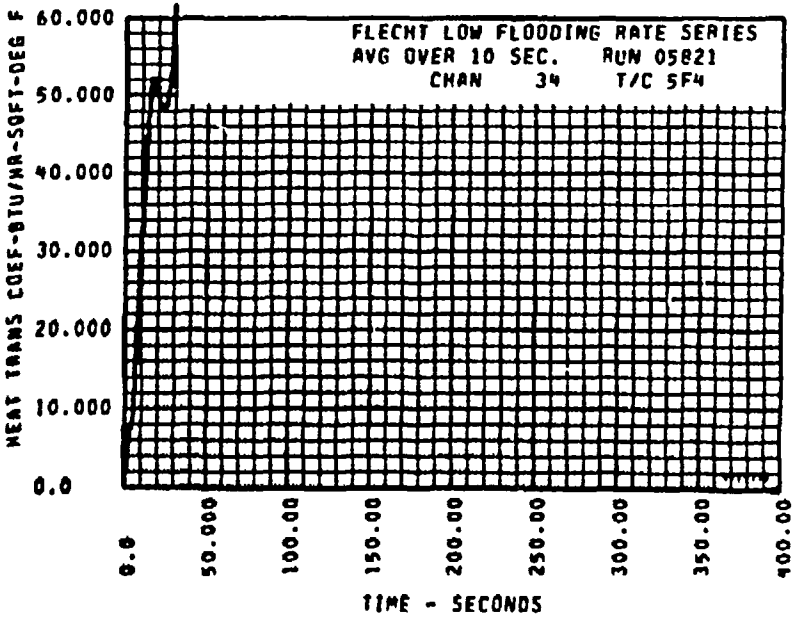
RUN NUMBER 05421

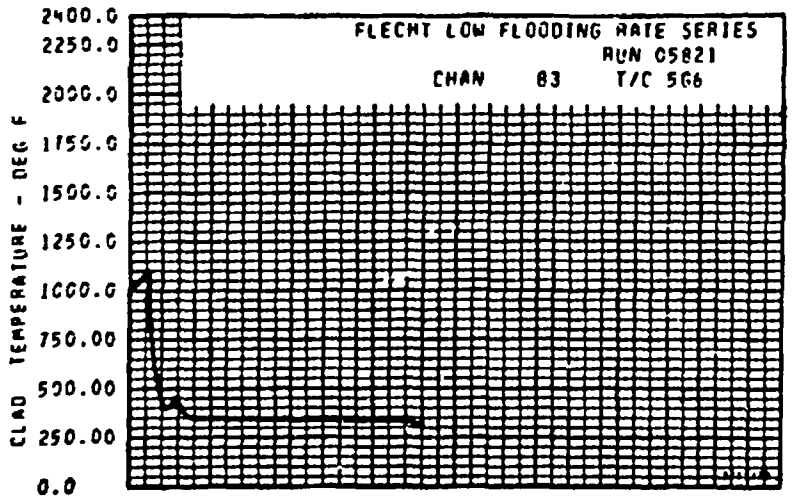
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H?.5	298.	-45.?	[illegible]	509.	1?.	2.9	593.	4.5
4?1	29?.	-45.?	502.	514.	12.	?.4	511.	5.0
4H1.5	312.	-45.?	49?.	508.	13.	3.4	59?.	5.4
4H?	3??.	-46.?	6??.	651.	25.	7.0	629.	9.3
4H4	?4?.	-46.?	?4?.	1021.	??.	?.6	745.	40.7
4H6	?41.	-45.?	101?.	1221.	12?.	??.4	1094.	44.5
8?6	3?1.	-45.?	93?.	100?.	15?.	30.9	1945.	37.7
8?6.5	?9?.	-43.?	?9?.	1087.	17?.	32.4	102?.	45.2
8?7	31?.	-4?.?	?4?.	977.	92.	1?.6	90?.	15.?
??8	29?.	-45.?	797.	694.	?4.	1?.6	?59.	14.1
?9	298.	-45.?	711.	79?.	7?.	1?.4	756.	14.0
??10	?9?.	-45.?	57?.	6??.	101.	45.0	637.	71.?
??11	?9?.	-46.?	49?.	535.	43.	10.4	528.	12.1
??12	1?1.	-??.?	22?.	2??.	11.	7.8	234.	19.7
5?0	29?.	-46.?	41?.	416.	?.	1.0	416.	1.7
5?.5	298.	-45.2	531.	511.	19.	2.6	513.	?.7
5?1	?9?.	-46.?	43?.	511.	1?.	?.8	51?.	4.2
5?1.5	* * * * ? T H E		? ? C O U P L E		? A T A * * *			
5?2	?16.	-45.?	43?.	671.	2?.	5.0	615.	7.9
5?3	3?0.	-45.?	73?.	780.	46.	6.2	715.	12.5
5?4	3?7.	-45.?	?7?.	1?44.	74.	?.5	722.	37.2
5?6	32?.	-45.?	94?.	1096.	111.	1?.6	1?45.	12.7
5G6	?5?.	-43.?	93?.	1102.	1?1.	11.4	1099.	11.9
5G6.5	?3?.	-45.?	1091.	111?.	11?.	1?.6	496.	32.2
5G7	29?.	-45.?	??.	98?.	?3.	10.5	936.	12.5
5G8	3??.	-45.?	?0?.	?04.	103.	11.4	?95.	12.5
5G9	33?.	-45.?	615.	770.	?5.	31.4	737.	44.5
5G11	?3?.	-45.?	494.	53?.	4?.	10.5	336.	34.9
5G12	29?.	-45.?	45?.	?01.	45.	1?.6	4?3.	15.1
1?4	?46.	-45.?	91?.	?72.	??.	9.4	75?.	39.2
1?6	?91.	-46.?	1?6?.	114?.	??.	??.?	763.	92.7
1G1?	3??.	-46.?	574.	6??.	?3.	10.6	5??.	39.?
3H2	3??.	-43.?	?3?.	652.	22.	4.6	640.	8.2
?H4	4??.	-4?.?	113?.	118?.	1?1.	31.?	1034.	43.3
?H8	1?1.	-45.?	?64.	?61.	97.	11.0	?09.	16.7
3H1?	301.	-45.?	60?.	72?.	124.	45.?	71?.	50.?

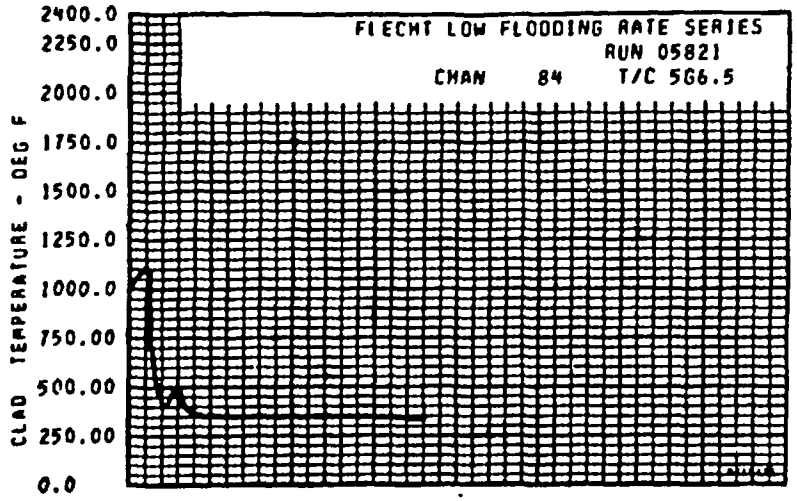

FLECHT LOW FLOODING RATE SERIES
RUN 05821
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

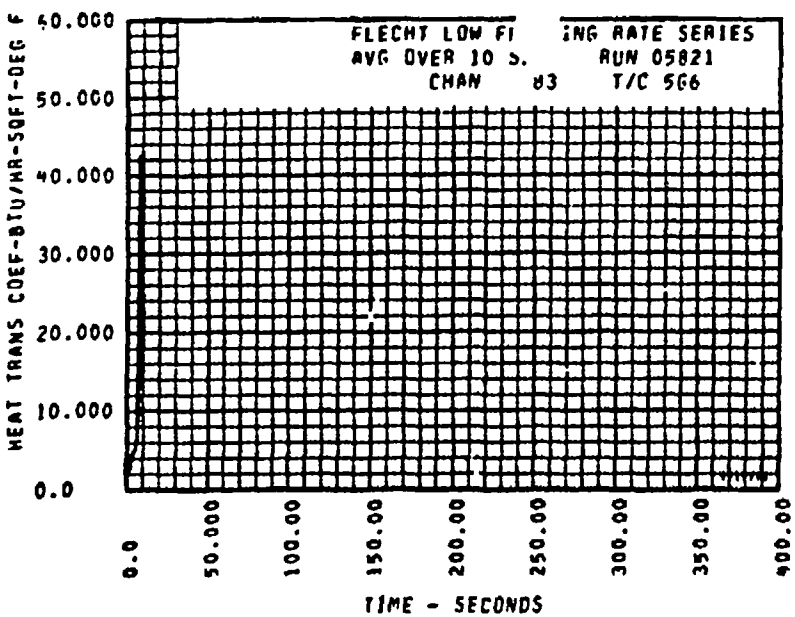

FLECHT LOW FLOODING RATE SERIES
RUN 05821
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

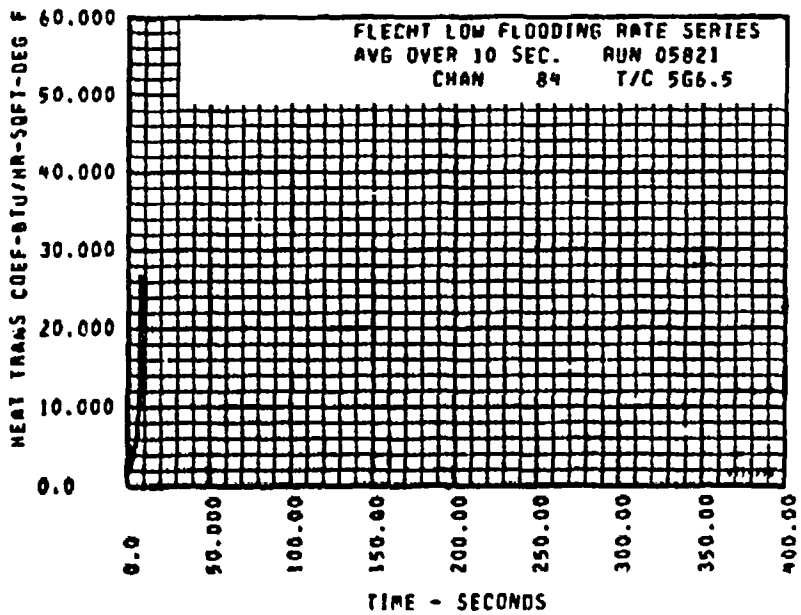

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05821
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

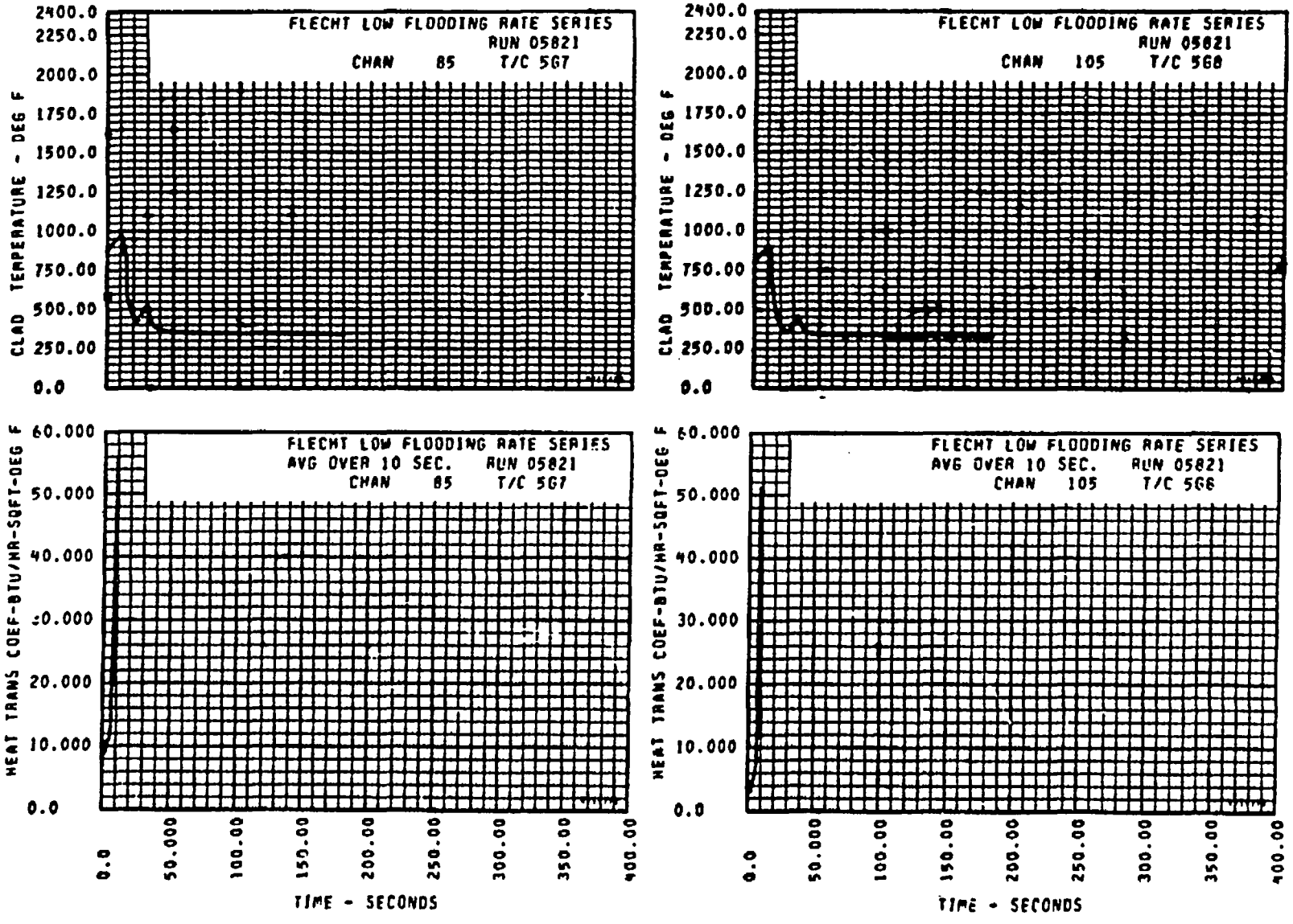

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05821
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

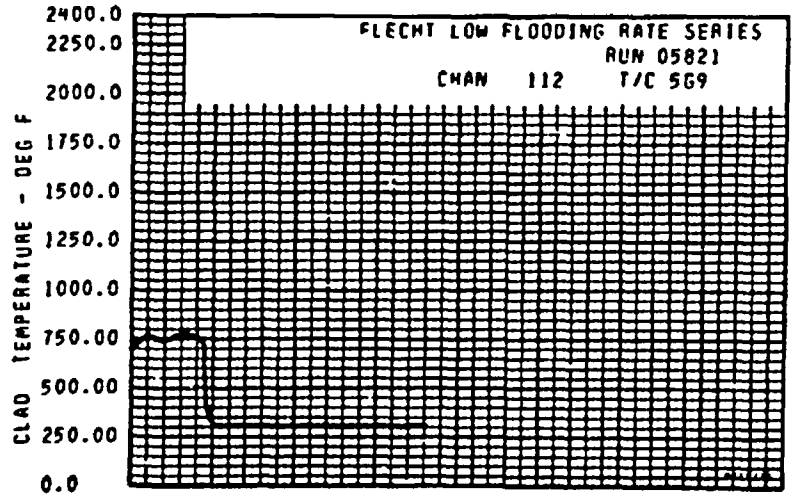

FLECHT LOW FLOODING RATE SERIES
RUN 05821
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

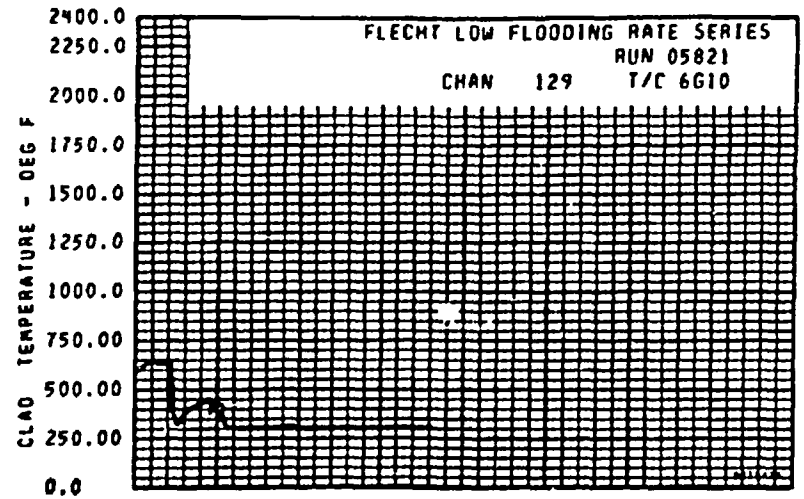

FLECHT LOW FLOODING RATE SERIES
RUN 05821
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

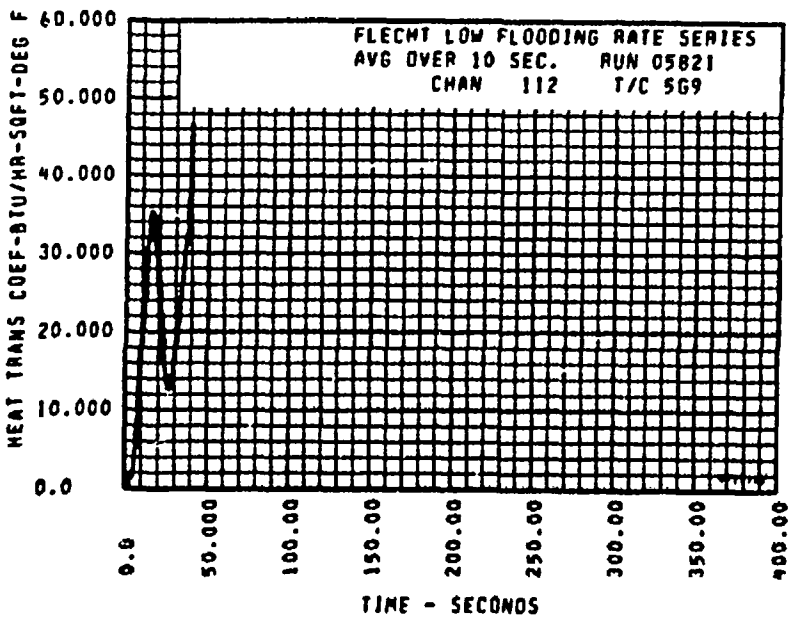

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 S. RUN 05821
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

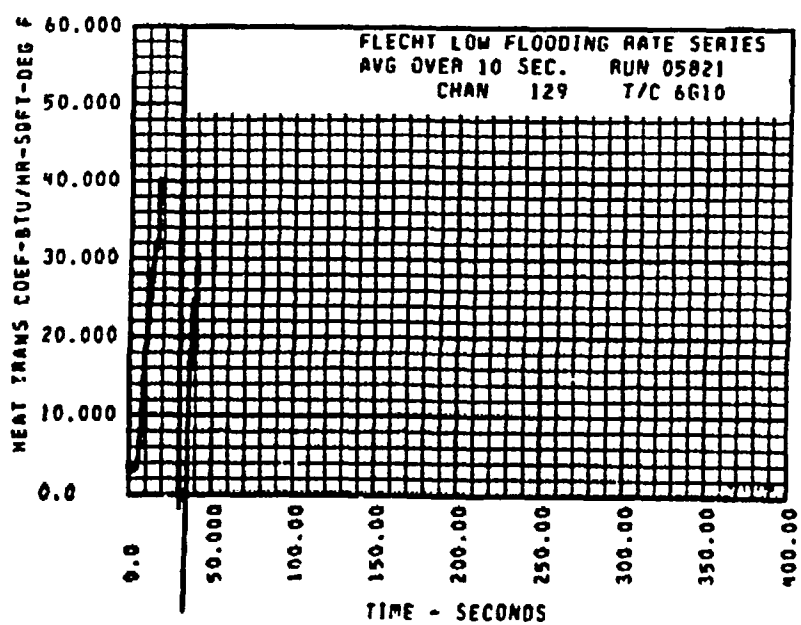

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05821
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

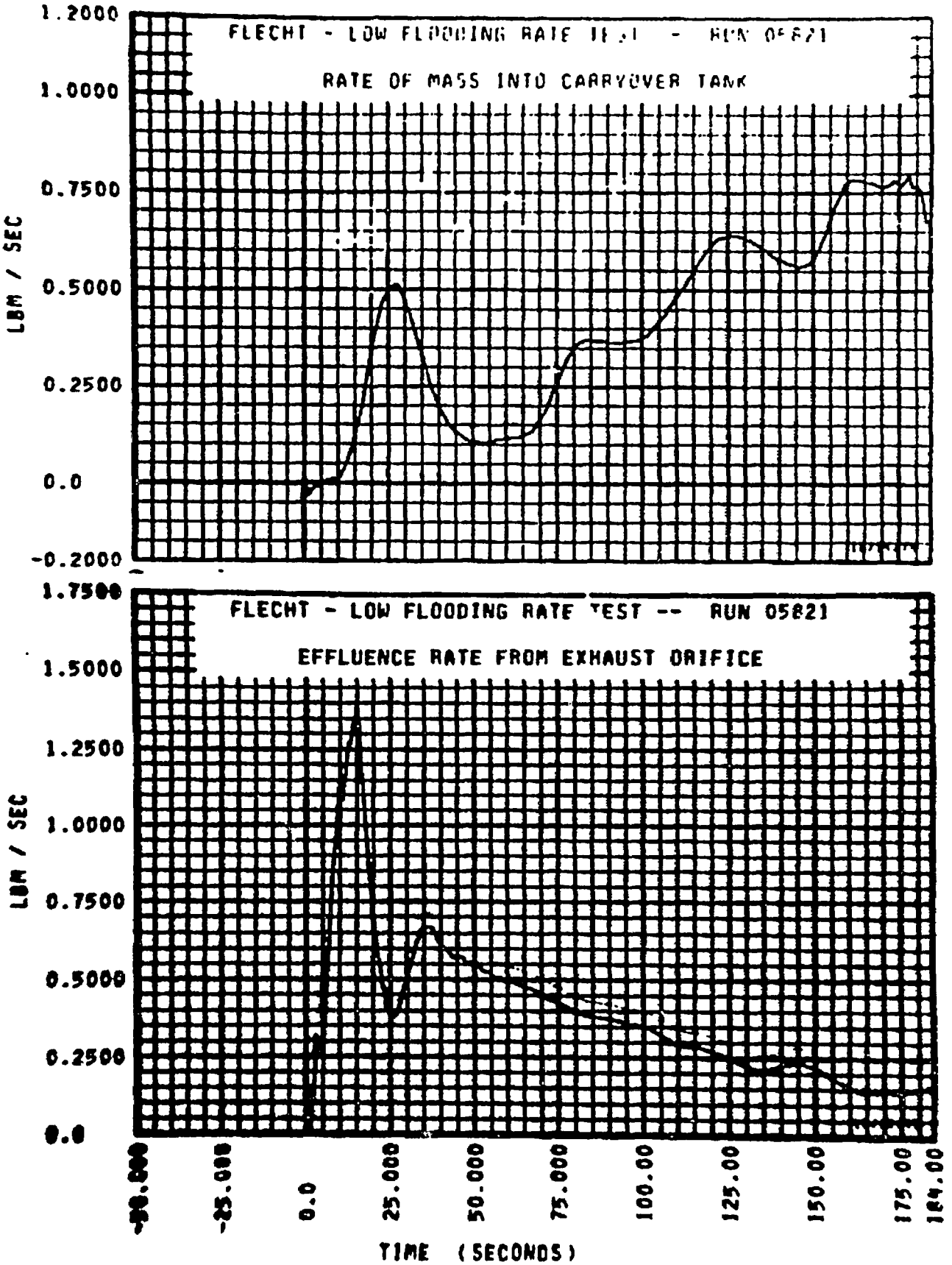

FLECHT LOW FLOODING RATE SERIES
RUN 05821
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05821
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05821
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05821
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

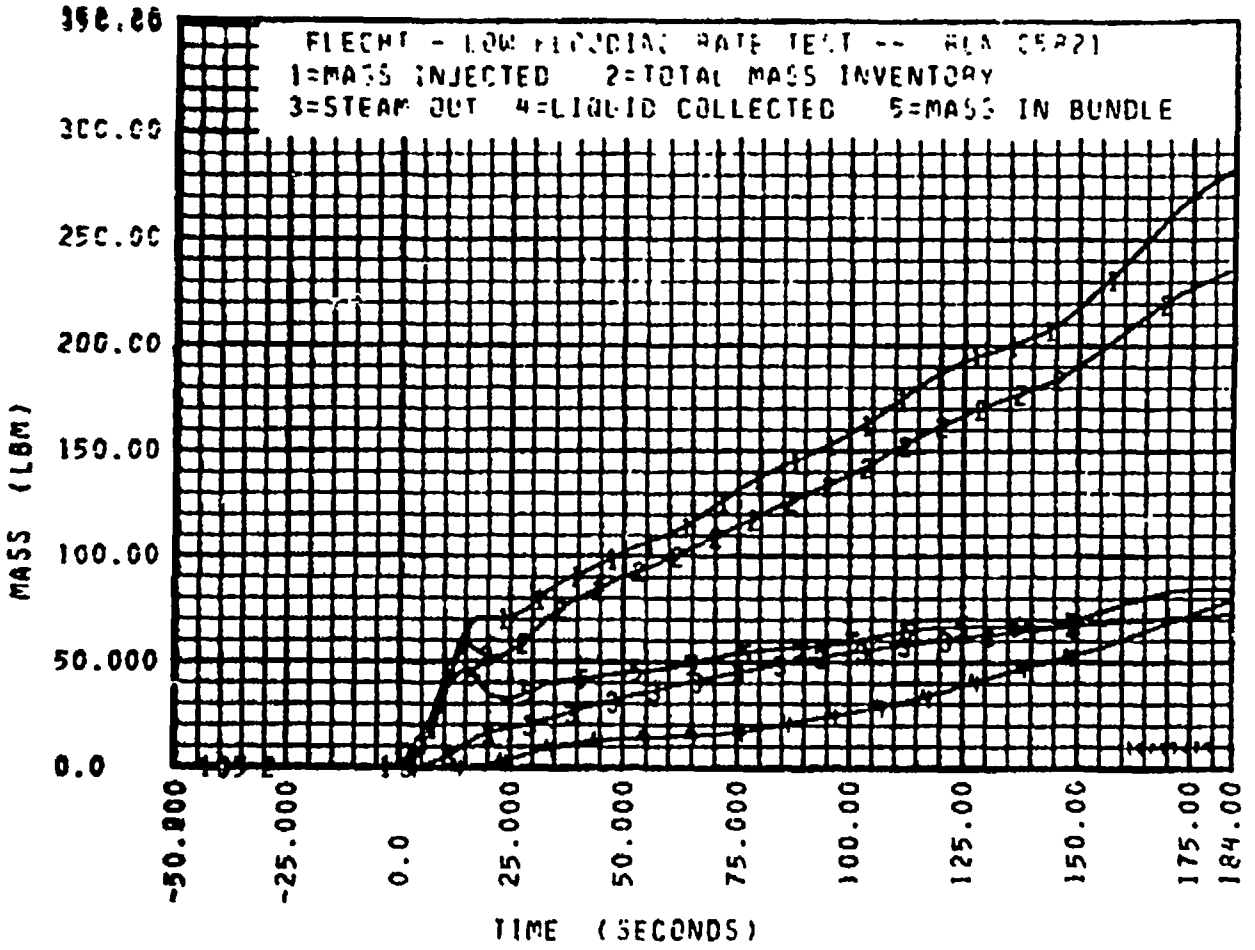

FLECHT LOW FLOODING RATE SERIES
RUN 05821
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

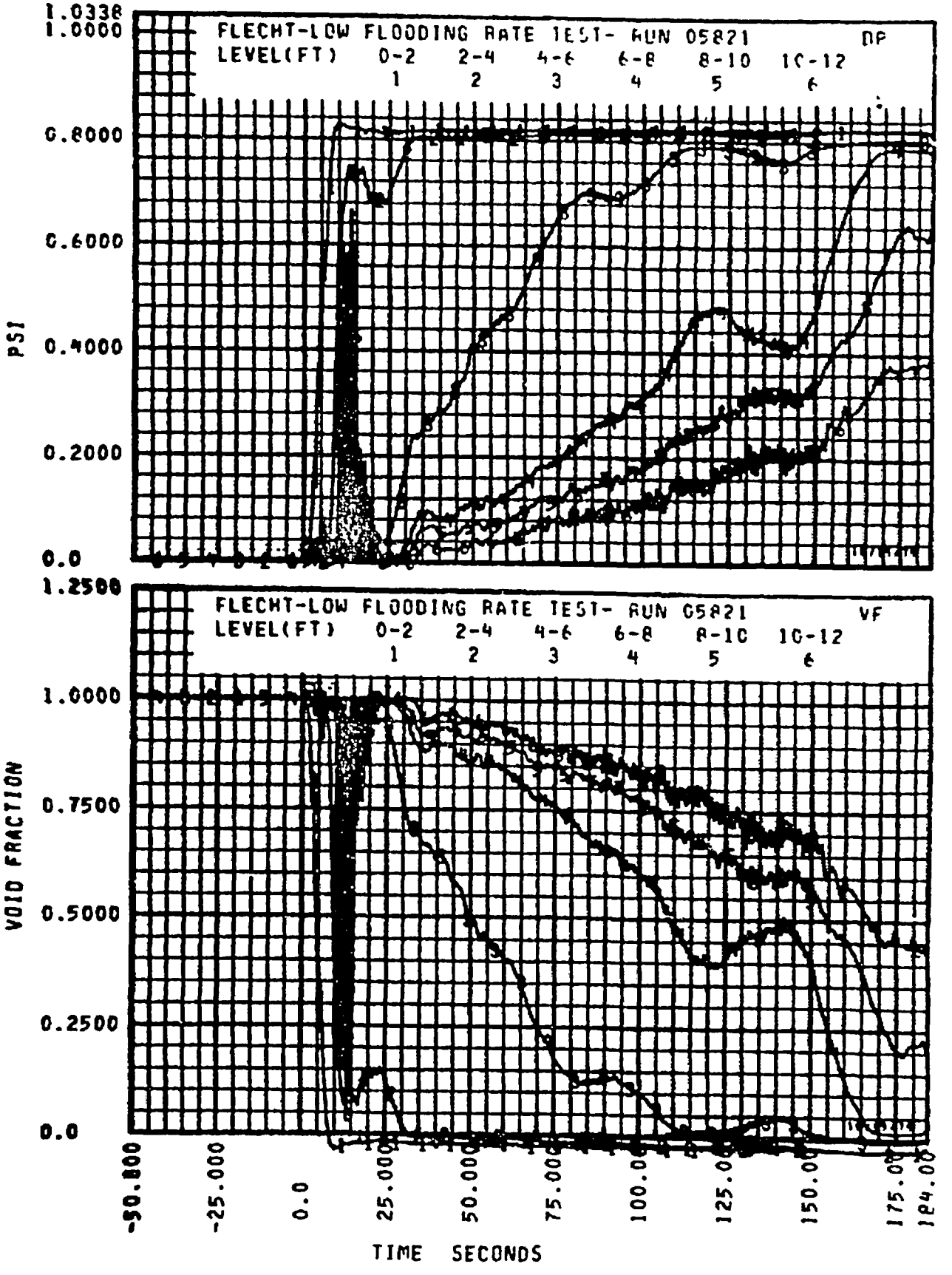

FLECHT LOW FLOODING RATE SERIES
RUN 05821
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

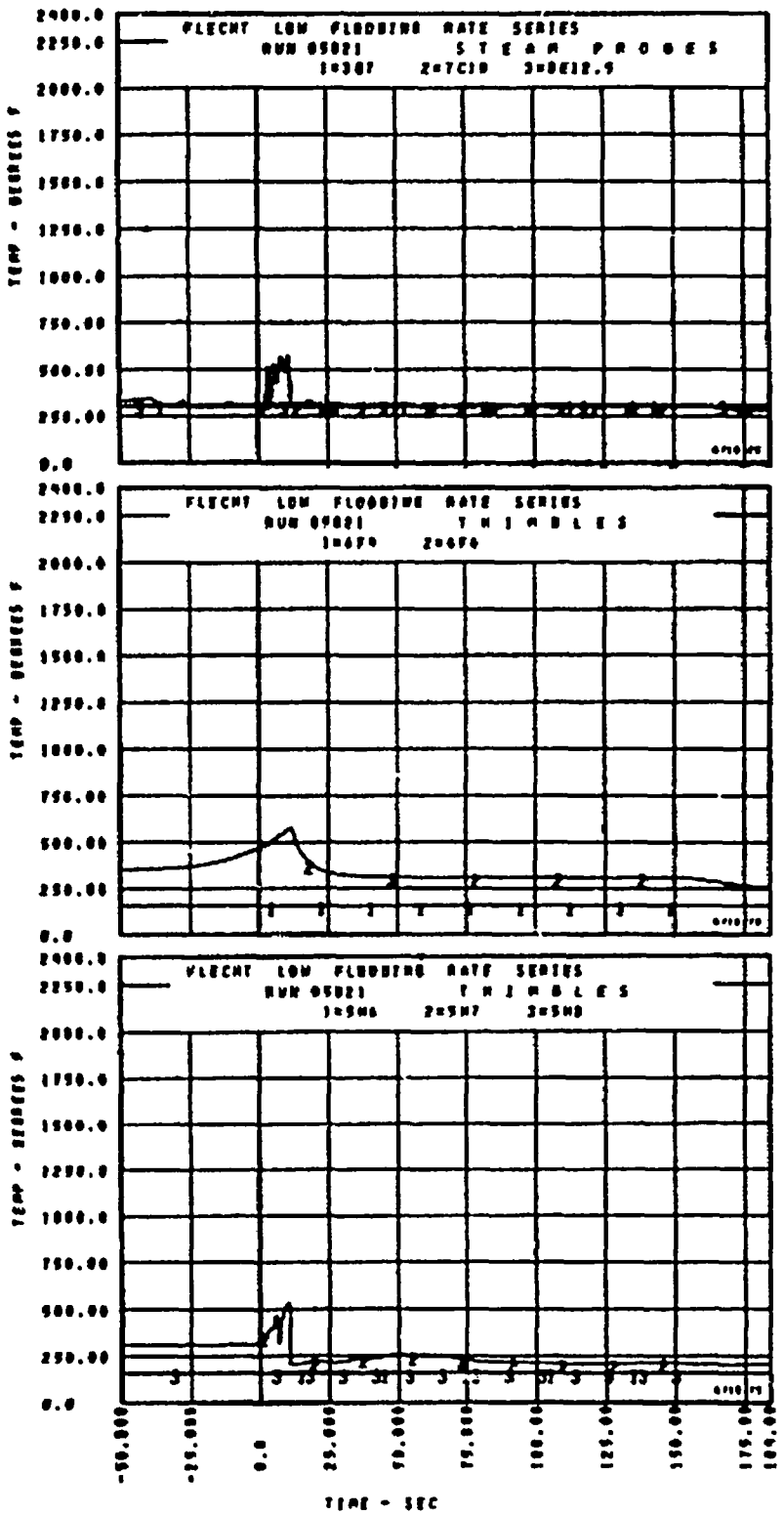

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05821
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

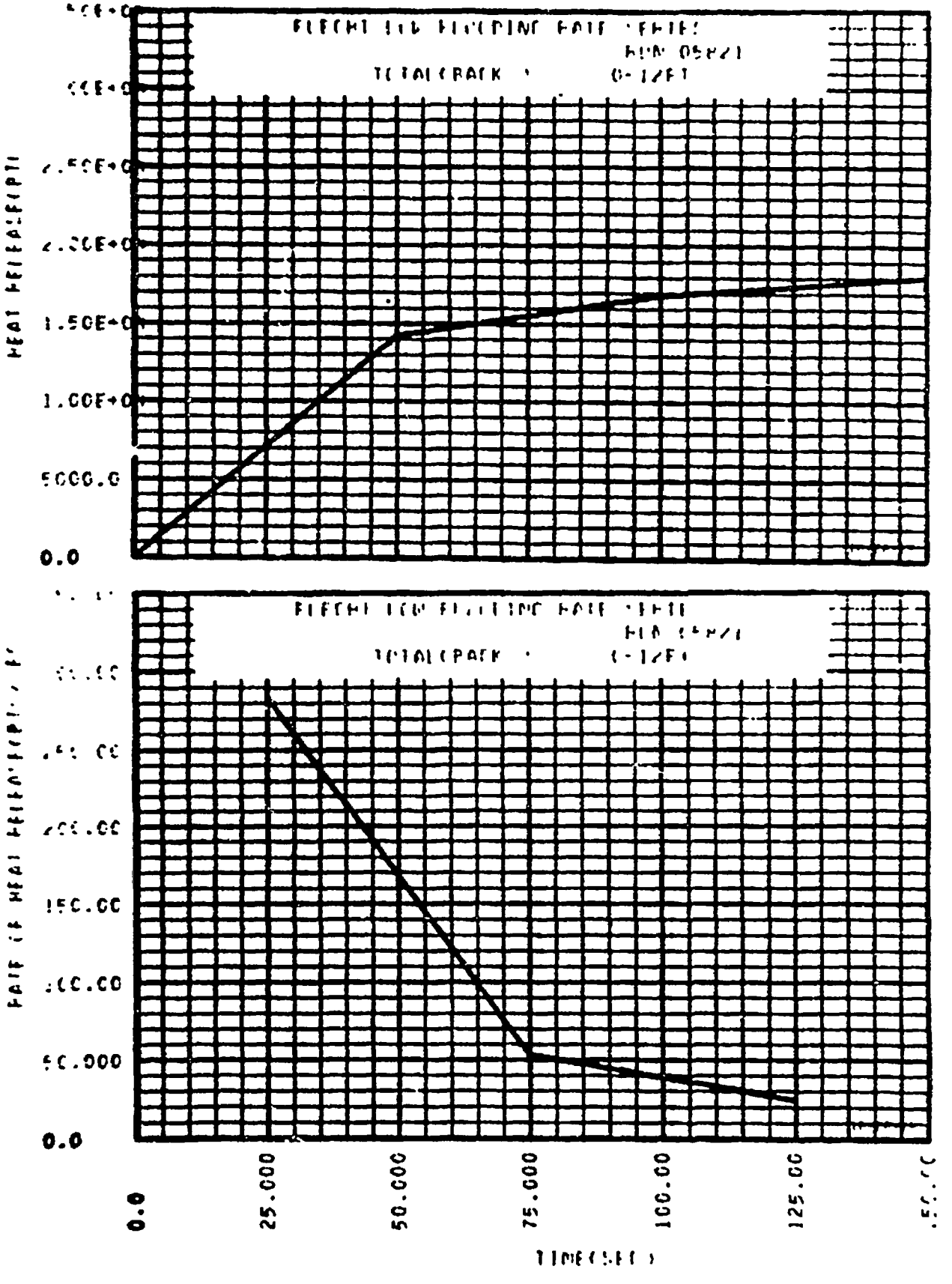

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05821
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST - RUN 05821
RATE OF MASS INTO CARRYOVER TANK
LBM / SEC
1.2000
1.0000
0.7500
0.5000
0.2500
0.0
-0.2000
FLECHT - LOW FLOODING RATE TEST -- RUN 05821
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
1.7500
1.5000
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
-50.000
-25.000
0.0
25.000
50.000
75.000
100.00
125.00
150.00
175.00
184.00
TIME (SECONDS)


FLECHT - LOW PRESSURE RATE TEST -- RUN 05821
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
350.00
300.00
250.00
200.00
150.00
100.00
50.000
0.0
MASS (LBM)
-50.000
-25.000
0.0
25.000
50.000
75.000
100.00
125.00
150.00
175.00
184.00
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 05821
DP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.0338
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 05821
VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-50.000
-25.000
0.0
25.000
50.000
75.000
100.0
125.0
150.0
175.0
184.0
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 05021
S T E A M P R O B E S
1=387 2=7C19 3=8E12.9
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05021
T H I M B L E S
1=6F9 2=6F4
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 05021
T H I M B L E S
1=5H6 2=5H7 3=5H8
TEMP - DEGREES F
-50.000
-25.000
0.0
25.000
50.000
75.000
100.00
125.00
150.00
175.00
200.00
TIME - SEC


1.50E+07
1.00E+07
5000.0
0.0
HEAT RELEASE RATE
0.0
25.000
50.000
75.000
100.00
125.00
TIME (SEC)

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 05917

DATE: 6/4/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40	
Initial Clad Temperature (6 Ft)°F At Flood	1,600	Rod T/C 4H6
Rod Peak Power, kw/ft	0.95	
Flooding Rate, in/sec	3 (4.6 sec)	
	0.77	

Coolant Temperature, °F	126	
Bundle Radial Power Profile	FLECHT	
Disconnected Rods	7F	

B. INITIAL HOUSING TEMPERATURE

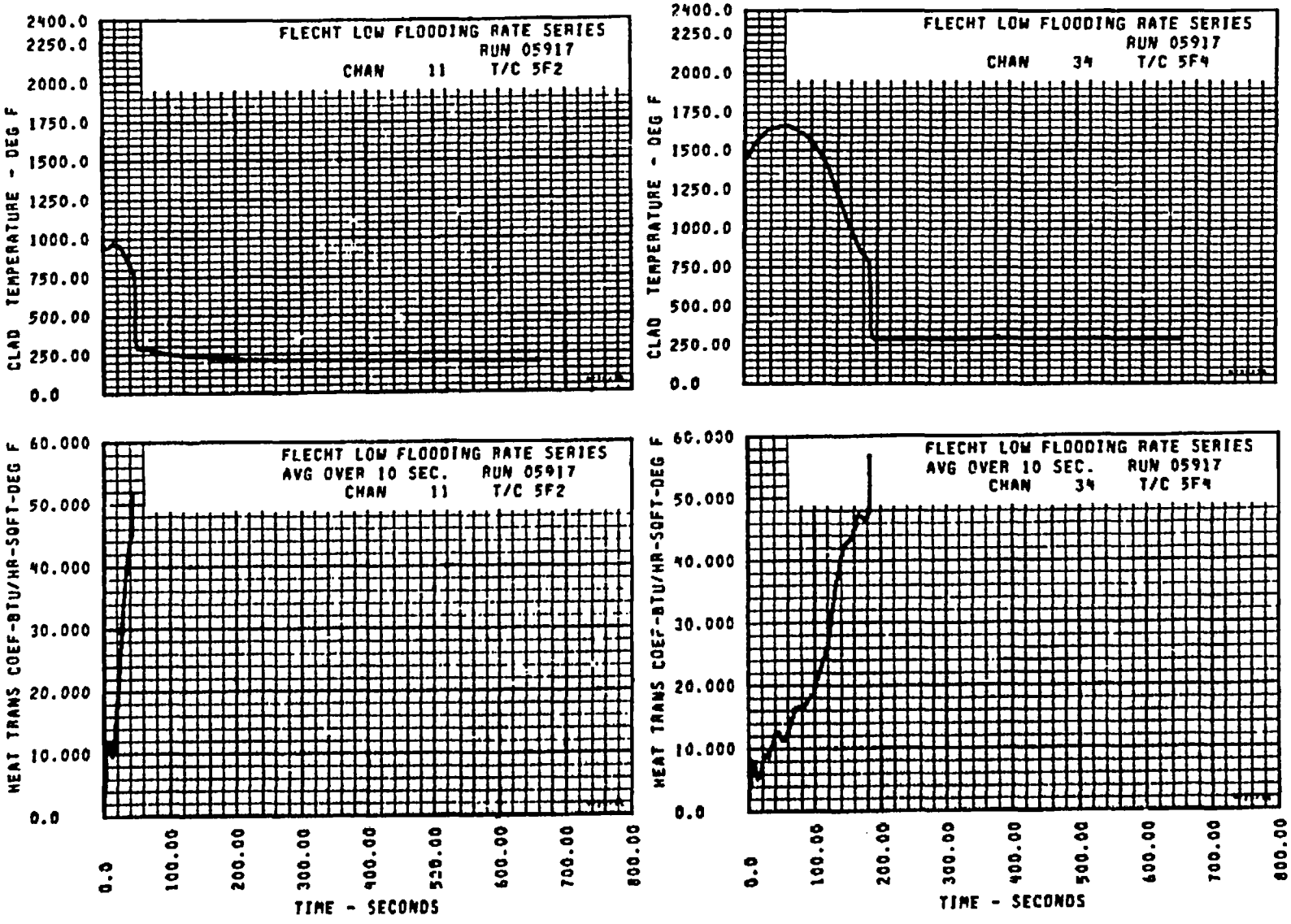
Back Side Elevation, Ft.	Temperature, °F
0	274
2	600
4	765
5.5	826
6	820
6.5	677
7	685
7.5	711
8	772
10	614
12	279
Average	638
Lower Plenum	122

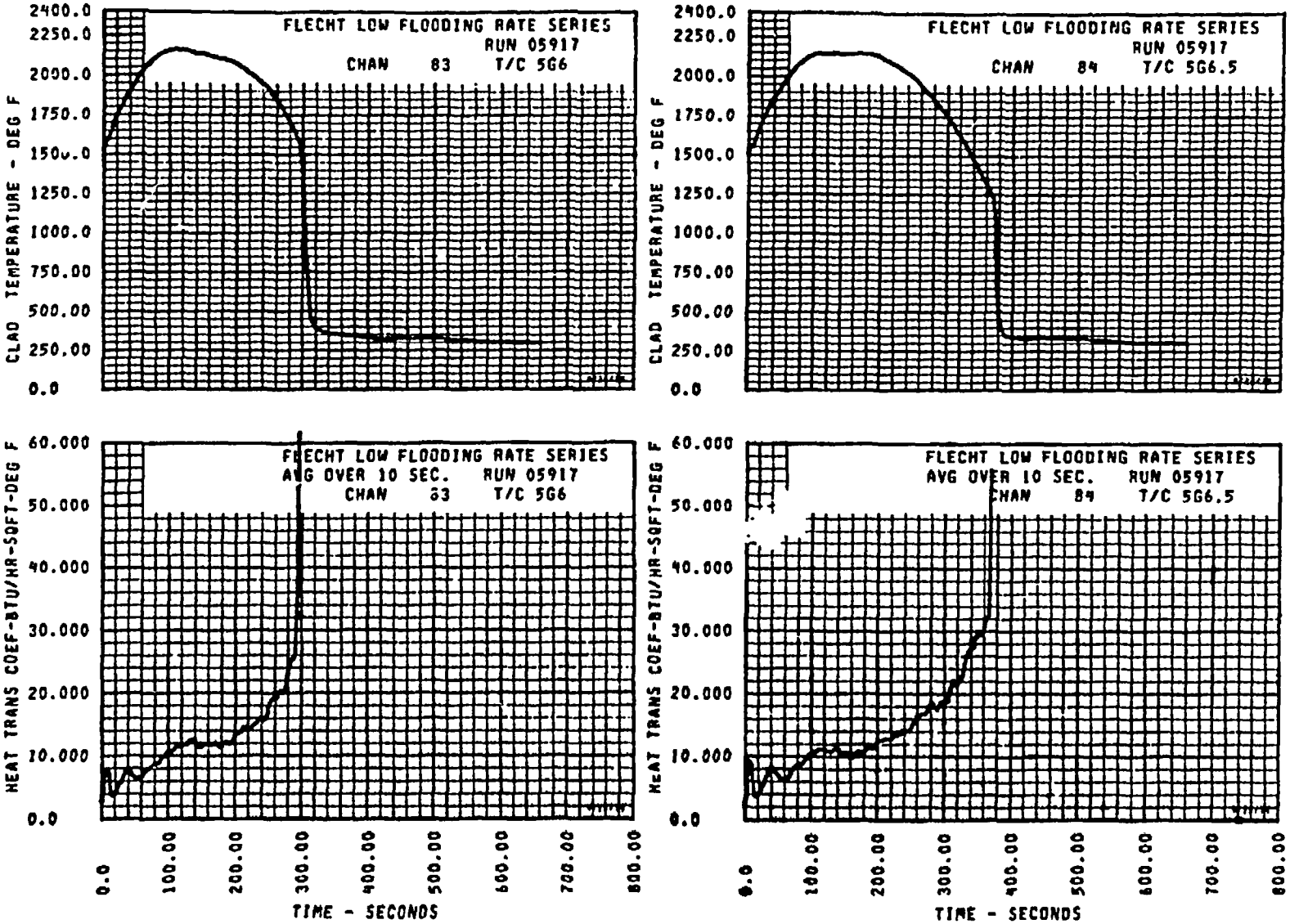
BLANK PAGE

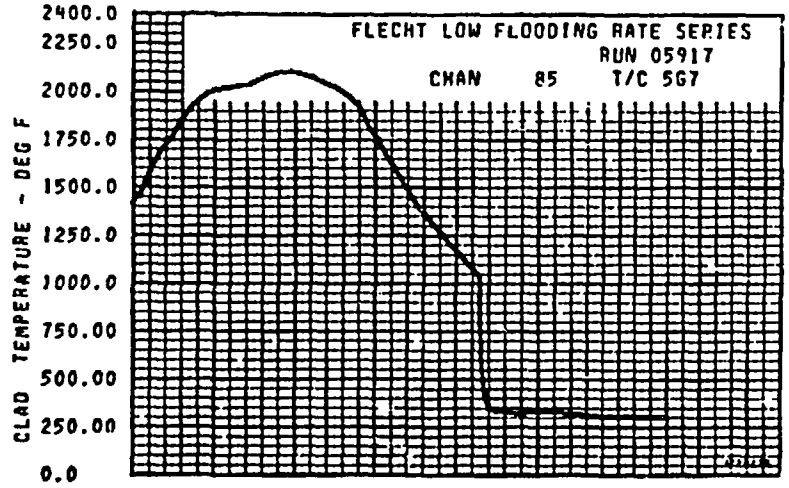
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

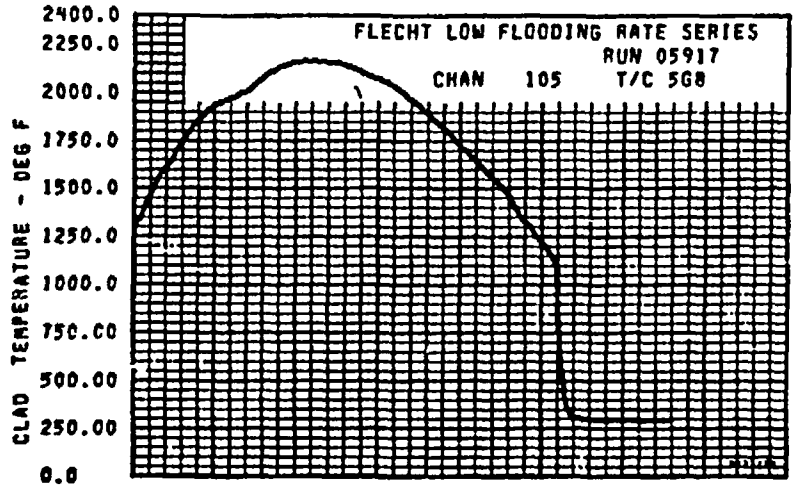
RUN NUMBER 35917

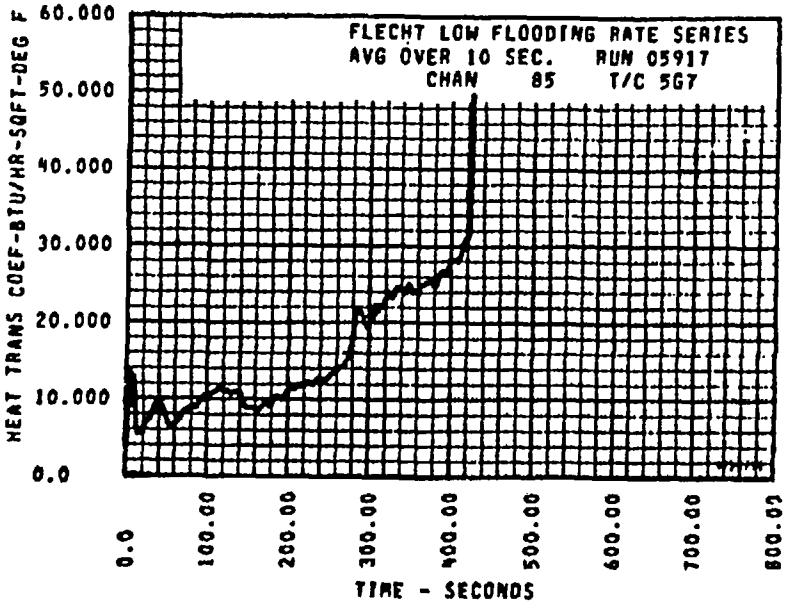
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	317.	-57.8	60[illegible].	616.	9.	7.5	581.	9.4
4H1	390.	-57.?	674.	687.	12.	?.0	625.	13.7
4H1.5	476.	-55.9	735.	746.	11.	3.2	657.	30.8
4H2	390.	-57.?	974.	1021.	46.	18.2	778.	52.6
4H4	762.	-57.?	1437.	1701.	264.	63.2	873.	184.8
4H6	731.	-57.?	1600.	2171.	571.	186.7	901.	349.8
8D6	535.	-57.8	1459.	2054.	596.	108.8	1093.	336.9
8D6.5	534.	-55.?	1493.	2192.	659.	132.0	1132.	339.7
8D7	537.	-57.	1407.	1903.	495.	172.8	777.	463.8
8D8	547.	-57.	1298.	2065.	766.	211.8	454.	534.0
8D9	453.	-57.	1077.	1955.	879.	234.8	674.	606.0
8D10	790.	-57.?	711.	1604.	590.	275.8	753.	595.6
8D11	979.	-57.?	571.	1263.	692.	275.0	734.	541.6
8D12	197.	-56.3	308.	645.	376.	295.8	492.	392.0
5F0	260.	-57.?	377.	377.	0.	0.0	351.	.1
5F0.5	295.	-57.8	590.	606.	7.	1.6	572.	5.2
5F1	362.	-57.9	649.	660.	11.	2.9	597.	18.3
5F1.5	* BAD THERMOCOUPLE DATA *							
5F2	347.	-57.8	937.	975.	41.	17.8	767.	47.7
5F3	684.	-57.0	1215.	1319.	104.	29.4	745.	112.7
5F4	759.	-57.8	1435.	1673.	233.	63.8	771.	189.2
5F6	537.	-51.	1542.	2156.	619.	119.0	1299.	715.8
5G6	537.	-55.	1537.	2172.	675.	109.4	1454.	293.6
5G6.5	533.	-57.?	1508.	2157.	649.	133.0	1131.	373.6
5G7	545.	-57.?	1417.	2119.	693.	182.0	1??3.	425.8
5G8	527.	-53.?	129?.	2172.	862.	212.0	1033.	518.9
5G9	55?.	-57.?	1087.	1937.	847.	210.0	737.	589.3
5G10	37?.	-57.?	57?.	1052.	475.	193.0	542.	630.0
5G12	374.	-57.?	547.	966.	429.	174.8	559.	641.8
1G4	767.	-57.?	?30.	1492.	124.	42.8	932.	142.6
1G6	717.	-57.?	152?.	1817.	289.	93.4	924.	339.8
1G10	438.	-57.?	851.	1136.	295.	108.2	563.	622.4
3H2	364.	-55.?	977.	1007.	76.	19.6	764.	48.9
3H6	735.	-57.?	1578.	2106.	529.	180.2	1009.	339.9
3H8	704.	-57.?	1357.	2092.	734.	182.?	968.	515.7
3H10	337.	-57.?	928.	1521.	593.	143.0	1090.	488.6
9F4	757.	-57.?	1369.	1585.	217.	63.4	800.	172.7
5F6	588.	-57.?	1497.	2141.	644.	118.0	1092.	335.0
5F8	535.	-56.?	1192.	2280.	1089.	246.0	1229.	534.9
5F10	273.	-57.	666.	1740.	1074.	259.0	812.	602.0

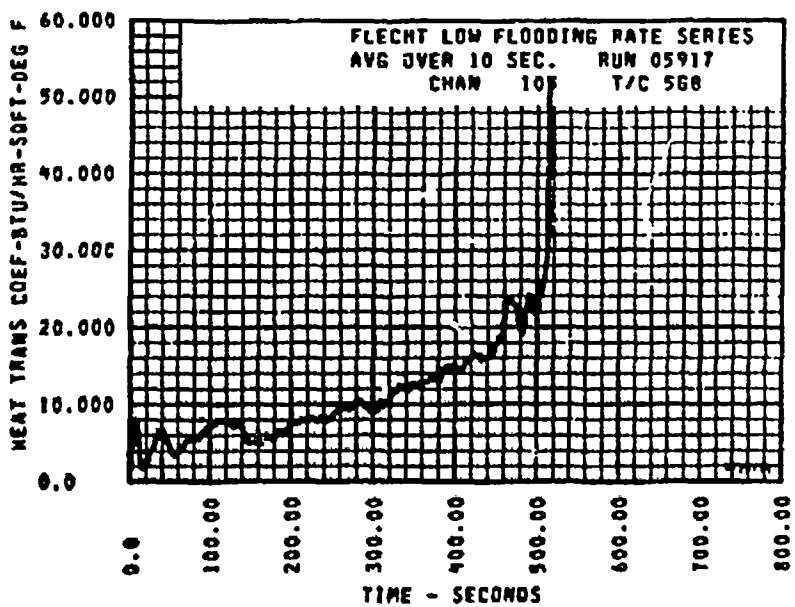

FLECHT LOW FLOODING RATE SERIES
RUN 05917
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05917
CHAN 34 T/C 5F9
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05917
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05917
CHAN 34 T/C 5F9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

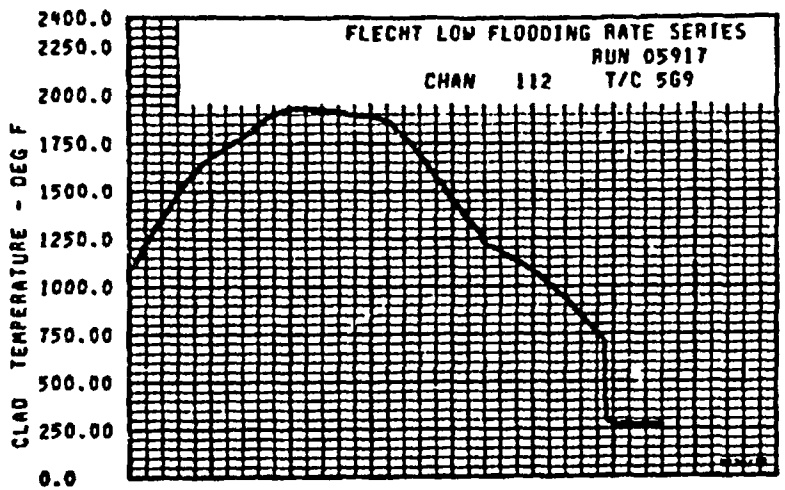

FLECHT LOW FLOODING RATE SERIES
RUN 05917
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05917
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05917
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05917
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
TIME - SECONDS

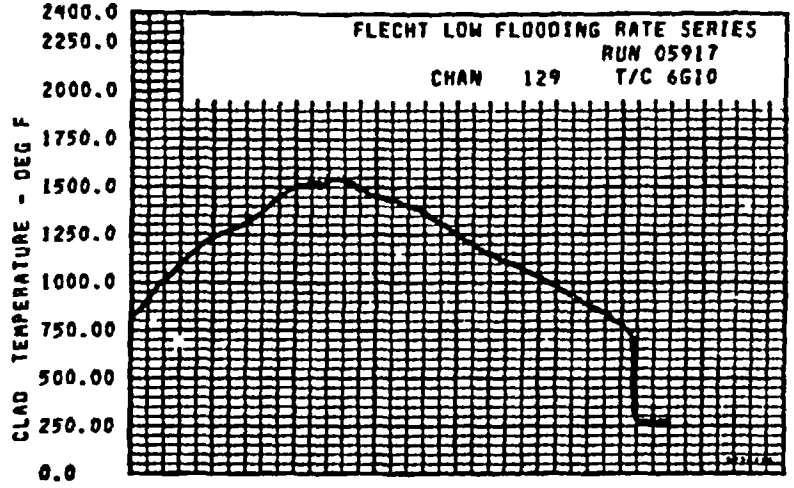

FLECHT LOW FLOODING RATE SERIES
RUN 05917
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

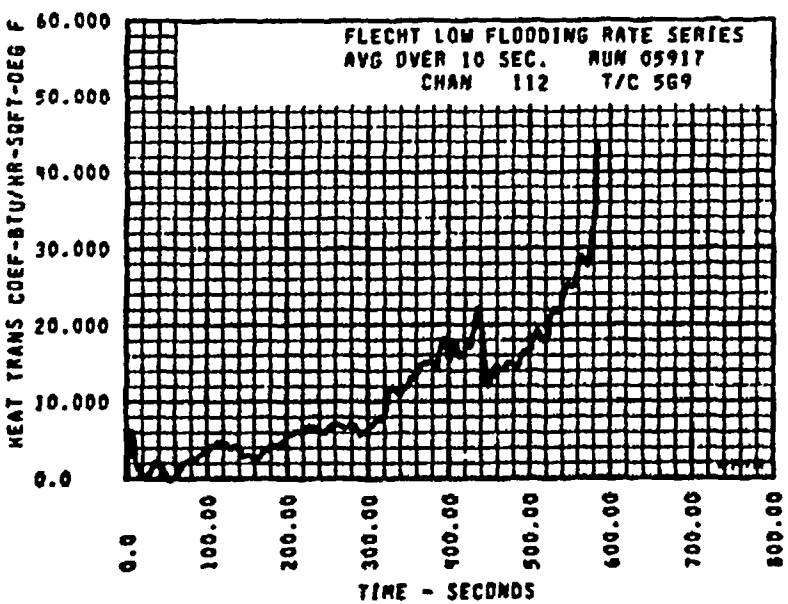

FLECHT LOW FLOODING RATE SERIES
RUN 05917
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

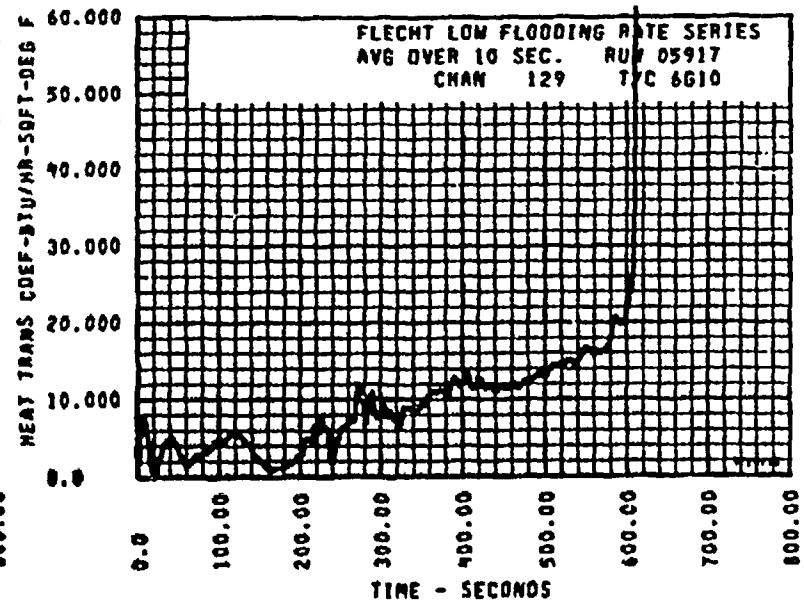

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05917
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

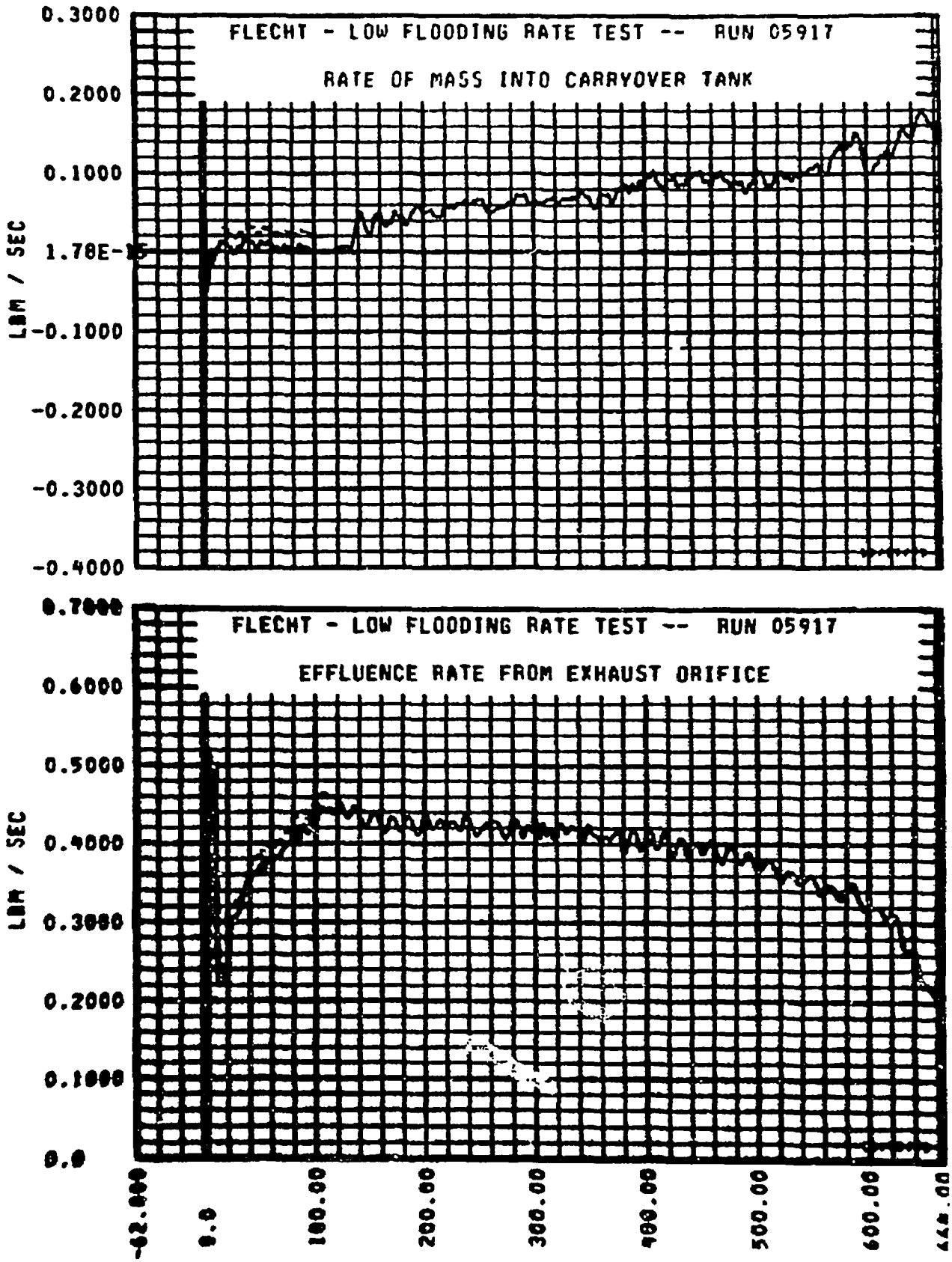

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05917
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

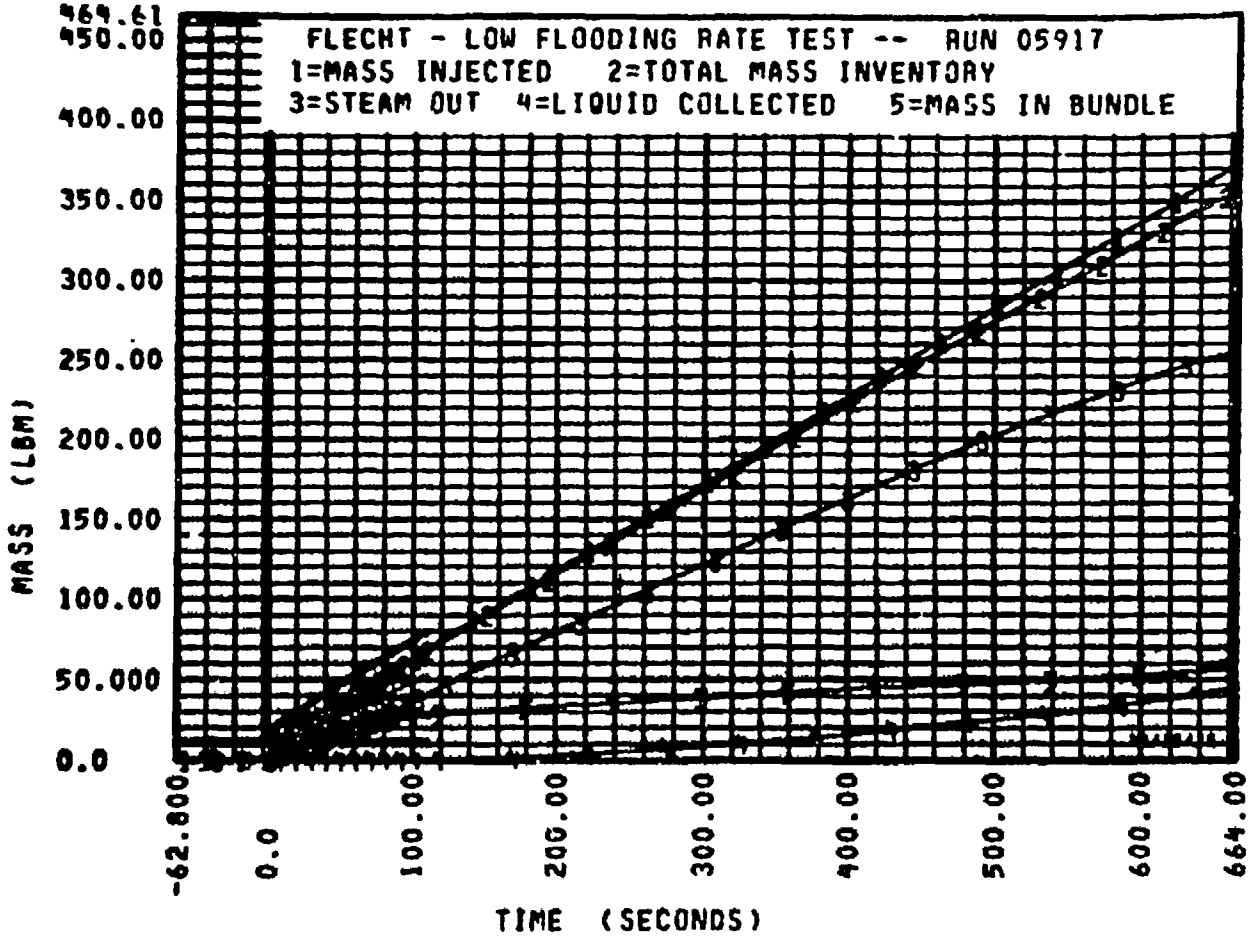

FLECHT LOW FLOODING RATE SERIES
RUN 05917
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

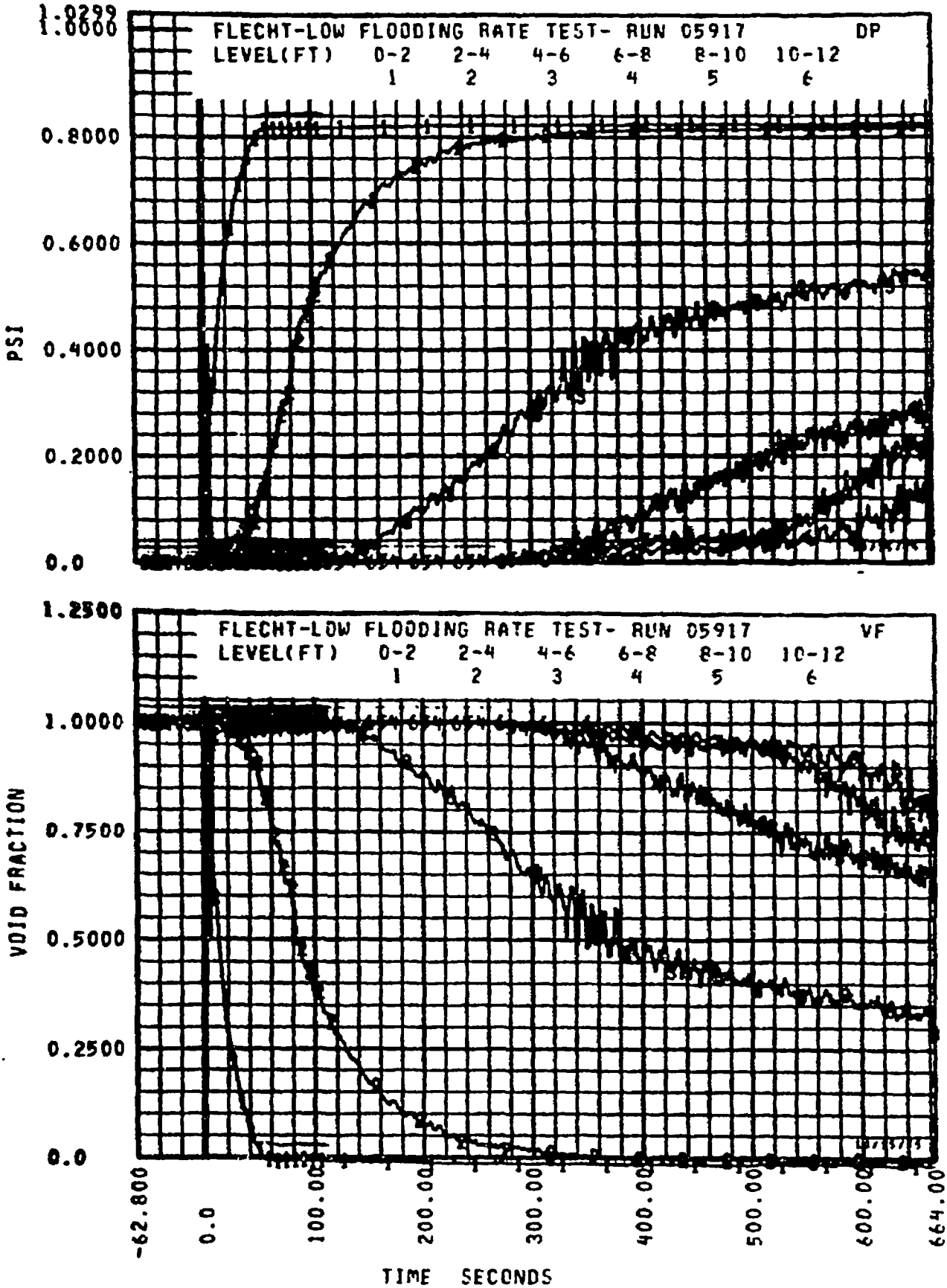

FLECHT LOW FLOODING RATE SERIES
RUN 05917
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

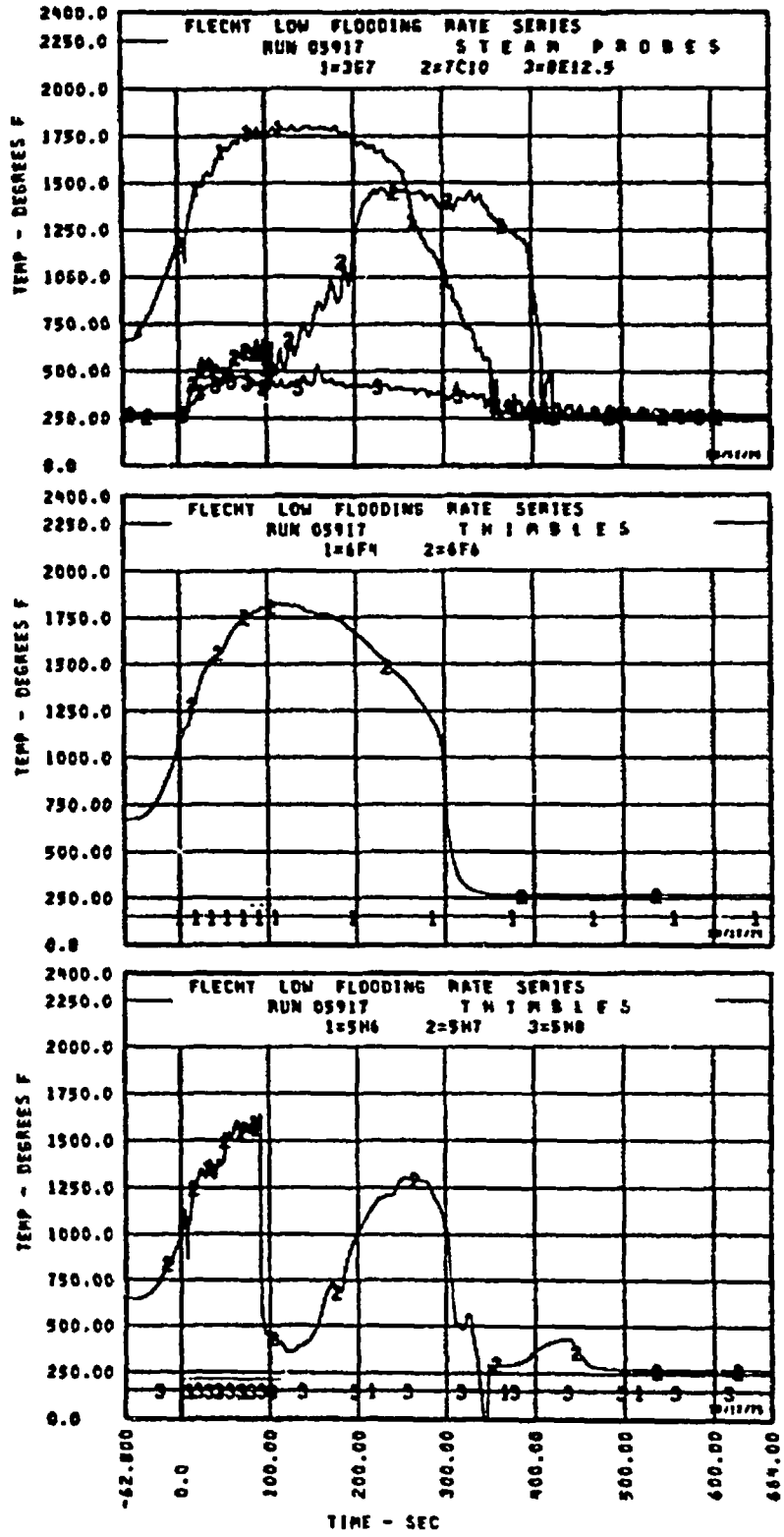

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05917
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

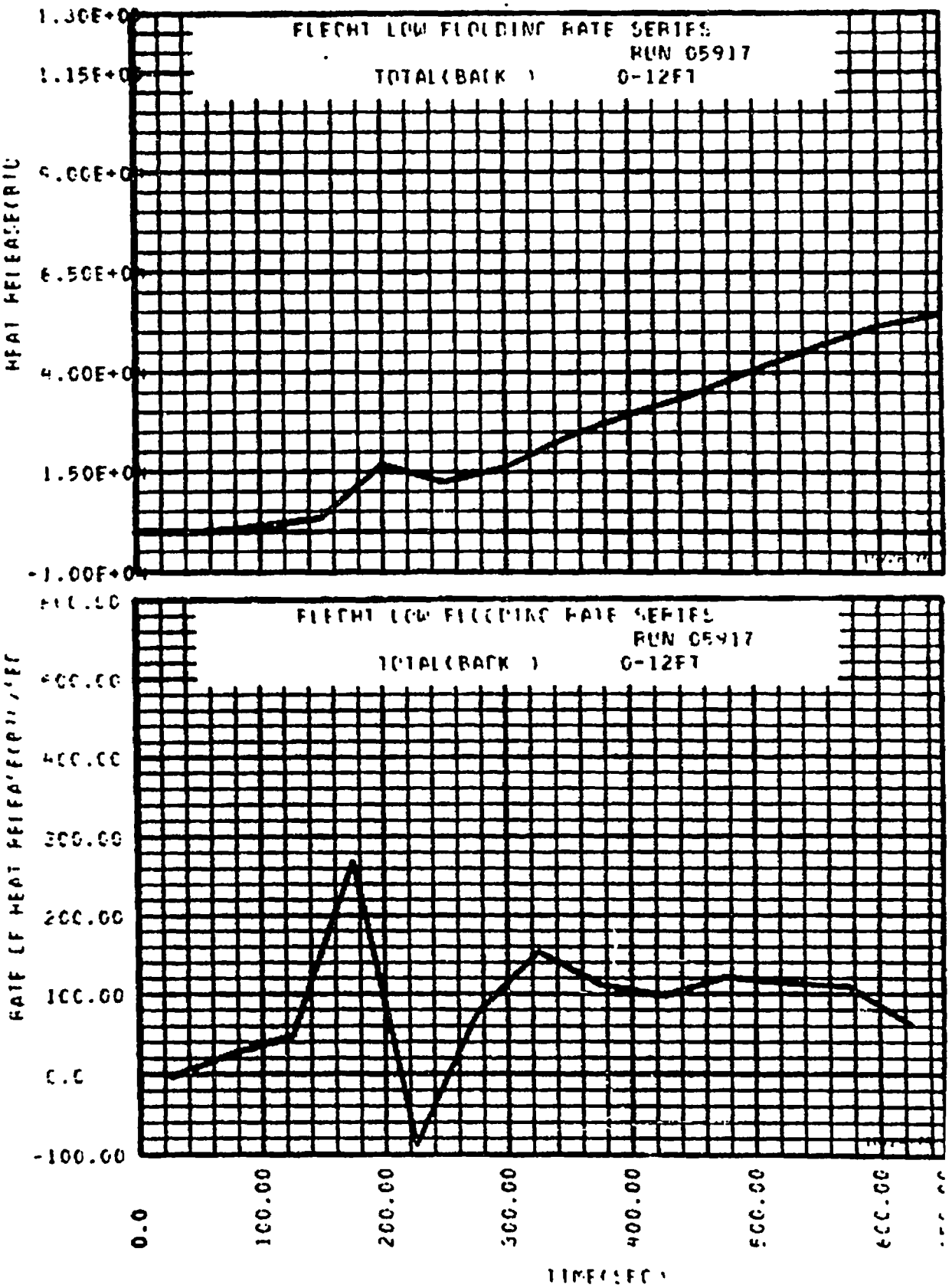

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 05917
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 05917
RATE OF MASS INTO CARRYOVER TANK
LBM / SEC
0.3000
0.2000
0.1000
1.78E-15
-0.1000
-0.2000
-0.3000
-0.4000
FLECHT - LOW FLOODING RATE TEST -- RUN 05917
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
0.7000
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
-42.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 05917
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
469.61
450.00
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.000
0.0
MASS (LBM)
-62.800
0.0
100.00
200.00
300.00
400.00
500.00
600.00
664.00
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 05917 DP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.0299
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 05917 VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-62.800
0.0
100.00
200.00
300.00
400.00
500.00
600.00
664.00
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 05917 STEAM PROBES
1=3G7 2=7C10 3=8E12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 05917 THIMBLES
1=6F4 2=6F6
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 05917 THIMBLES
1=5H6 2=5H7 3=5H8
TEMP - DEGREES F
-62.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
664.00
TIME - SEC


FLIGHT LOW FLOODING RATE SERIES
RUN 05917
TOTAL(BACK) 0-12FT
1.30E+0
1.15E+0
9.00E+0
6.50E+0
4.00E+0
1.50E+0
-1.00E+0
HEAT RELEASE(ERG
FLIGHT LOW FLOODING RATE SERIES
RUN 05917
TOTAL(BACK) 0-12FT
400.00
300.00
200.00
100.00
0.0
-100.00
0.0
100.00
200.00
300.00
400.00
500.00
TIME(SEC)

BLANK PAGE

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 06022

DATE: 6/9/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	25		
Initial Clad Temperature (6 Ft)°F At Flood	1,090	Rod T/C	4H6
Rod Peak Power, kw/ft	0.87		
Flooding Rate, in/sec	FLECHT SET PHASE B RUN 2617B		

Coolant Temperature, °F	144		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

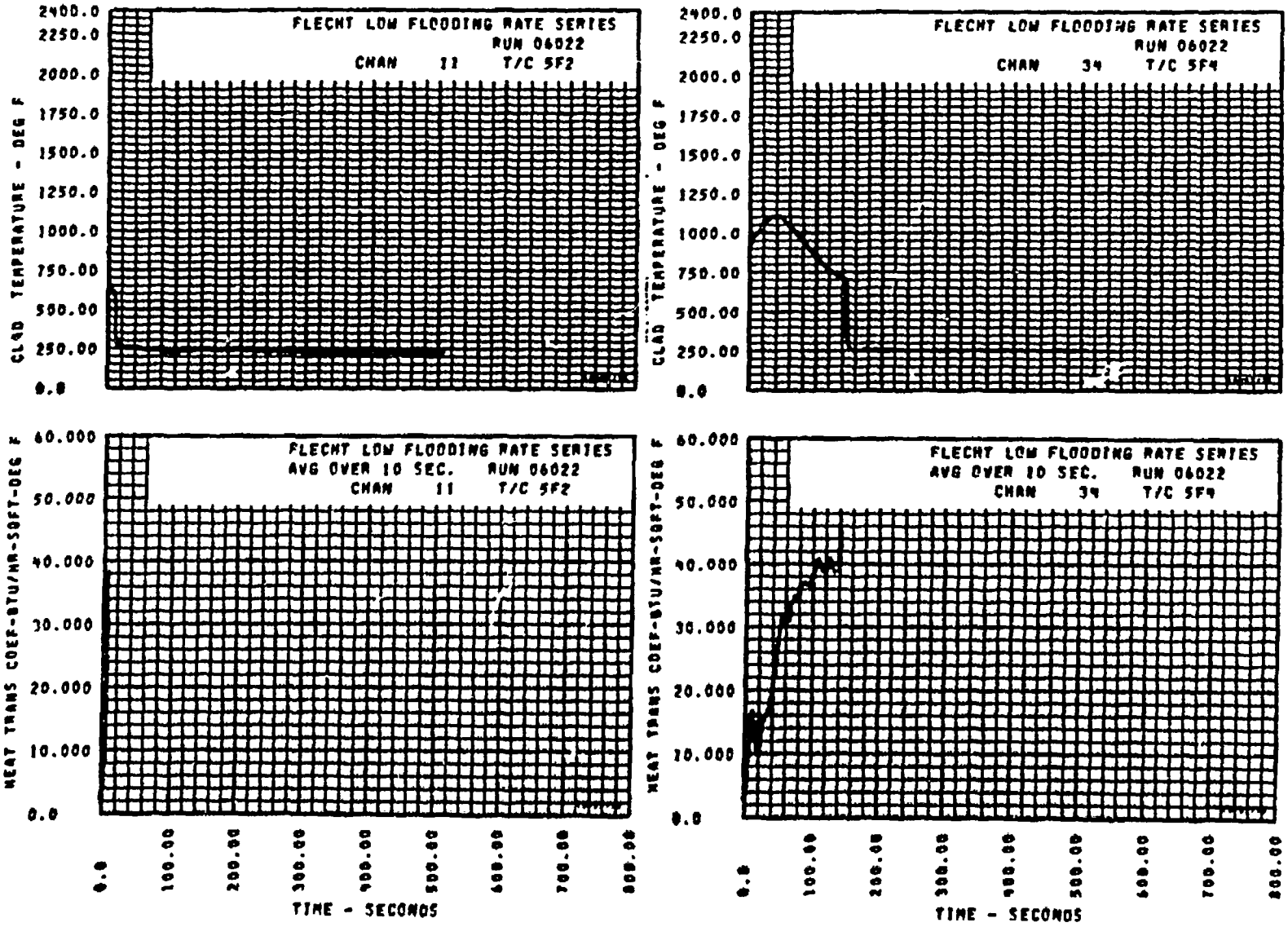
B. INITIAL HOUSING TEMPERATURE

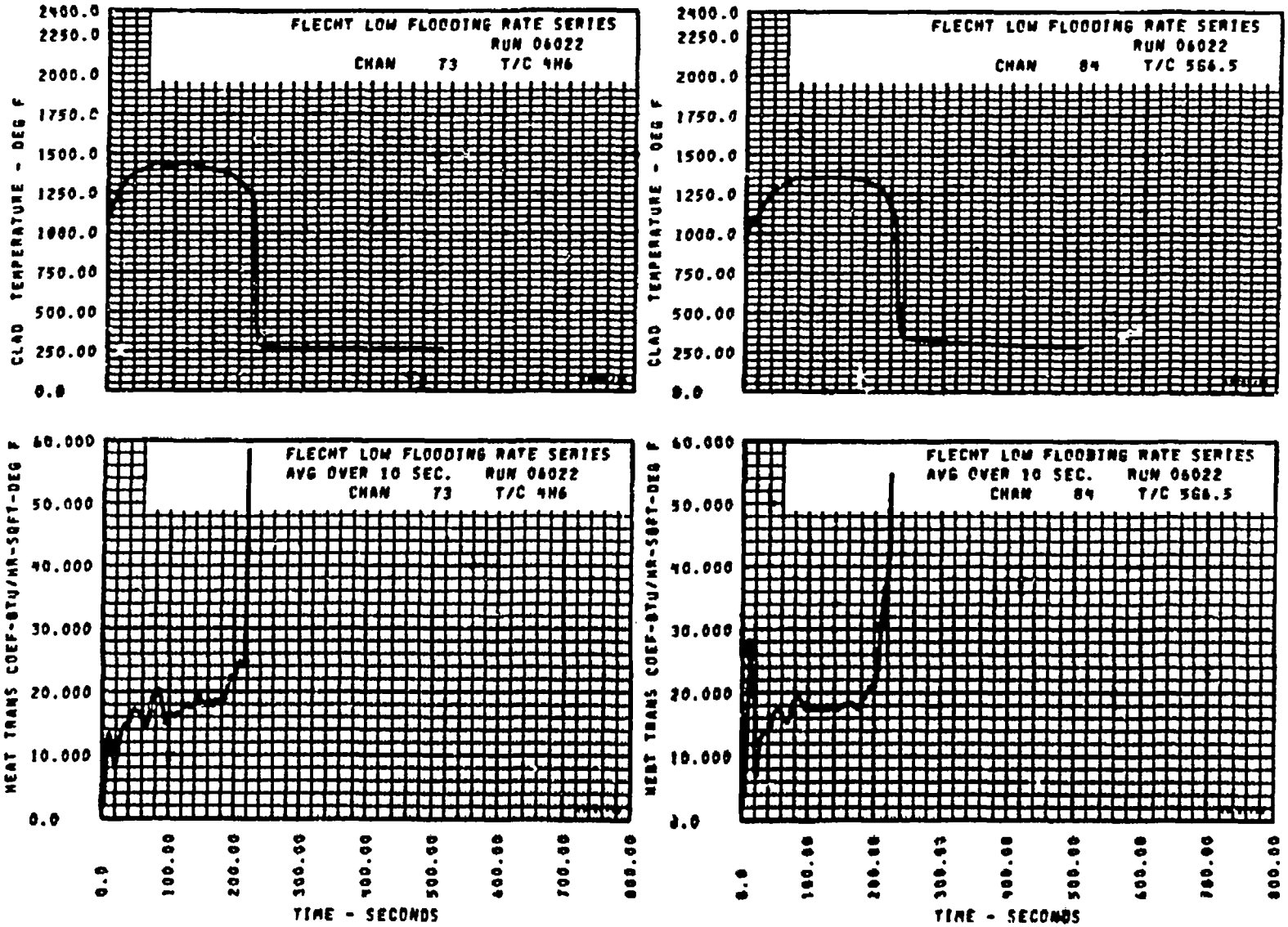
Back Side Elevation, Ft.	Temperature, °F
0	250
2	356
4	527
5.5	612
6	614
6.5	501
7	485
7.5	478
8	506
10	376
12	252
Average	451
Lower Plenum	137

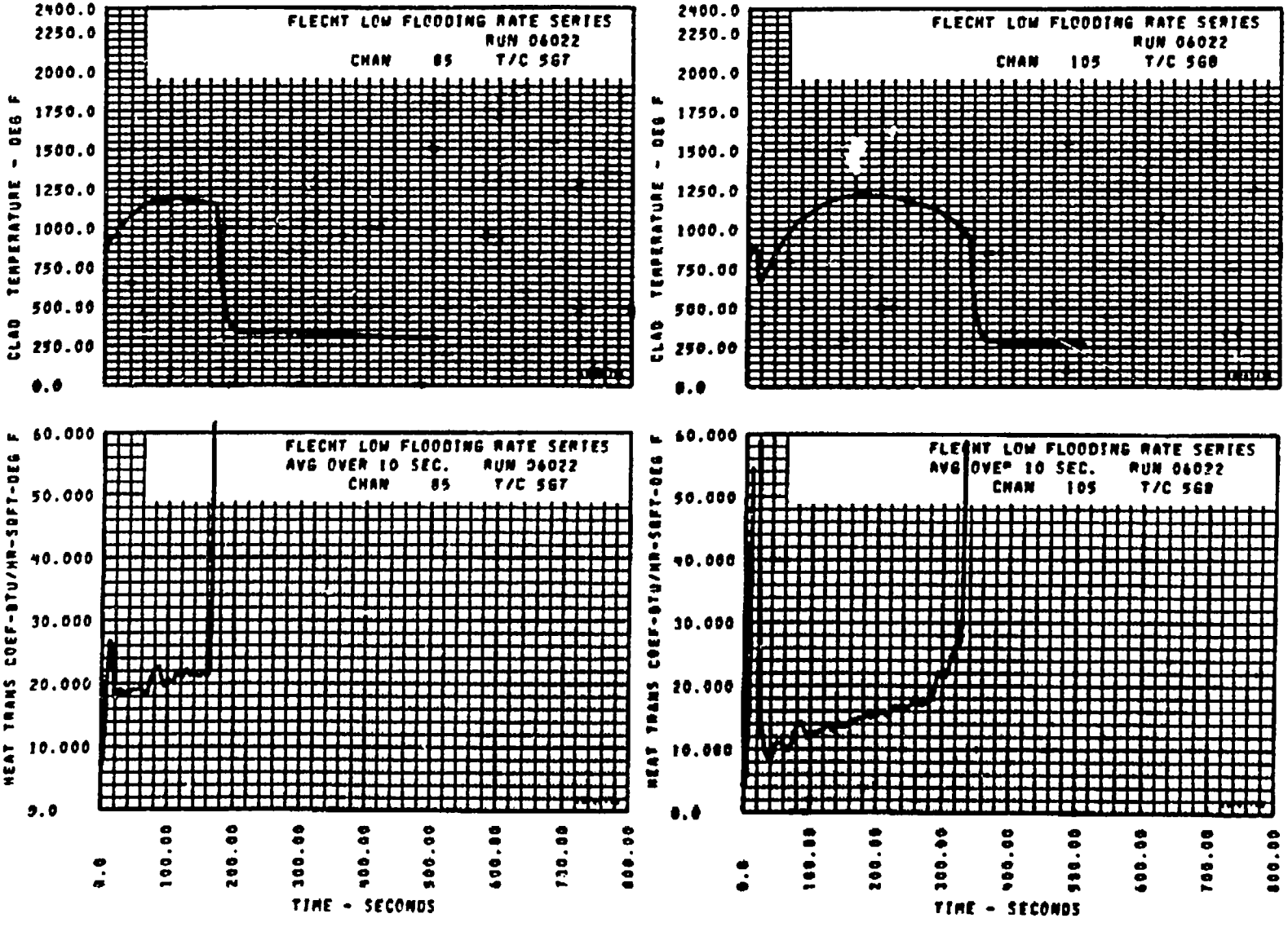
FLECHT-LOW FLOODING RATE 230 THERMOCOUPLE DATA

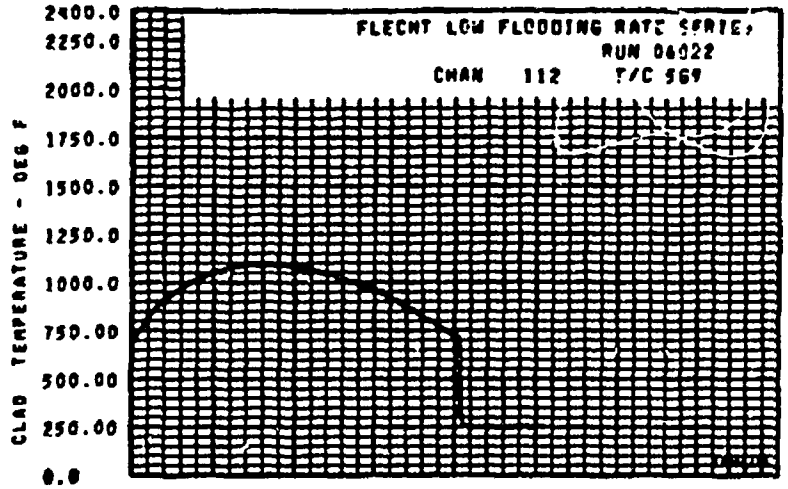
RUN NUMBER 06122

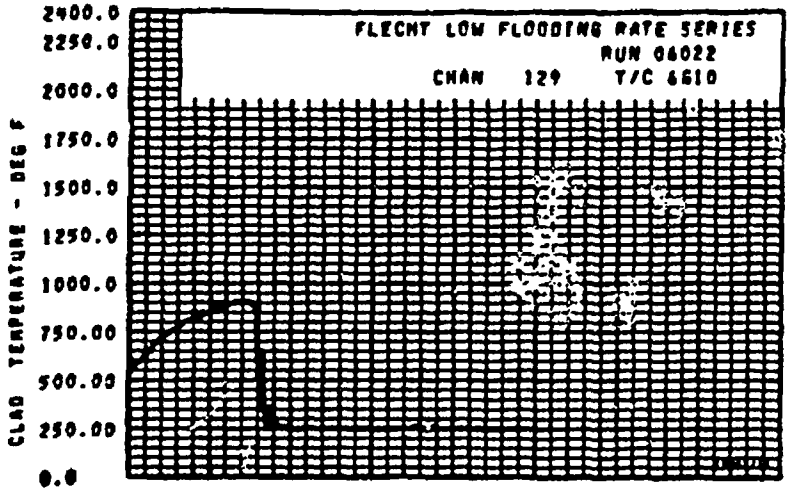
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURN-AROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	943.	-34.4	423.	434.	12.	2.6	426.	3.7
4H1	265.	-34.4	448.	460.	15.	4.9	458.	6.2
4H1.5	383.	-34.4	470.	482.	12.	4.8	467.	7.5
4H?	373.	-34.4	623.	652.	29.	5.4	682.	16.7
4H4	529.	-34.4	957.	1151.	193.	48.2	731.	138.3
4H6	592.	-34.4	1094.	1447.	353.	74.6	1167.	224.5
8H6	313.	-34.4	15?.	1426.	563.	142.8	857.	288.6
8H6.5	942.	-34.4	925.	1491.	566.	135.8	978.	331.3
8H7	259.	-34.4	789.	1154.	364.	124.8	787.	391.1
8H8	249.	-34.4	691.	1123.	433.	191.8	762.	383.3
8H9	248.	-34.4	622.	1072.	449.	191.8	666.	447.8
8H10	246.	-34.4	592.	978.	476.	285.8	788.	383.6
8H11	249.	-34.4	422.	460.	39.	18.8	459.	11.2
8H12	151.	-32.4	201.	226.	25.	51.6	225.	52.8
5F0	243.	-34.4	34?.	351.	3.	1.2	349.	2.8
5F0.5	241.	-34.4	415.	426.	11.	2.4	417.	3.9
5F1	256.	-34.4	434.	448.	14.	3.8	444.	6.8
5F1.5	* P R A T T H E R M O C O U P L E				D A T A * *			
5F2	346.	-34.4	595.	624.	28.	5.4	595.	10.3
5F3	458.	-34.4	780.	840.	60.	18.6	615.	68.7
5F4	494.	-34.4	922.	1112.	198.	48.2	695.	149.9
5F6	357.	-34.4	925.	1228.	302.	33.2	1177.	97.7
5G6	469.	-34.4	970.	1241.	267.	32.2	975.	193.4
5G6.5	448.	-34.4	990.	1394.	364.	128.9	1821.	228.2
5G7	349.	-34.4	847.	1192.	345.	189.8	1065.	172.4
5G8	396.	-34.4	804.	1222.	418.	171.8	813.	336.2
5G9	353.	-34.4	685.	1089.	404.	148.8	783.	485.6
5G11	247.	-34.4	427.	466.	39.	9.6	495.	12.6
5G12	249.	-34.4	404.	472.	68.	72.4	482.	15.6
1G4	570.	-34.4	939.	1025.	94.	28.8	763.	181.4
1G6	981.	-35.4	1072.	1361.	289.	69.9	844.	279.9
1G10	715.	-35.4	551.	745.	194.	192.8	556.	381.8
3H?	358.	-34.4	428.	649.	29.	5.4	596.	11.3
3H6	552.	-34.4	1061.	1416.	355.	69.2	979.	251.1
3H8	482.	-34.4	970.	1188.	236.	47.8	1084.	97.3
3H10	996.	-34.4	688.	1864.	457.	202.0	962.	218.4

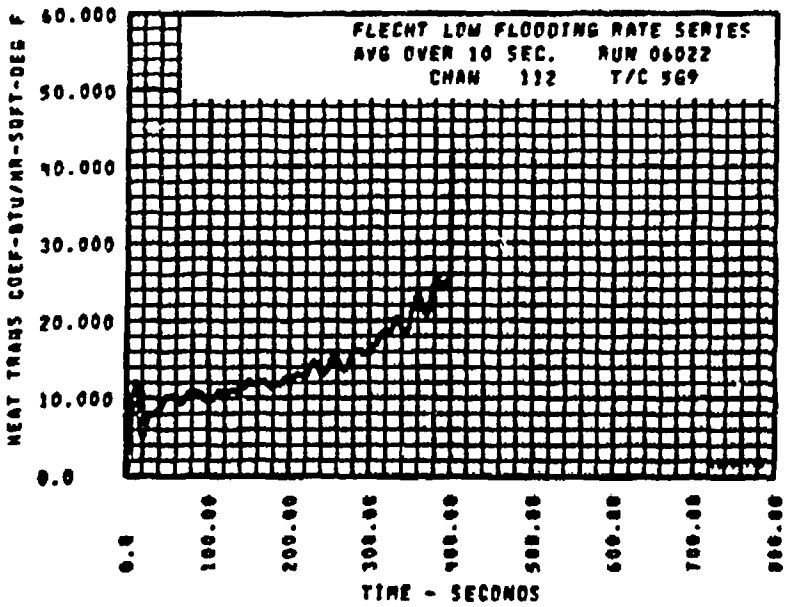

FLECHT LOW FLOODING RATE SERIES
RUN 06022
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06022
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06022
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06022
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

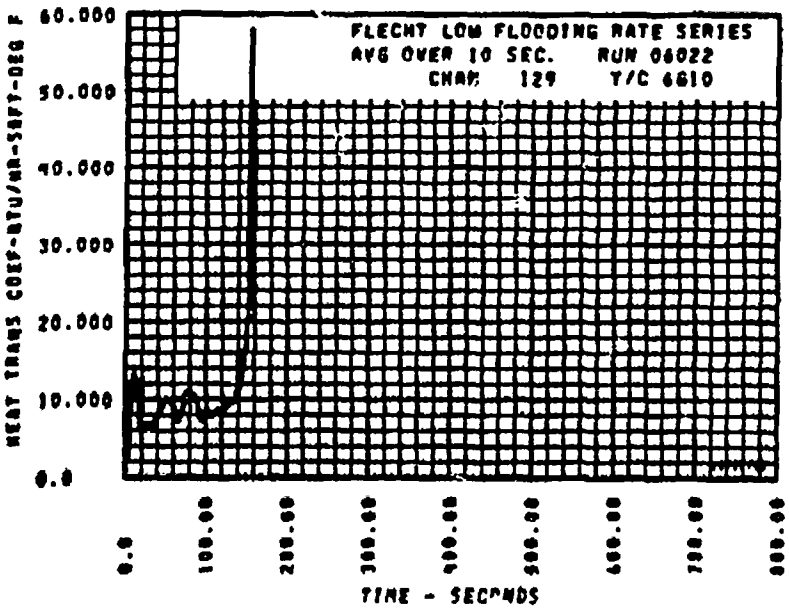

FLECHT LOW FLOODING RATE SERIES
RUN 06022
CHAN 73 T/C 4H6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06022
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06022
CHAN 73 T/C 4H6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06022
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

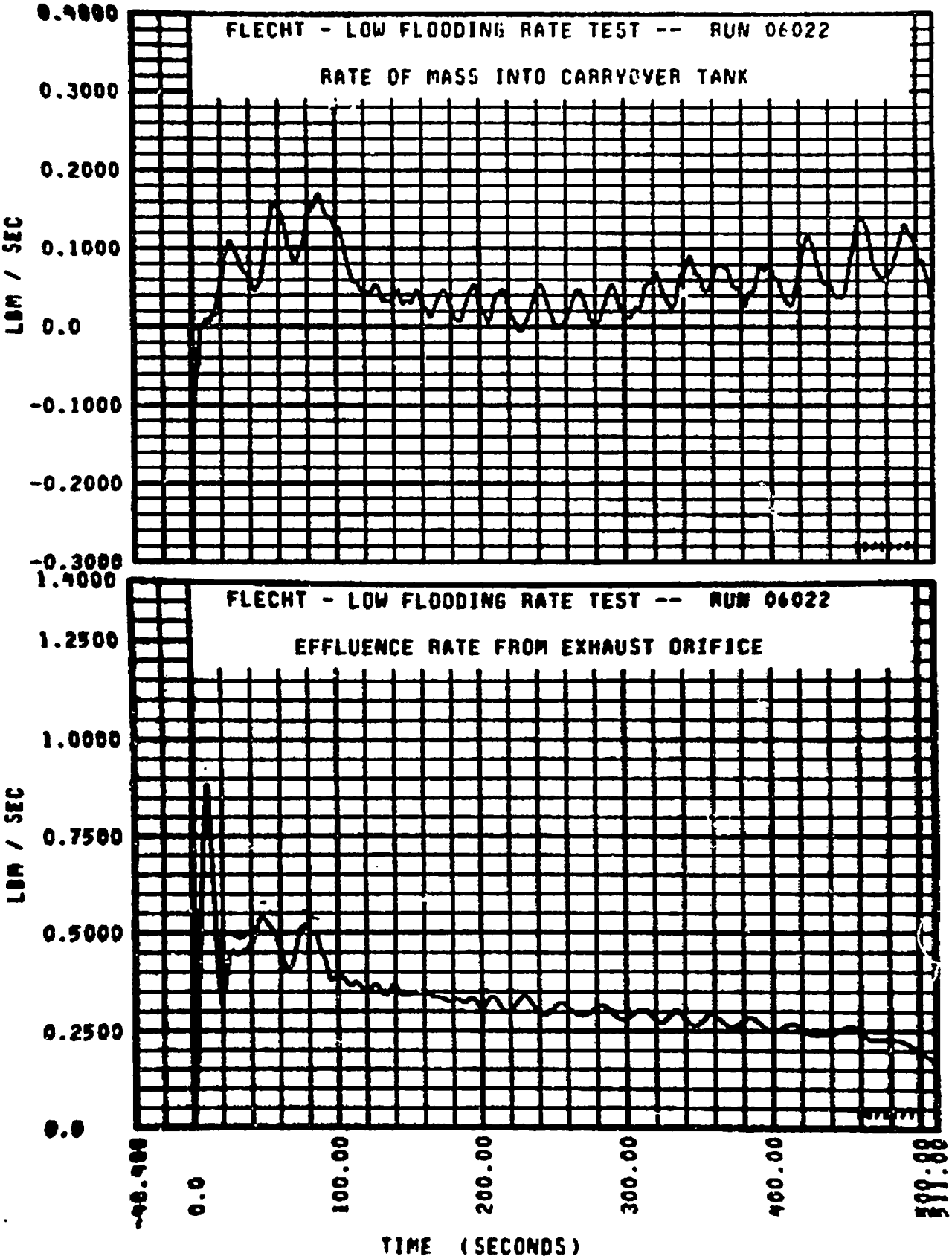

FLECHT LOW FLOODING RATE SERIES
RUN 06022
CHAN 85 T/C 567
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06022
CHAN 105 T/C 568
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06022
CHAN 85 T/C 567
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06022
CHAN 105 T/C 568
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

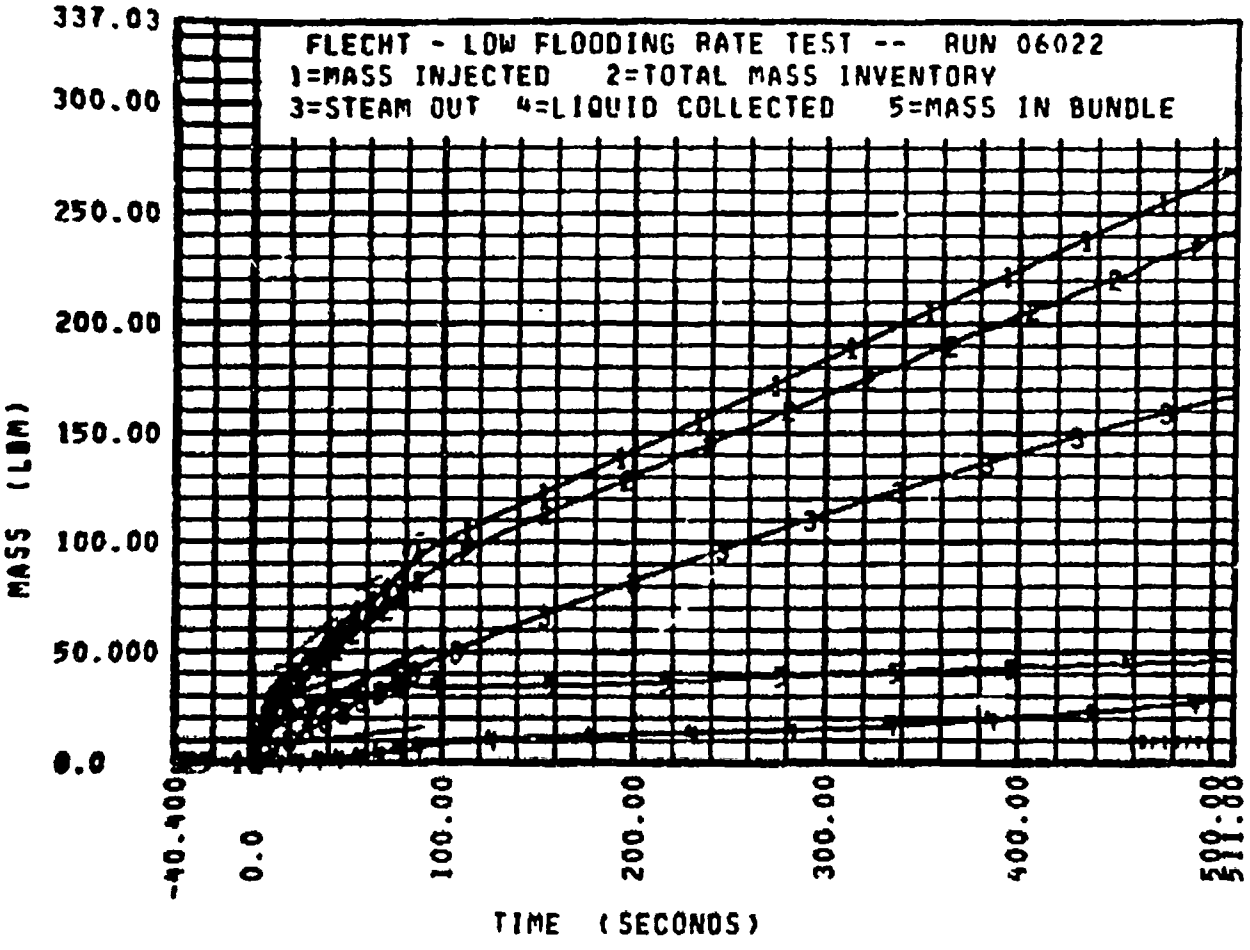

FLECHT LOW FLOODING RATE SERIES
RUN 06022
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

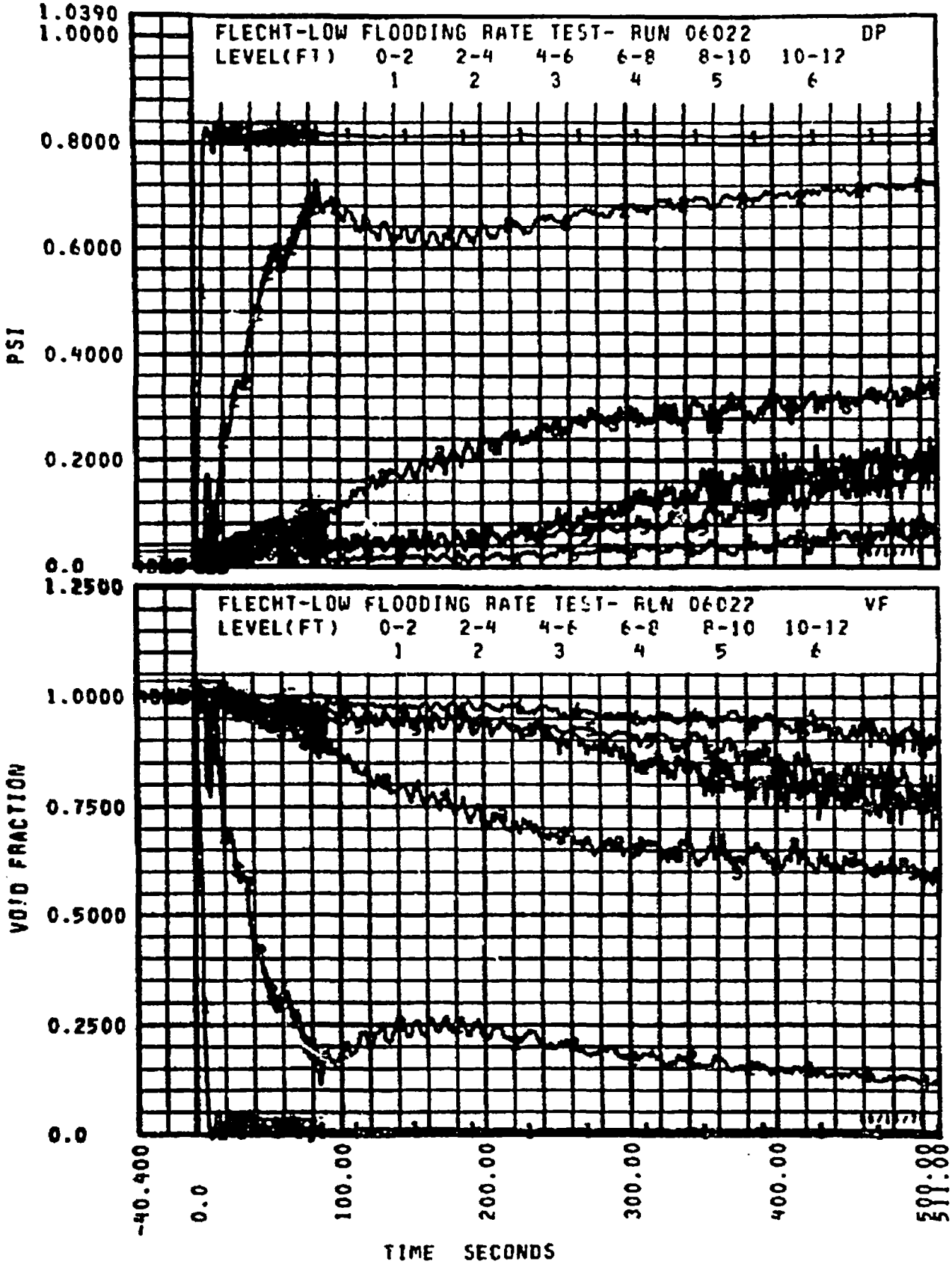

FLECHT LOW FLOODING RATE SERIES
RUN 06022
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

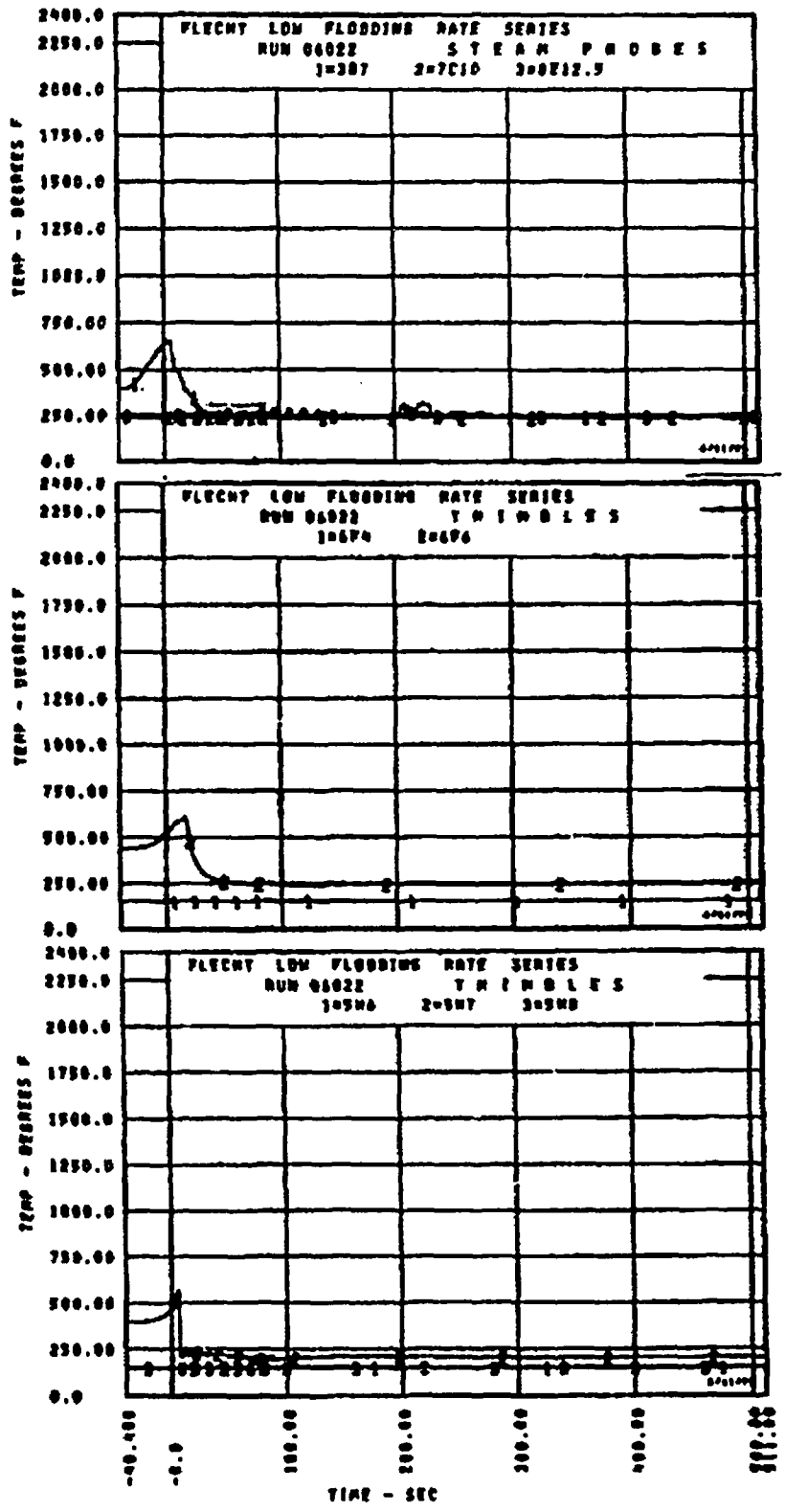

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06022
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

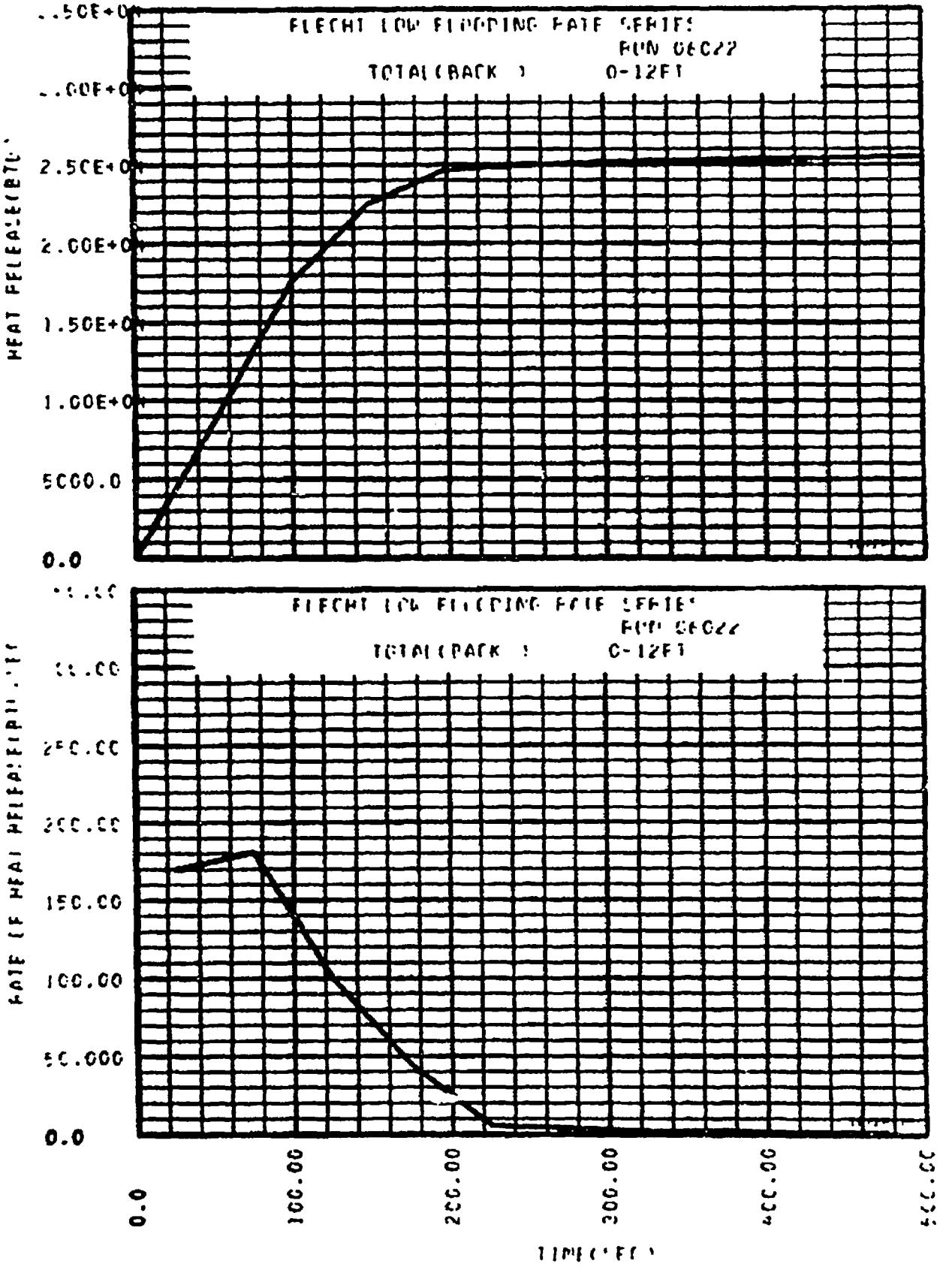

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06022
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 06022
RATE OF MASS INTO CARRYOVER TANK
LBM / SEC
0.4000
0.3000
0.2000
0.1000
0.0
-0.1000
-0.2000
-0.3000
FLECHT - LOW FLOODING RATE TEST -- RUN 06022
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
1.4000
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
-40.000
0.0
100.00
200.00
300.00
400.00
511.88
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 06022
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
337.03
300.00
250.00
200.00
150.00
100.00
50.000
0.0
MASS (LBM)
-40.400
0.0
100.00
200.00
300.00
400.00
511.88
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 06022 DP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.0390
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 06022 VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-40.400
0.0
100.00
200.00
300.00
400.00
599.88
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 06022
STEAM PROBES
1=387 2=7C10 3=8E12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06022
TAIWBLES
1=6P4 2=6P6
TEMP - DEGREES F
FLECHT LOW FLOODING RATE SERIES
RUN 06022
TAIWBLES
1=5W6 2=5W7 3=5W8
TEMP - DEGREES F
-40.000
-0.0
100.00
200.00
300.00
400.00
TIME - SEC


FLIGHT LOW FLIPPING RATE SERIES
RUN 06C22
TOTAL(BACK) 0-12FT
HEAT RELEASE(BTU
2.5CE+0
2.00E+0
1.50E+0
1.00E+0
5000.0
0.0
FLIGHT LOW FLIPPING RATE SERIES
RUN 06C22
TOTAL(BACK) 0-12FT
RATE OF HEAT RELEASE(BTU
150.00
100.00
50.000
0.0
0.0
100.00
200.00
300.00
400.00
TIME(SEC)

BLANK PAGE

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 06161

DATE: 6/10/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	39		
Initial Clad Temperature (6 Ft)°F At Flood	1,600	Rod T/C	4H6
Rod Peak Power, kw/ft	0.95		
Flooding Rate, in/sec	6 (1 sec)		
	2 (20 sec)		
	1.0		
Coolant Temperature, °F	126		
Bundle Radial Power Profile	FLECHT		
Disconnected Rods	7F		

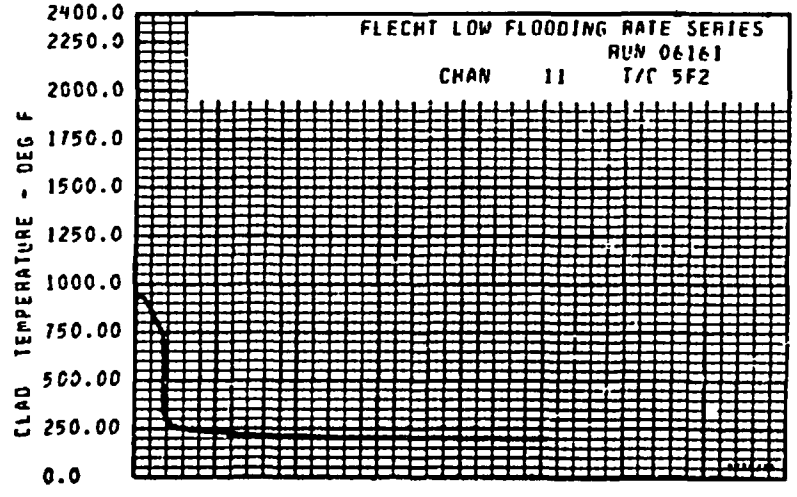
B. INITIAL HOUSING TEMPERATURE

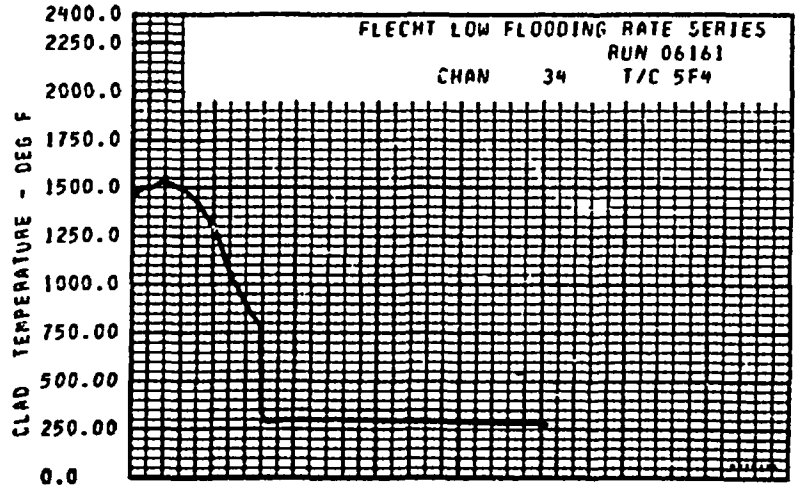
Back Side Elevation, Ft.	Temperature, °F
0	265
2	602
4	768
5.5	821
6	818
6.5	690
7	679
7.5	704
8	775
10	616
12	287
Average	639
Lower Plenum	120
Upper Plenum	270

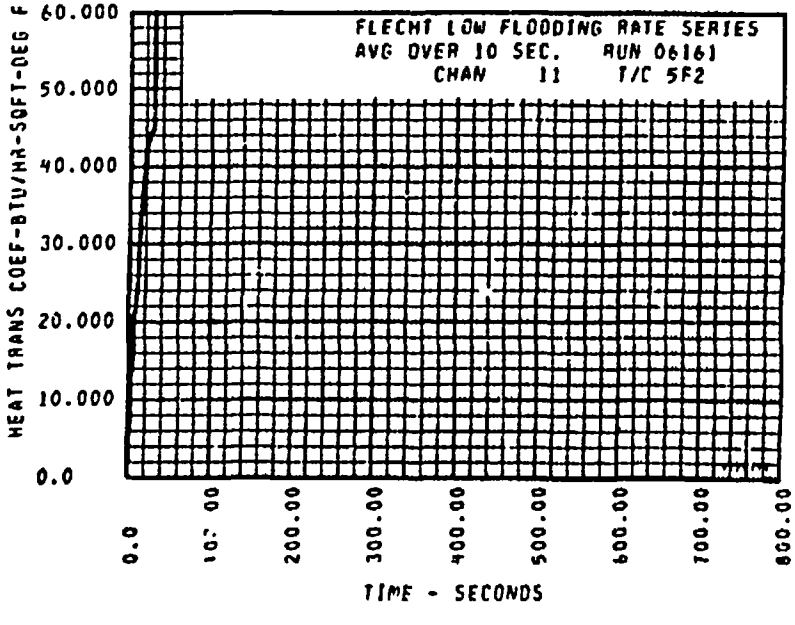
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

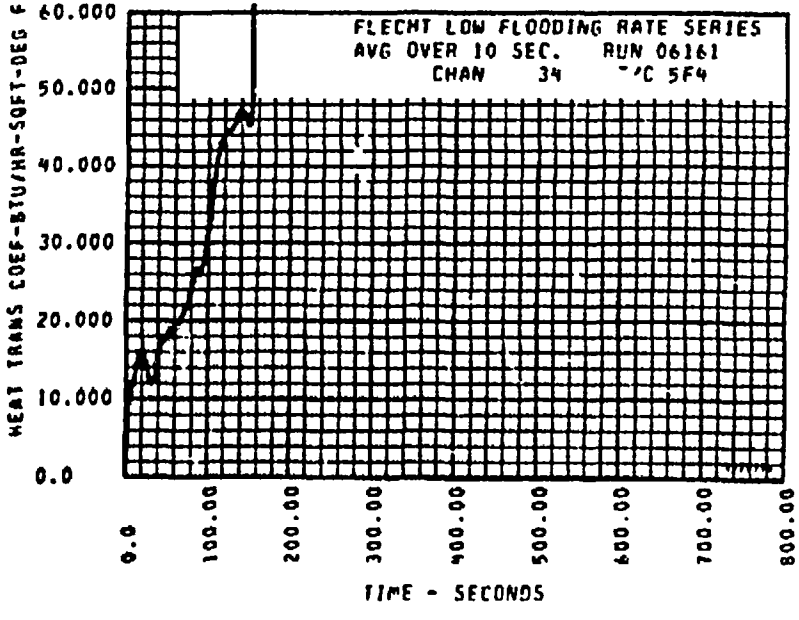
RUN NUMBER C6161

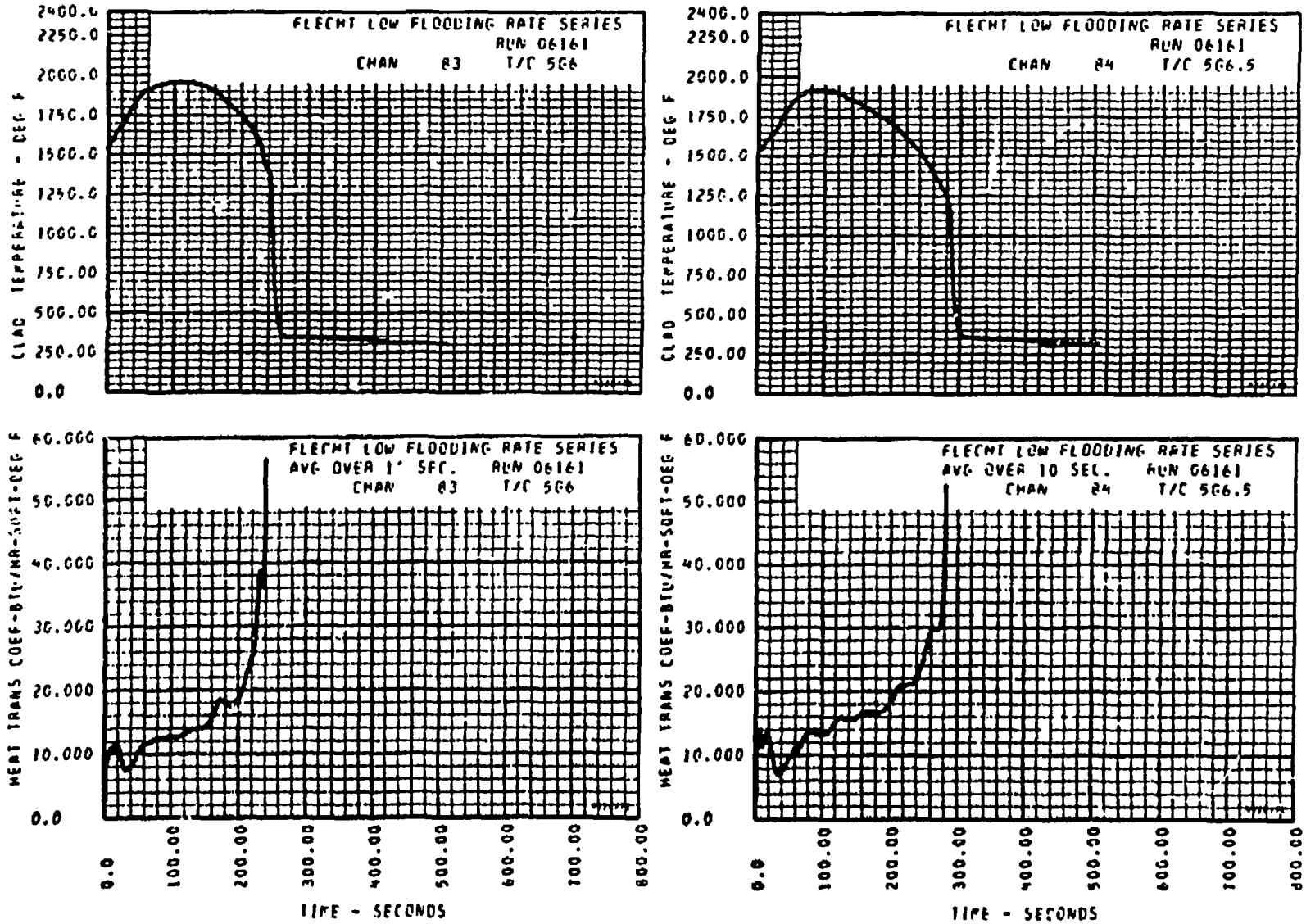
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4HC.5	307.	-57.8	603.	609.	6.	1.2	566.	6.0
4H1	385.	-58.3	672.	679.	7.	1.6	614.	13.0
4H1.5	465.	-57.8	731.	739.	8.	2.0	648.	21.8
4H2	577.	-57.3	973.	986.	14.	2.2	747.	39.2
4H4	762.	-57.8	1439.	1579.	140.	46.2	847.	157.0
4H6	729.	-56.9	1600.	1937.	337.	108.0	1026.	266.6
4D6	649.	-57.4	1468.	1845.	377.	75.8	1008.	275.3
4D6.5	617.	-56.3	1437.	1892.	454.	83.2	1120.	315.4
4D7	620.	-57.3	1401.	1598.	197.	54.6	814.	359.8
4D8	642.	-57.4	1304.	1783.	479.	137.0	939.	393.8
4D9	434.	-57.4	998.	1388.	390.	191.0	698.	456.0
4D10	269.	-57.8	709.	1224.	515.	216.0	727.	454.8
4D11	271.	-57.3	571.	1020.	450.	221.0	713.	414.7
4D12	187.	-57.4	299.	548.	249.	203.0	392.	321.6
3F6	262.	-57.3	299.	299.	0.	0.0	283.	1.4
3F6.5	292.	-58.8	594.	598.	4.	1.0	561.	4.5
3F7	361.	-57.9	648.	655.	7.	1.4	607.	10.2
3F8	* * R A D	T H E R M O C O U P L E		D A T A * *				
3F2	536.	-57.8	930.	944.	14.	2.4	736.	34.8
3F3	690.	-57.8	1219.	1249.	31.	12.0	713.	85.9
3F4	758.	-57.9	1437.	1537.	100.	40.2	767.	157.9
3F6	697.	-58.3	1556.	1959.	403.	92.0	1524.	230.7
3G6	696.	-56.8	1541.	1940.	419.	114.0	1352.	243.6
3G6.5	649.	-57.8	1516.	1914.	399.	95.0	1180.	285.6
3G7	651.	-57.3	1422.	1574.	152.	81.2	1117.	308.0
3G8	653.	-58.1	1315.	1628.	313.	139.0	1113.	373.5
3G9	517.	-57.3	1055.	1355.	300.	136.0	715.	434.9
3G11	274.	-57.4	573.	908.	335.	210.0	540.	465.0
3G12	270.	-57.3	543.	922.	379.	205.0	516.	487.0
1G4	769.	-57.9	1374.	1402.	28.	8.2	862.	116.9
1G6	782.	-58.3	1530.	1696.	166.	77.2	896.	279.1
1G10	517.	-57.8	671.	982.	111.	71.2	595.	456.0
3H2	560.	-57.3	974.	986.	13.	2.2	742.	34.8
3H6	748.	-57.8	1576.	1898.	322.	79.0	973.	276.8
3H8	721.	-56.9	1371.	1907.	436.	138.0	983.	382.2
3H10	394.	-57.8	834.	1293.	459.	113.0	977.	374.7
8E8	862.	-59.0	1483.	2026.	543.	123.0	900.0	296.6
8E8.5	698.	-59.0	1377.	1864.	488.	111.0	1063.9	322.7
8E7	640.	-59.0	1376.	1533.	158.	74.4	1029.1	324.7
8E8	620.	-59.0	1287.	1759.	472.	178.0	830.5	436.0
8E9	476.	-59.0	944.	1339.	396.	185.0	749.7	445.9
8E10	274.	-59.0	696.	1263.	578.	220.0	744.2	483.0
8E11	272.	-59.0	596.	1098.	502.	229.0	726.5	430.0

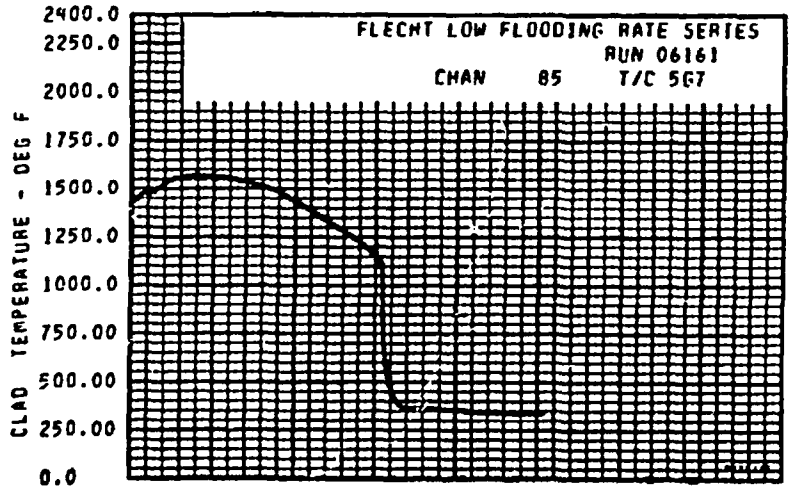

FLECHT LOW FLOODING RATE SERIES
RUN 06161
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

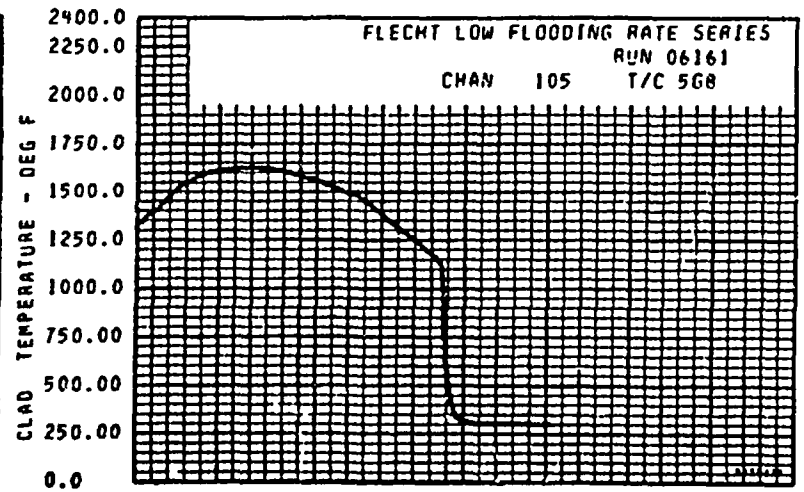

FLECHT LOW FLOODING RATE SERIES
RUN 06161
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

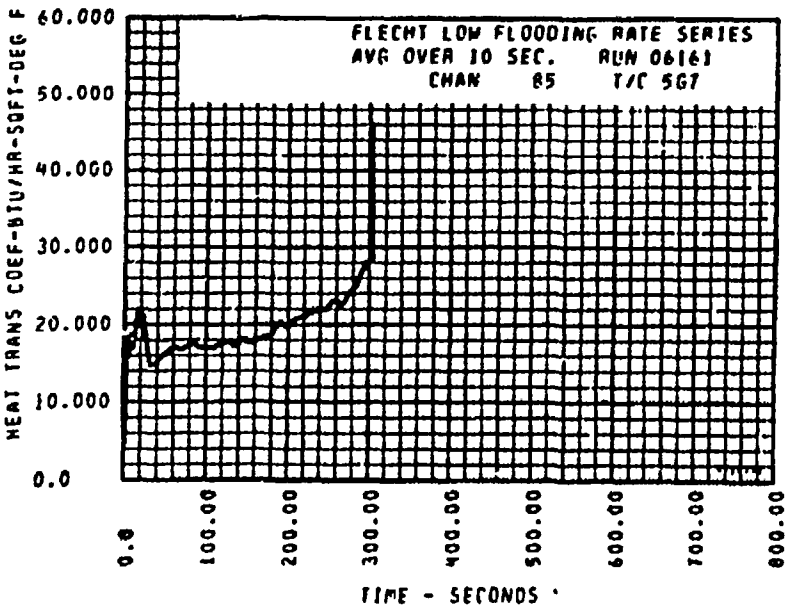

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06161
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

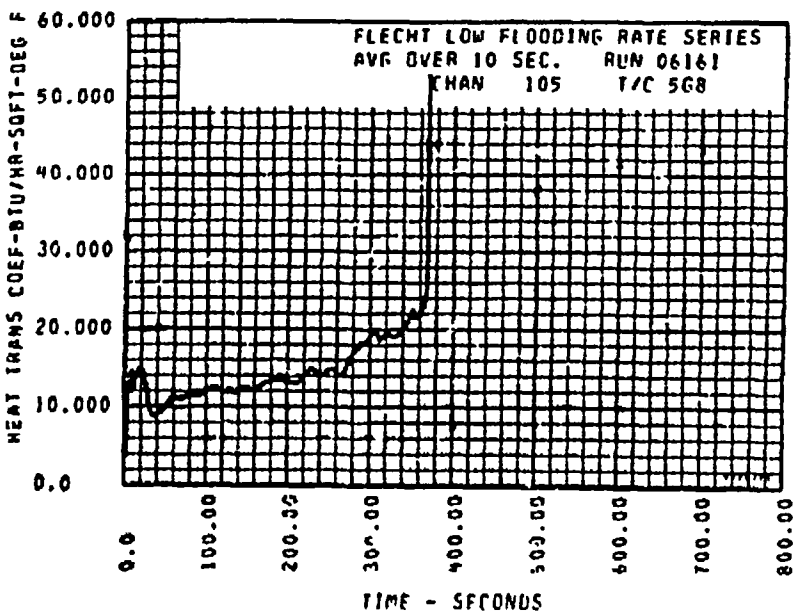

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06161
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

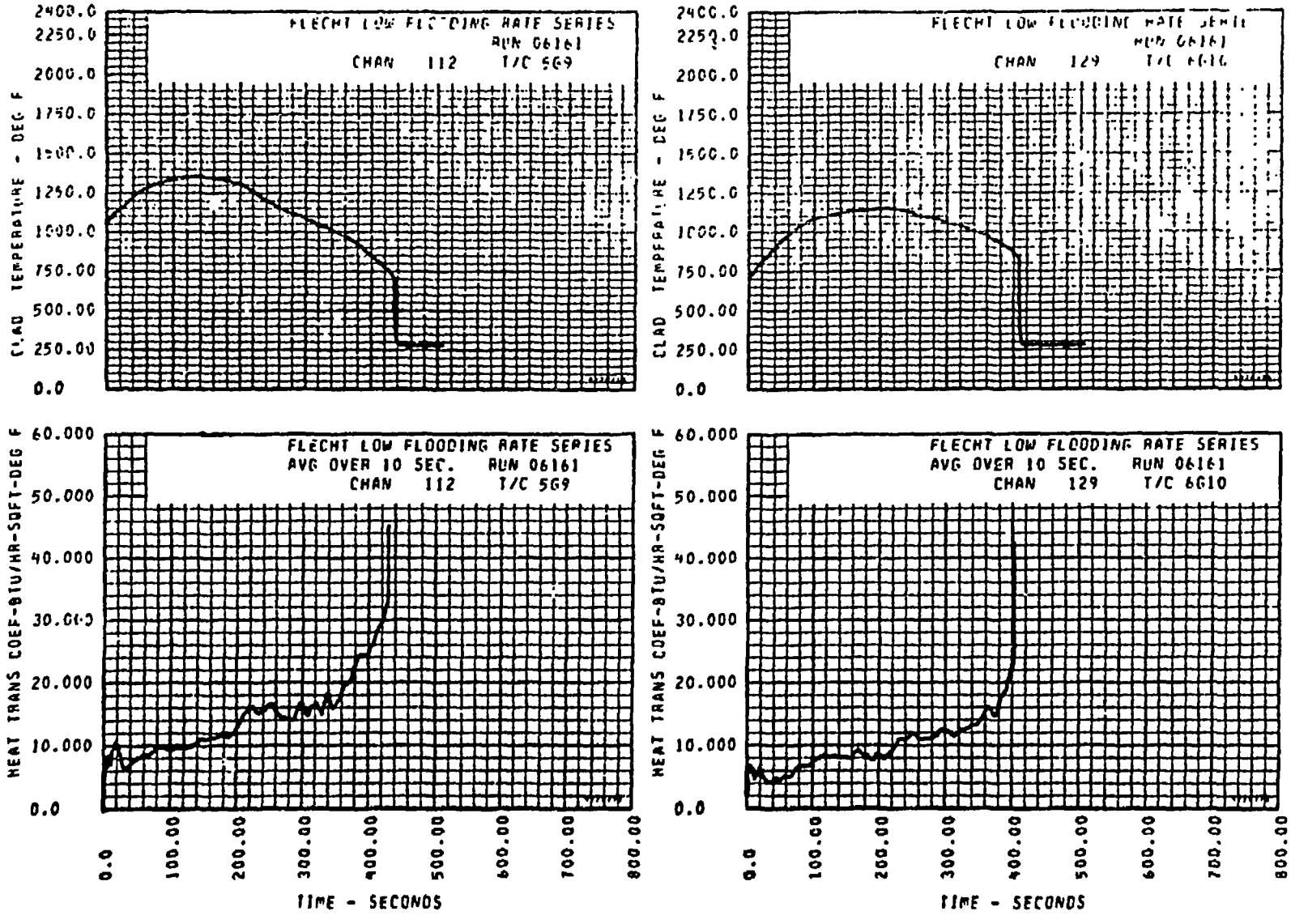

FLECHT LOW FLOODING RATE SERIES
RUN 06161
CHAN 83 T/C 506
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06161
CHAN 84 T/C 506.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
AVG OVER 1' SEC. RUN 06161
CHAN 83 T/C 506
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06161
CHAN 84 T/C 506.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

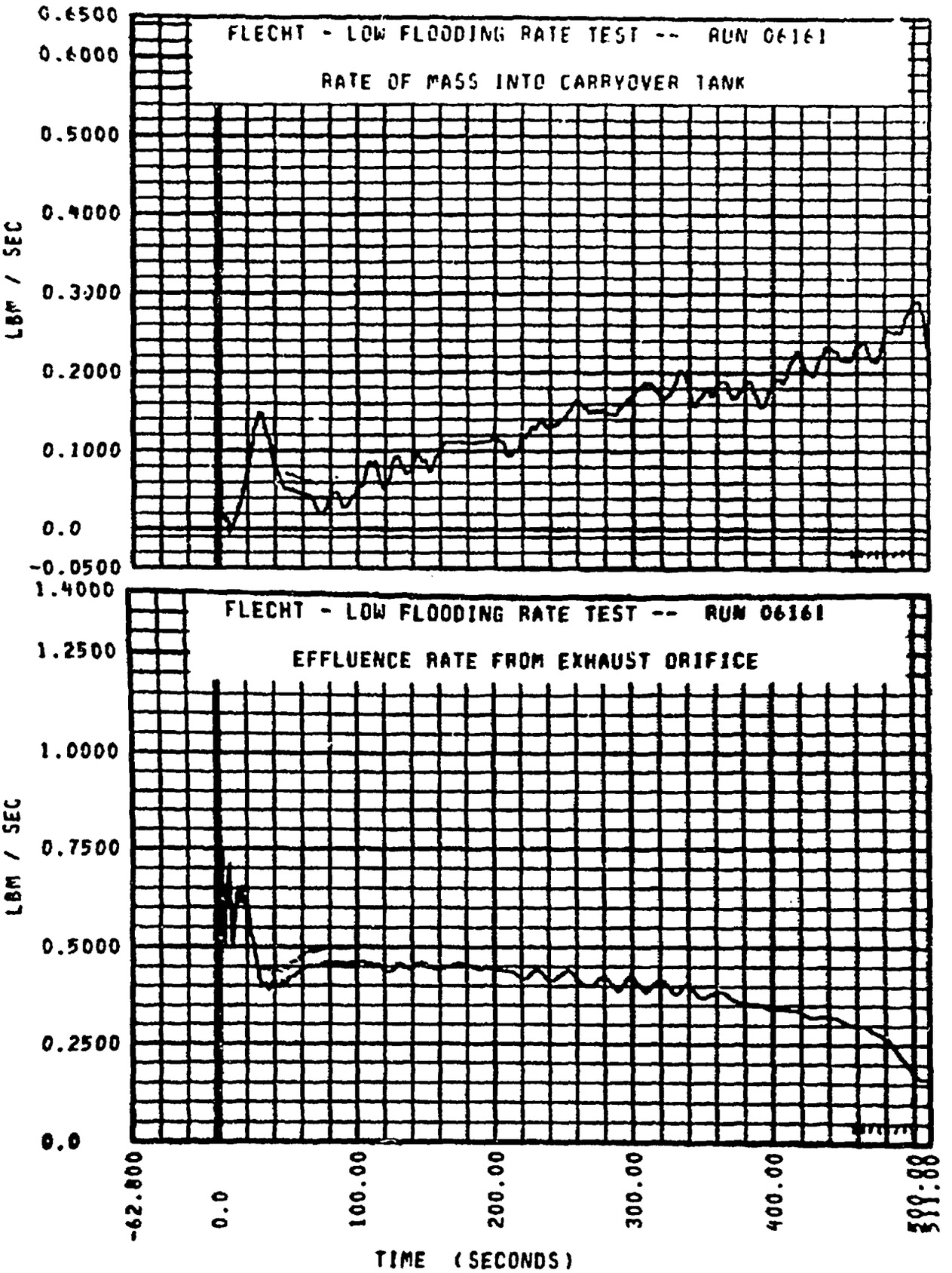

FLECHT LOW FLOODING RATE SERIES
RUN 06161
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

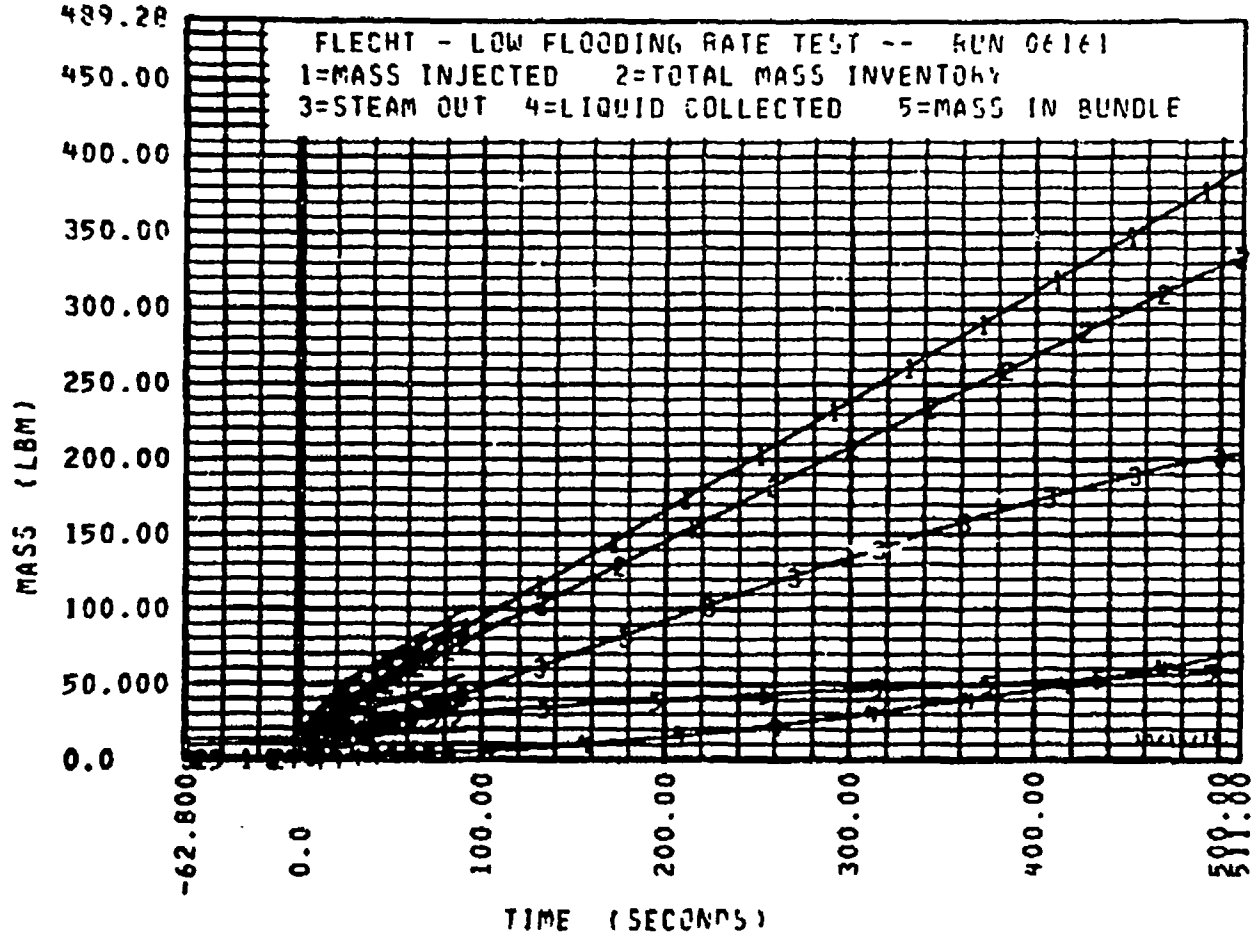

FLECHT LOW FLOODING RATE SERIES
RUN 06161
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

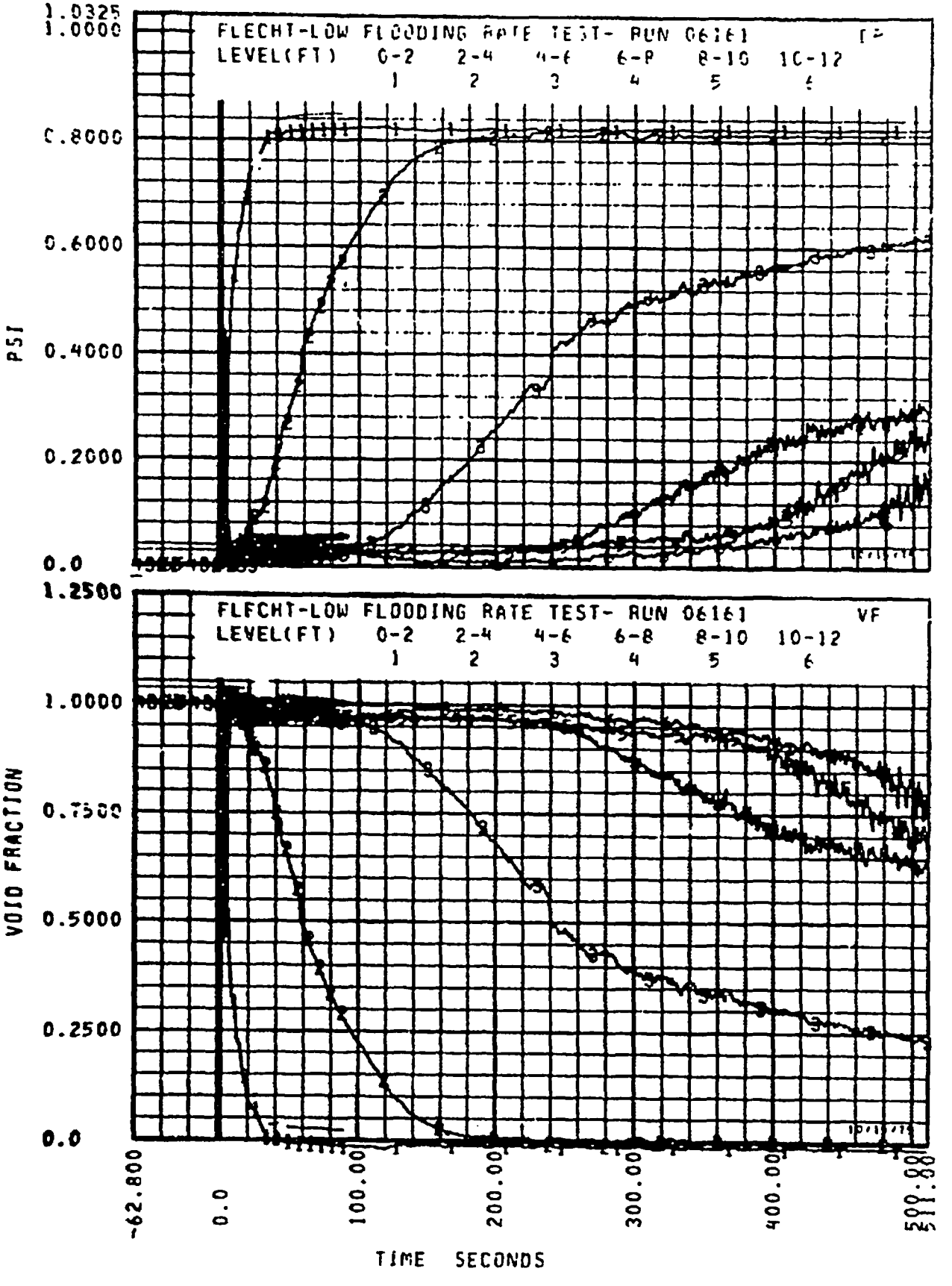

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06161
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

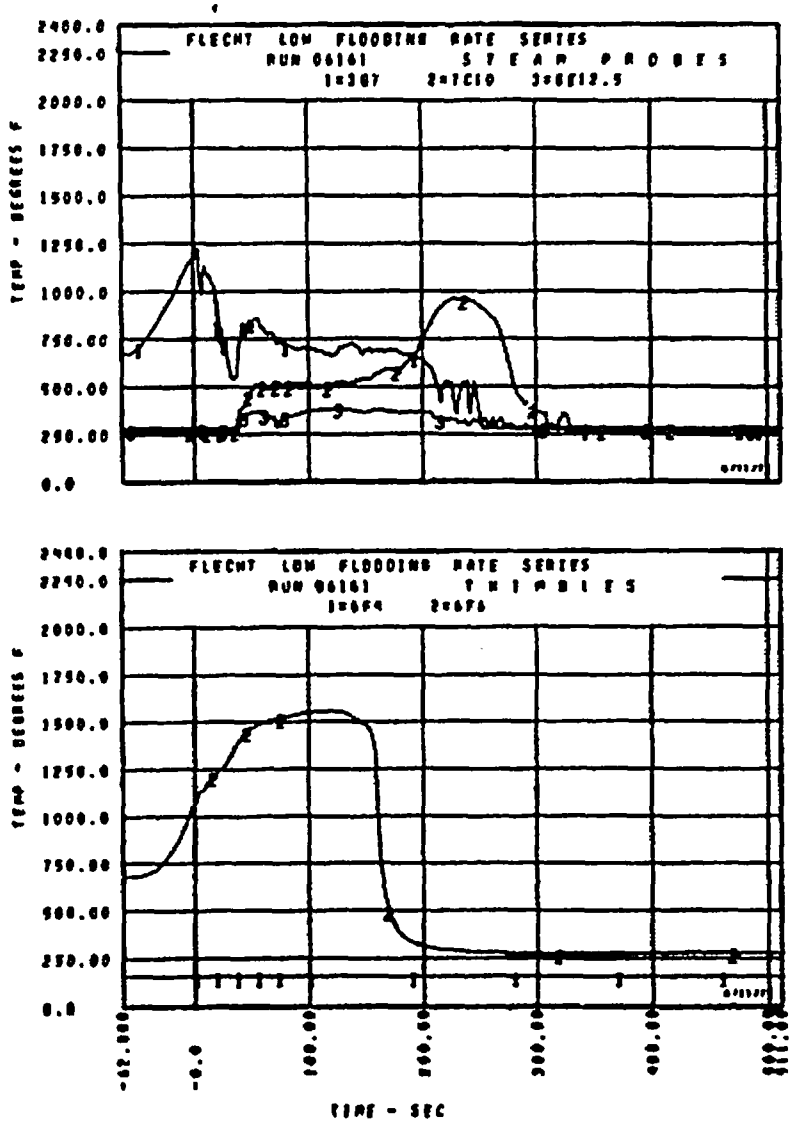

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06161
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 06161
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06161
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06161
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06161
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 06161
RATE OF MASS INTO CARRYOVER TANK
0.6500
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
-0.0500
LBM / SEC
FLECHT - LOW FLOODING RATE TEST -- RUN 06161
EFFLUENCE RATE FROM EXHAUST ORIFICE
1.4000
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
LBM / SEC
-62.800
0.0
100.00
200.00
300.00
400.00
599.88
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 06161
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
489.28
450.00
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.000
0.0
MASS (LBM)
-62.800
0.0
100.00
200.00
300.00
400.00
509.88
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 06161
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
PSI
1.0325
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
FLECHT-LOW FLOODING RATE TEST- RUN 06161
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
VF
VOID FRACTION
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
-62.800
0.0
100.00
200.00
300.00
400.00
500.80
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 06161
STEAM PROBES
1=387 2=TC10 3=GE12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06161
THIMBLES
1=654 2=674
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
-62.500
-0.0
100.00
200.00
300.00
400.00
500.00
TIME - SEC

0.0
0.0

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 06218

DATE: 6/11/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40	
Initial Clad Temperature (6 Ft)°F At Flood	1,601	Rod T/C 4H6
Rod Peak Power, kw/ft	0.95	
Flooding Rate, in/sec	6 (5 sec)	
	0.6	

Coolant Temperature, °F	129	
Bundle Radial Power Profile	FLECHT	
Disconnected Rods	7F	

B. INITIAL HOUSING TEMPERATURE

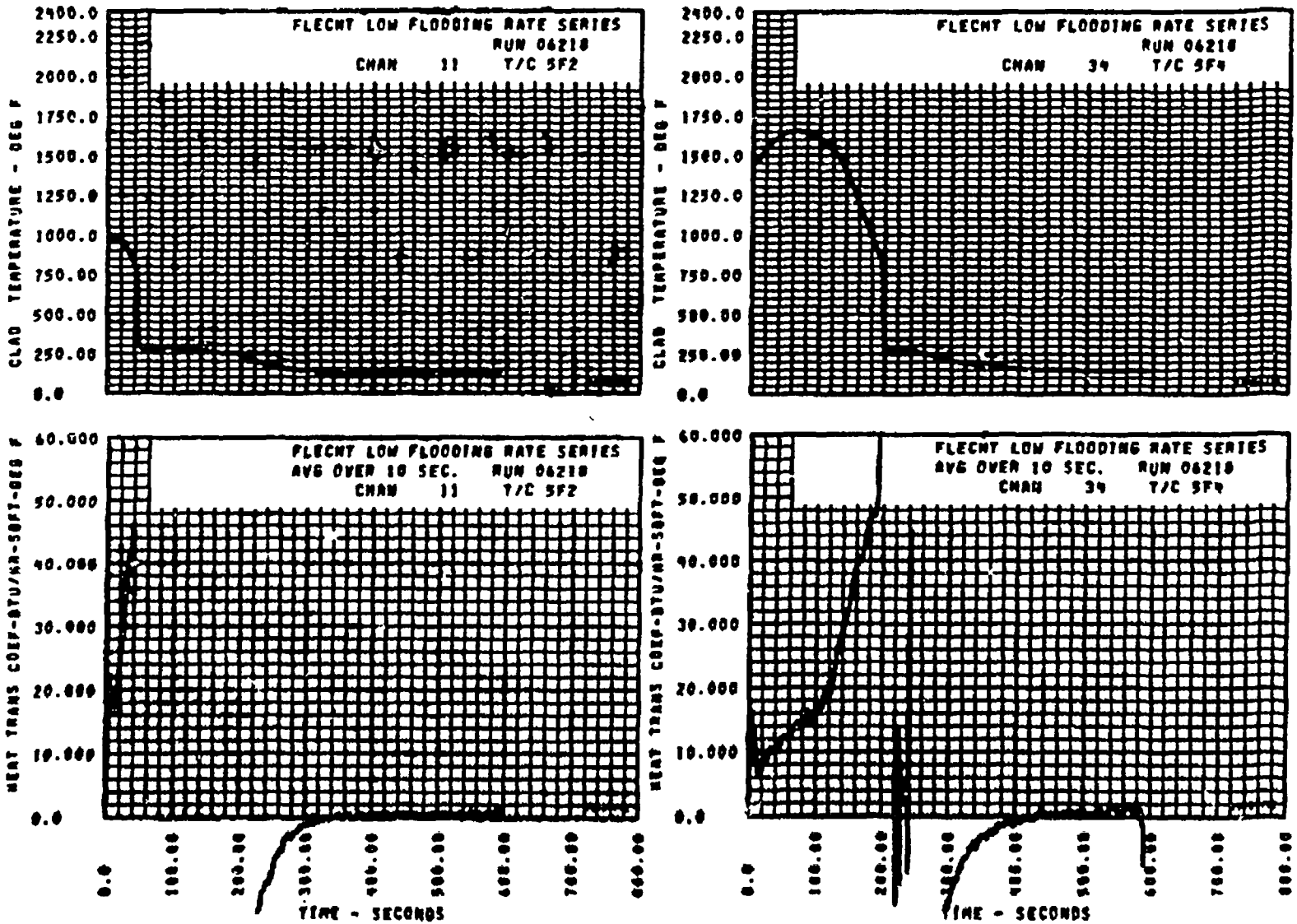
Back Side Elevation, Ft.	Temperature, °F
0	274
2	792
4	796
5.5	821
6	823
6.5	703
7	718
7.5	743
8	807
10	815
12	318
Average	692
Lower Plenum	121
Upper Plenum	270

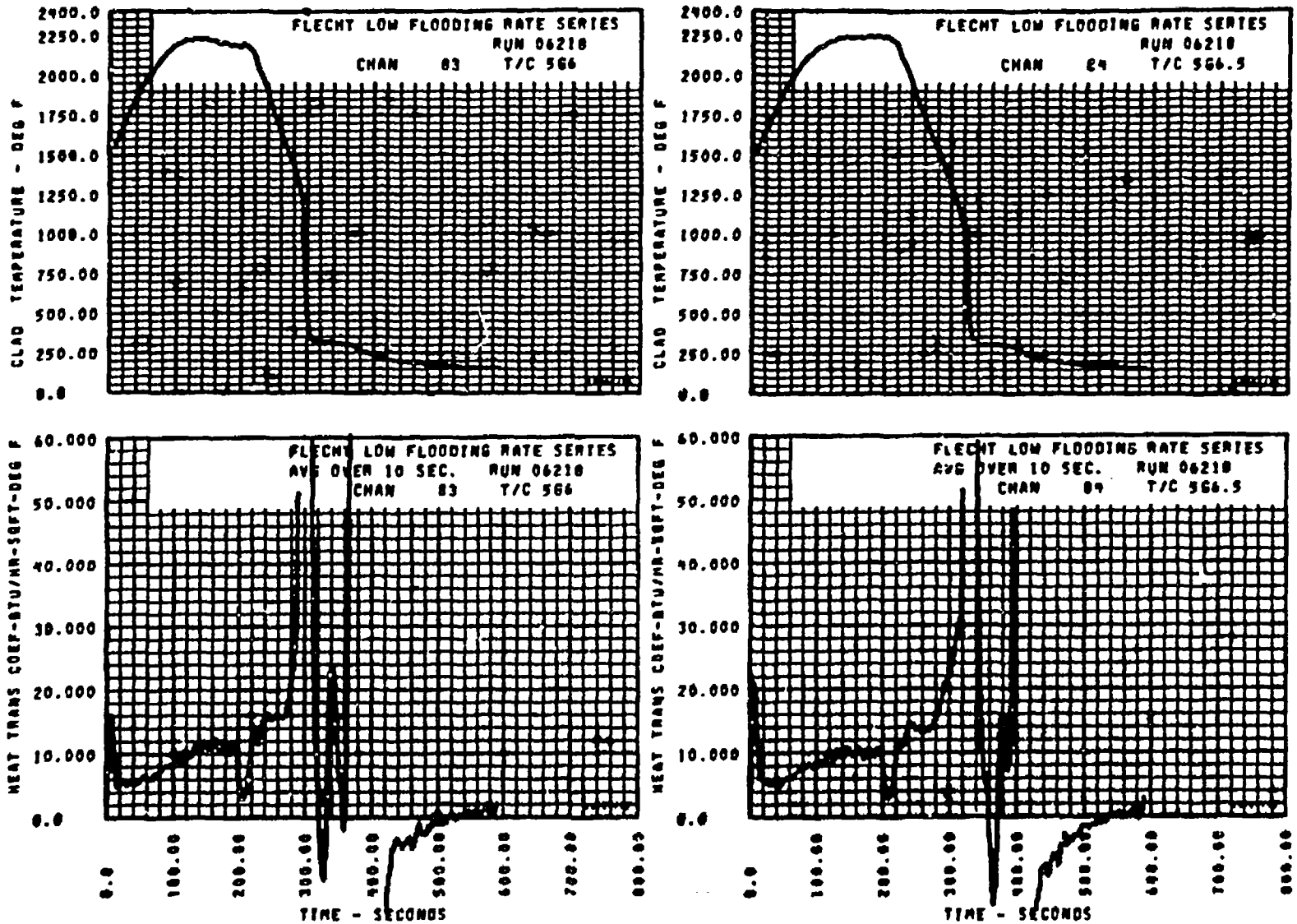
BLANK PAGE

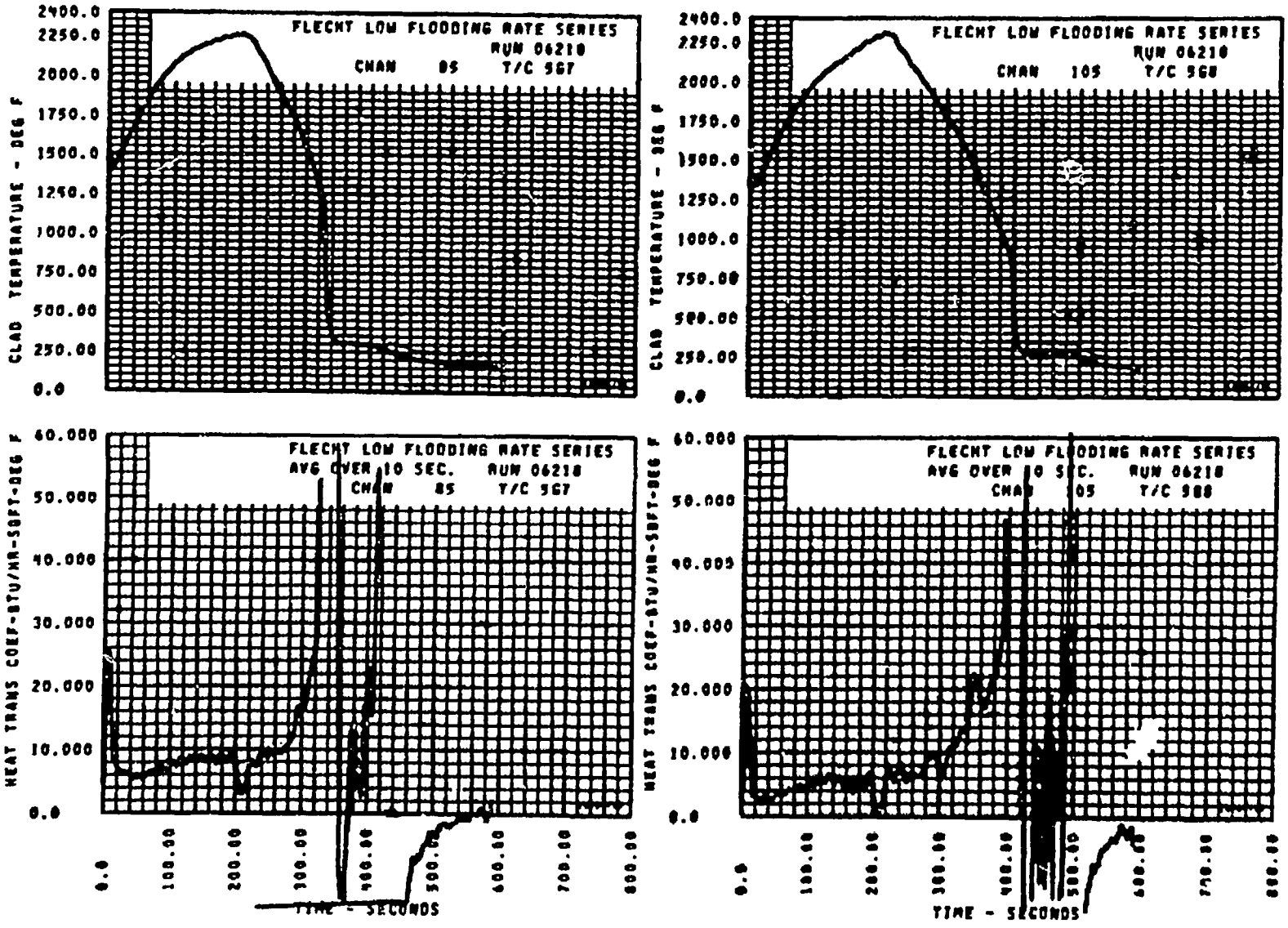
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

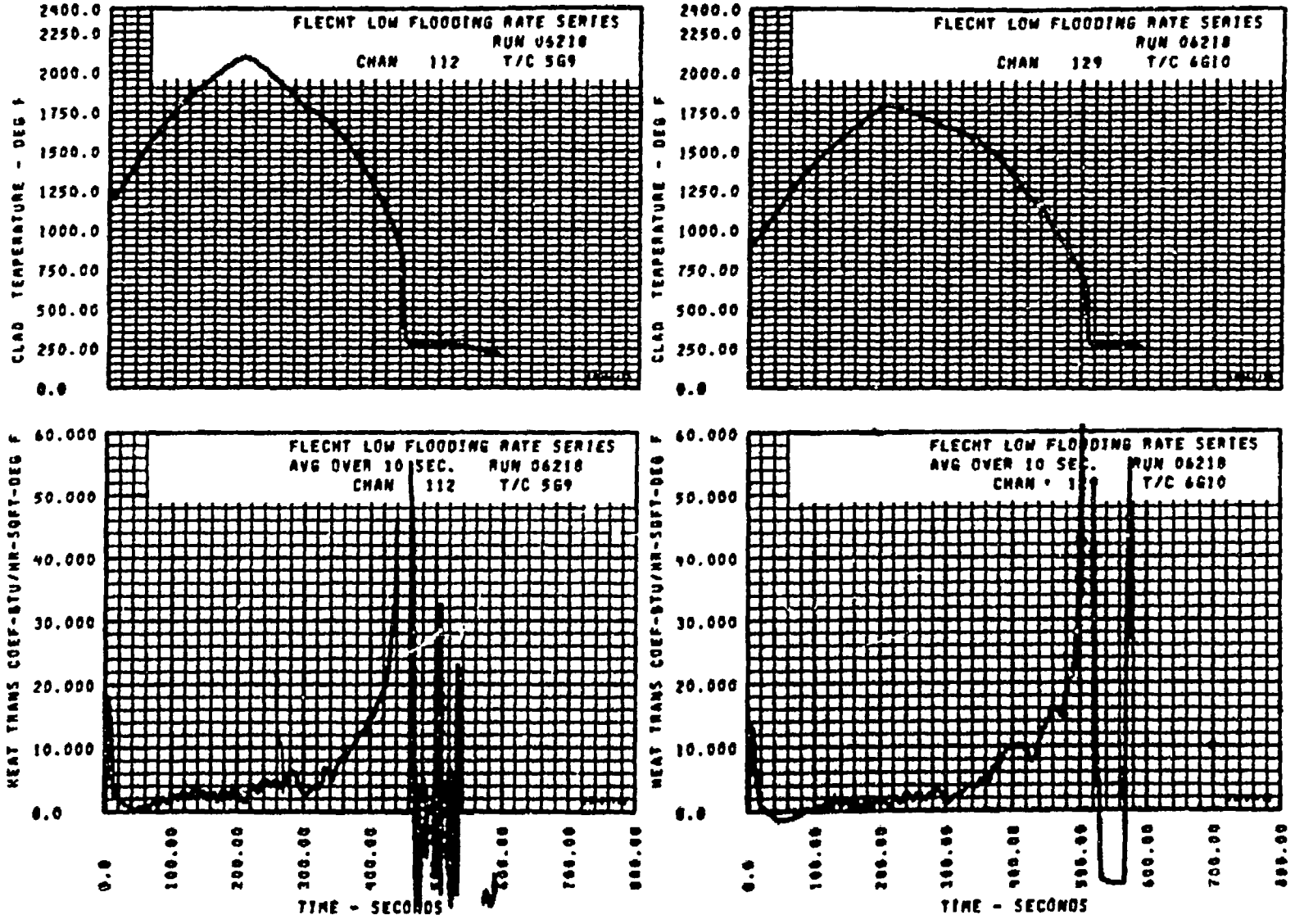
RUN NUMBER 0621[illegible]

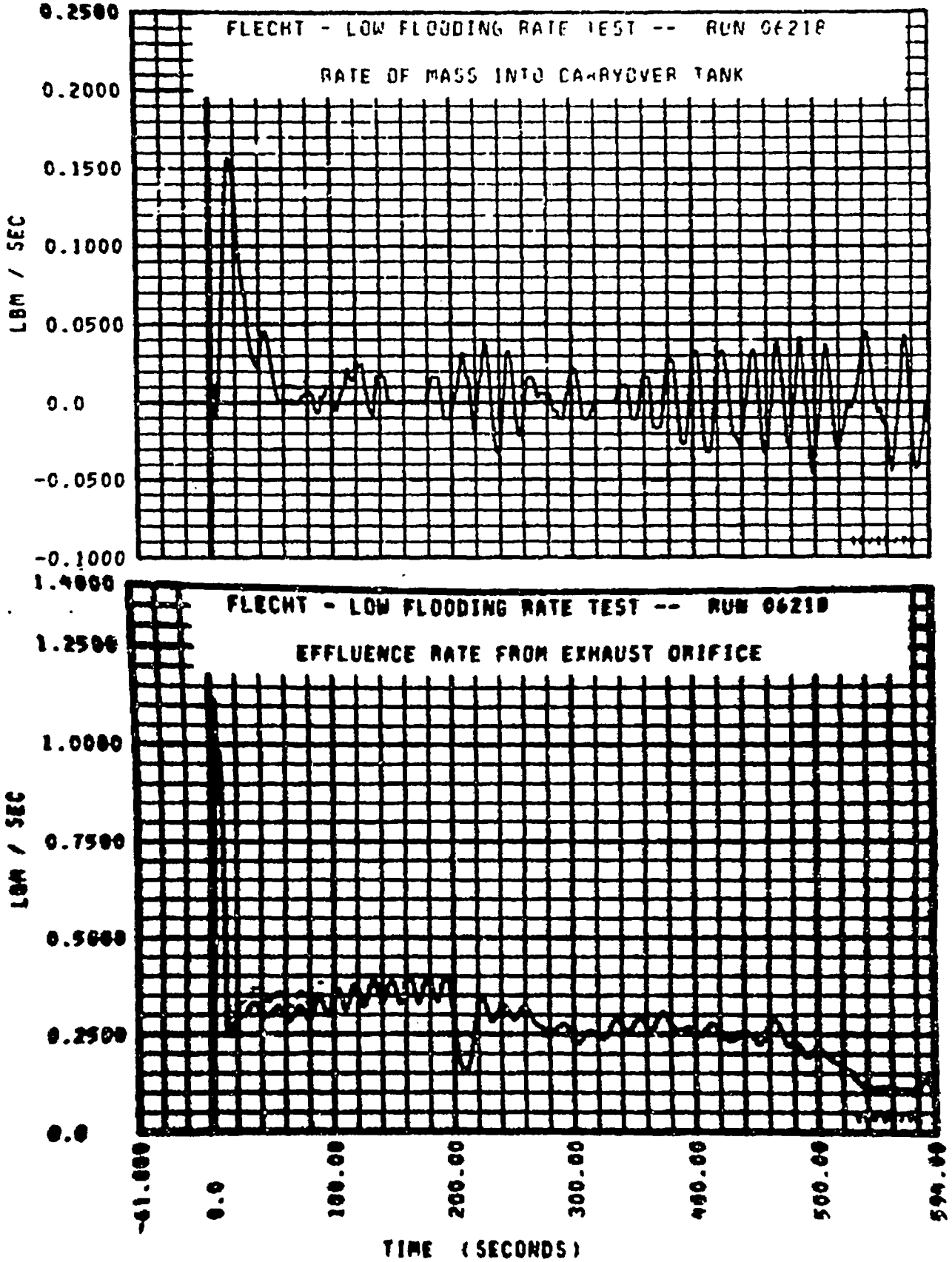
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	[illegible]	-35.4	132.	530.	3.	.6	616.	3.0
4H1	490.	-36.4	729.	732.	3.	.4	671.	6.3
4H1.5	673.	-33.4	823.	825.	2.	.6	688.	23.2
4H2	977.	[illegible]	1053.	1059.	6.	1.6	404.	49.1
4H4	747.	[illegible]	14 7.	[illegible]	263.	45.3	929.	198.9
4H6	743.	[illegible]	1631.	21 7.	585.	128.3	1017.	294.3
806	[illegible]	[illegible]	1475.	2117.	643.	143.3	933.	383.6
806.5	[illegible]	[illegible]	[illegible]	2192.	654.	144.3	1087.	431.0
807	[illegible]	[illegible]	1433.	2317.	312.	159.3	650.	355.6
808	739.	[illegible]	1371.	2141.	463.	221.3	756.	391.6
809	511.	[illegible]	1142.	1372.	430.	231.9	744.	426.5
8010	622.	[illegible]	[illegible]	1710.	474.	231.3	662.	499.6
8011	[illegible]	[illegible]	[illegible]	1684.	421.	279.3	663.	519.0
8012	[illegible]	[illegible]	[illegible]	[illegible]	621.	254.3	301.	542.0
5F0	253.	[illegible]	243.	280.	0.	0.3	249.	.8
5F0.5	135.	[illegible]	637.	634.	2.	--	496.	2.4
5F1	[illegible]	[illegible]	[illegible]	[illegible]	2.	.5	483.	4.9
5F1.5	[illegible]							
5F2	[illegible]	[illegible]	[illegible]	1561.	5.	1.2	783.	42.9
5F3	735.	[illegible]	[illegible]	1297.	72.	28.	767.	116.5
5F4	[illegible]	[illegible]	[illegible]	1550.	[illegible]	49.3	784.	197.5
5F5	711.	[illegible]	[illegible]	[illegible]	733.	179.3	1177.	293.6
5G6	713.	[illegible]	[illegible]	2235.	720.	173.3	1225.	235.3
5G6.5	[illegible]	[illegible]	1515.	2247.	712.	175.3	962.	324.3
5G7	[illegible]	[illegible]	[illegible]	[illegible]	422.	201.3	1122.	325.7
5G8	731.	[illegible]	1347.	2301.	953.	205.3	[illegible]	395.1
5G9	811.	[illegible]	[illegible]	2394.	[illegible]	252.4	925.	440.0
5G11	[illegible]	[illegible]	771.	1545.	371.	237.3	672.	535.0
5G12	771.	[illegible]	631.	[illegible]	442.	239.3	[illegible]	[illegible]
1G4	113.	[illegible]	1393.	[illegible]	74.	49.2	327.	145.0
1G5	[illegible]	[illegible]	1323.	1423.	331.	112.3	624.	298.0
1G10	[illegible]	[illegible]	1017.	1310.	293.	174.3	494.	475.0
3H2	117.	-15.5	1053.	1059.	6.	1.-	769.	44.5
3H6	743.	[illegible]	[illegible]	2120.	544.	115.3	647.	381.6
3H8	[illegible]	[illegible]	1339.	2211.	873.	191.3	947.	479.7
3H10	117.	[illegible]	1041.	1733.	649.	139.3	754.	491.0
5E4	711.	[illegible]	1355.	1550.	195.	65.2	885.	195.3
5E6	711.	[illegible]	1335.	2239.	731.	129.3	1058.	301.0
5E8	377.	[illegible]	1234.	2341.	1192.	232.3	1157.	402.7
5E10	[illegible]	[illegible]	715.	1172.	1139.	202.0	652.	539.0

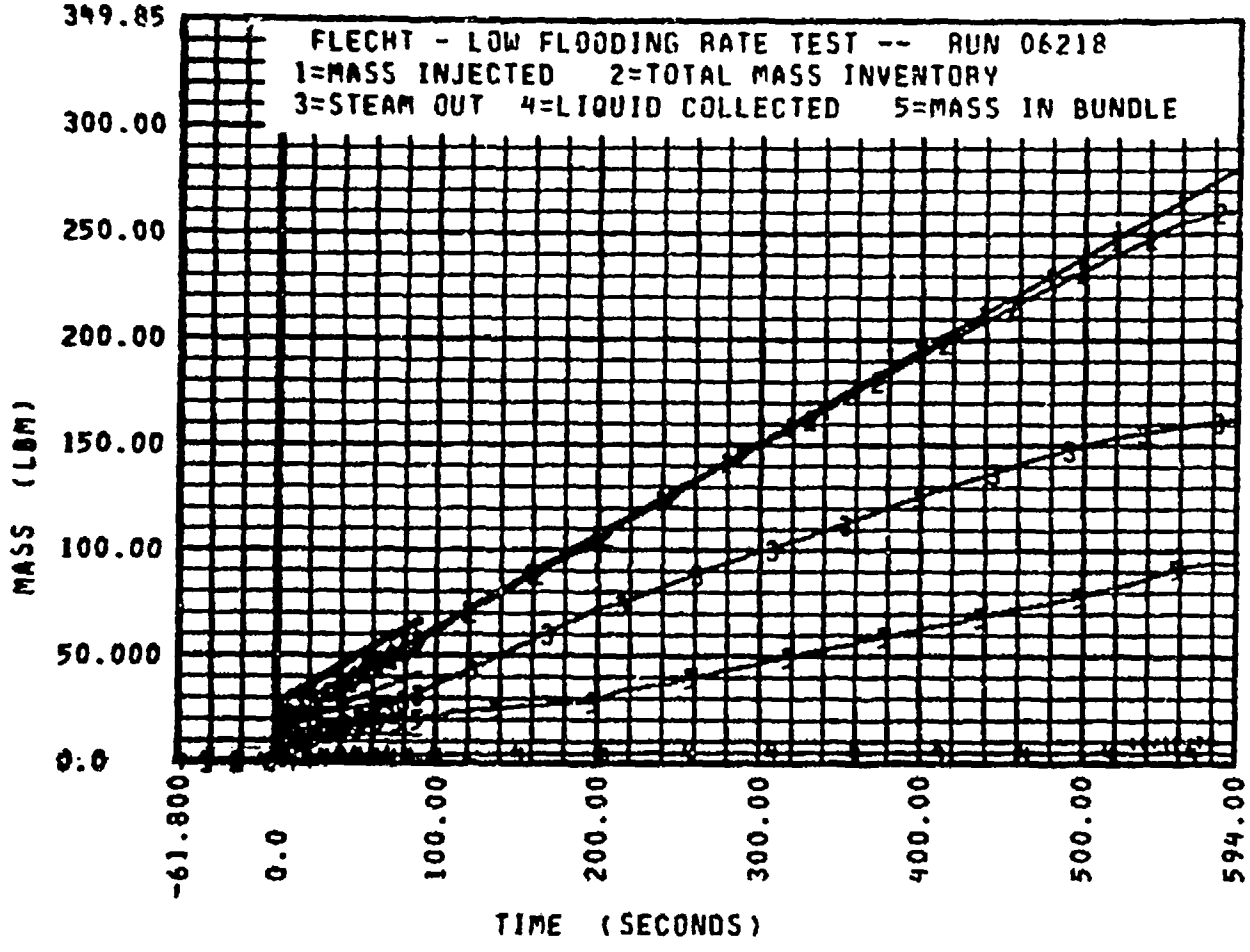

FLECHT LOW FLOODING RATE SERIES
RUN 06218
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06218
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06218
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06218
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS

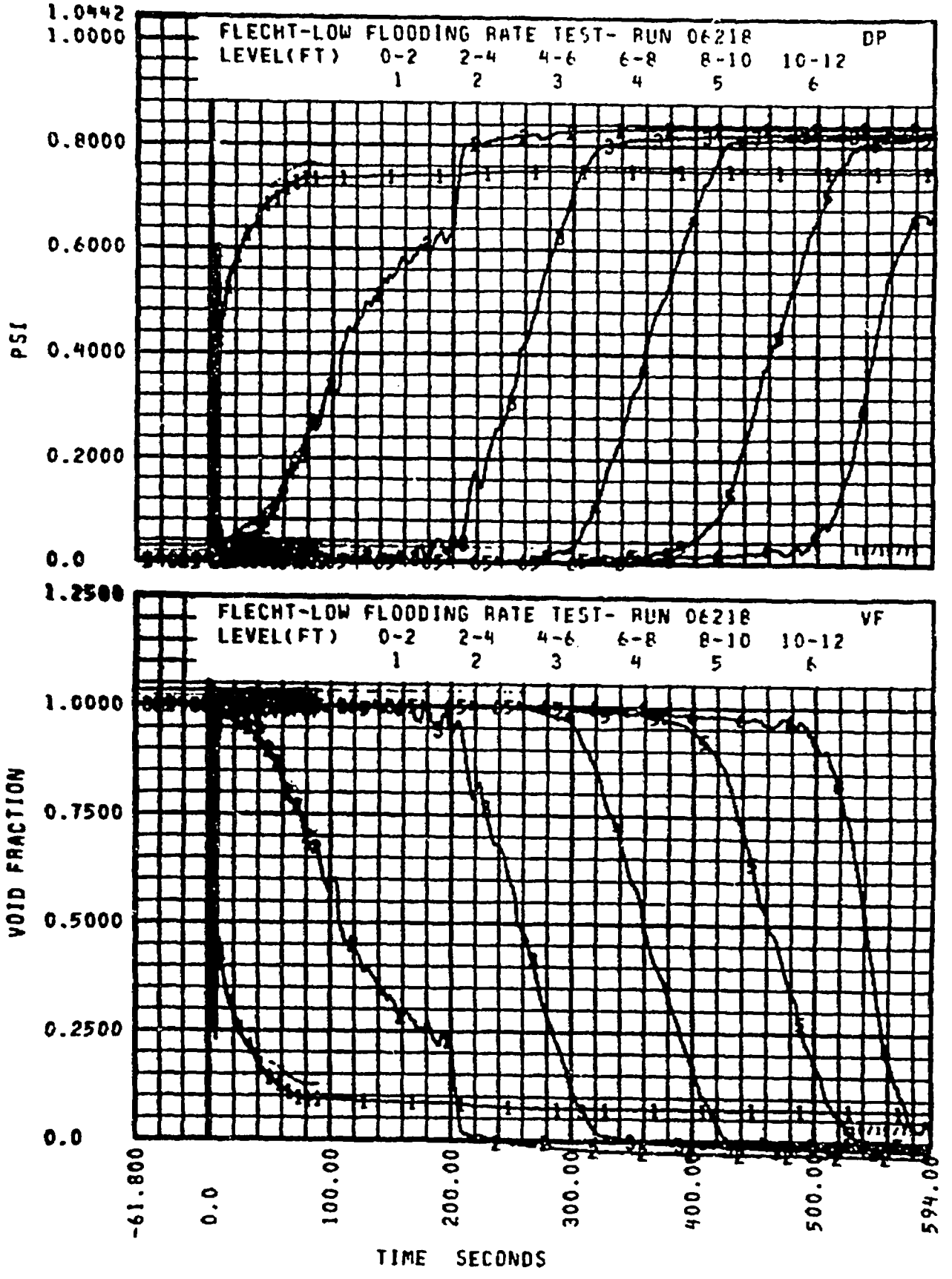

FLECHT LOW FLOODING RATE SERIES
RUN 06218
CHAN 83 T/C 566
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06218
CHAN 84 T/C 566.5
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06218
CHAN 83 T/C 566
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06218
CHAN 84 T/C 566.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

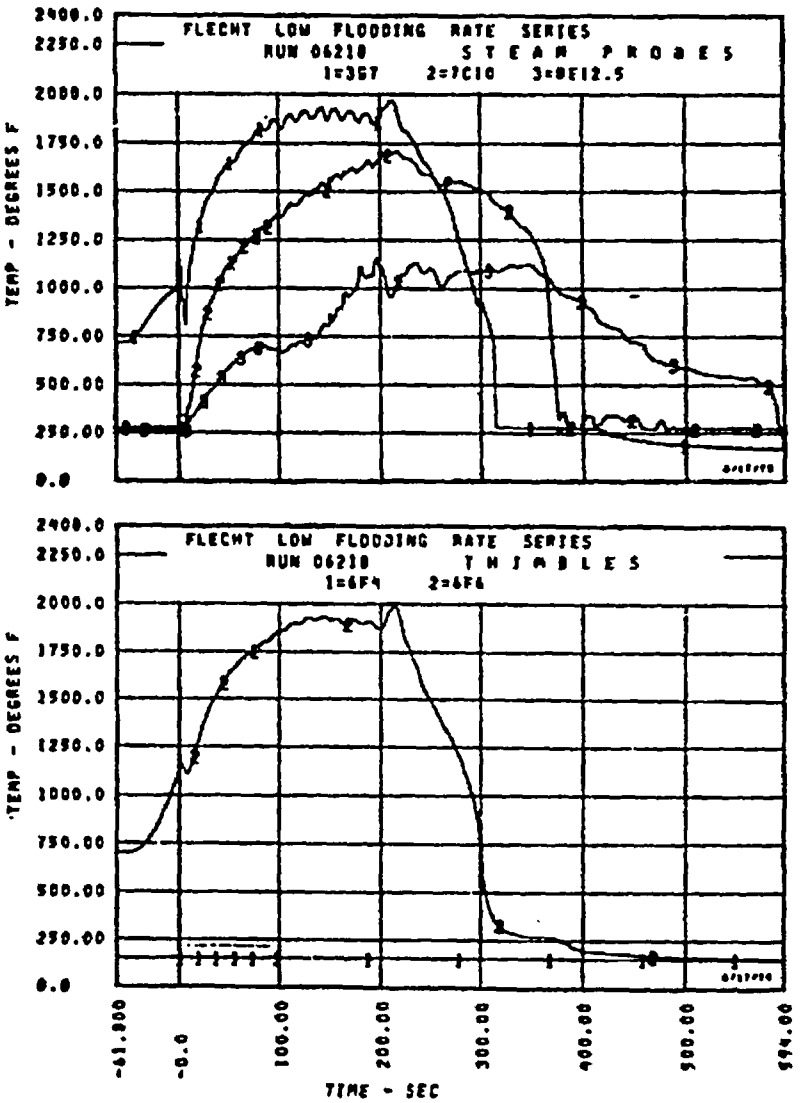

FLECHT LOW FLOODING RATE SERIES
RUN 06218
CHAN 85 T/C 567
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06218
CHAN 105 T/C 568
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06218
CHAN 85 T/C 567
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06218
CHAN 105 T/C 568
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

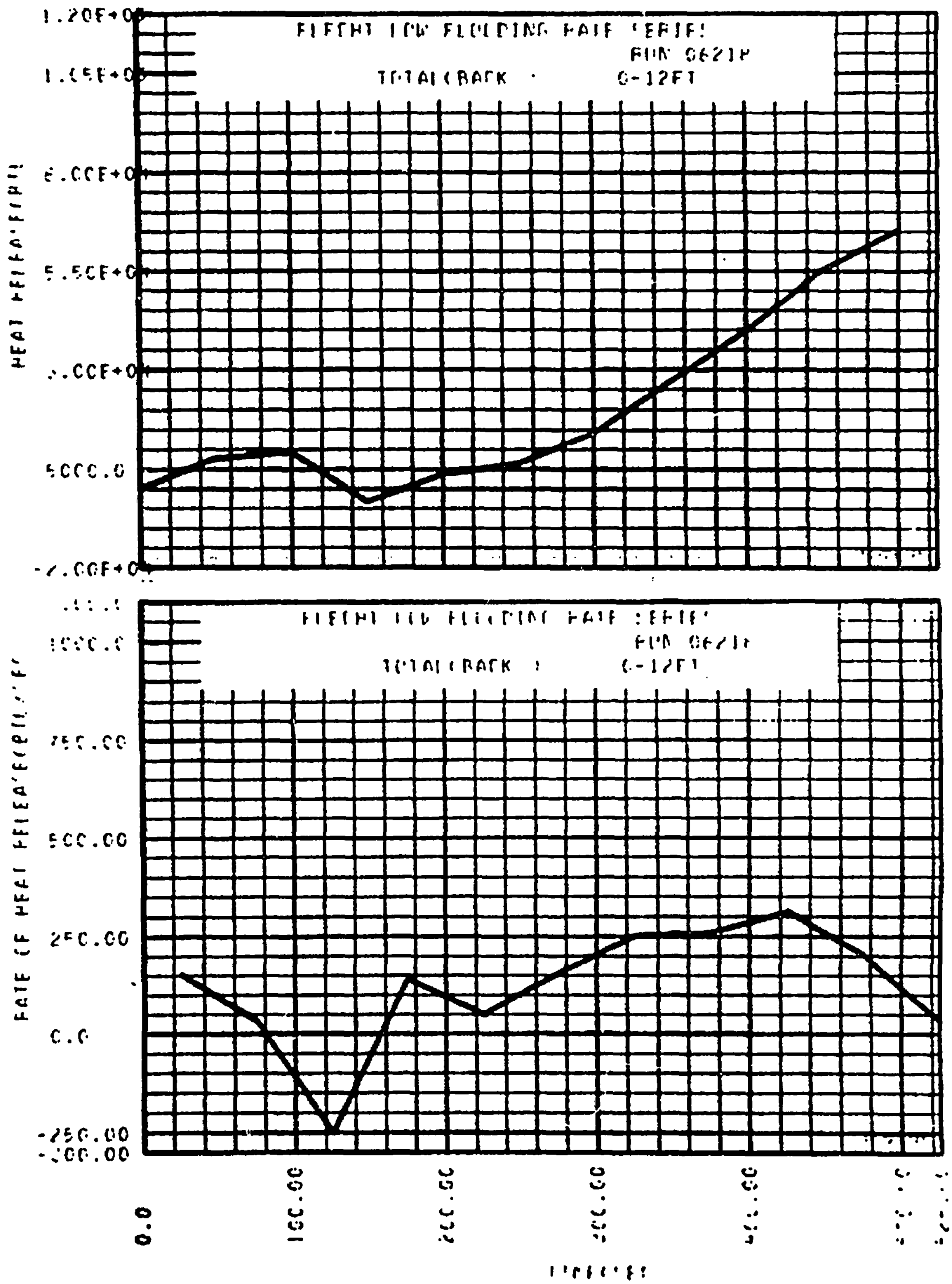

FLECHT LOW FLOODING RATE SERIES
RUN 06218
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06218
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06218
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
100.00
200.00
300.00
400.00
500.00
600.00
700.00
800.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06218
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 06218
RATE OF MASS INTO CARRYOVER TANK
LBM / SEC
0.2500
0.2000
0.1500
0.1000
0.0500
0.0
-0.0500
-0.1000
FLECHT - LOW FLOODING RATE TEST -- RUN 06218
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
1.4000
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
-41.000
0.0
100.00
200.00
300.00
400.00
500.00
594.00
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 06218
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
MASS (LBM)
349.85
300.00
250.00
200.00
150.00
100.00
50.000
0.0
-61.800
0.0
100.00
200.00
300.00
400.00
500.00
594.00
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 06218
DP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.0442
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 06218
VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-61.800
0.0
100.00
200.00
300.00
400.00
500.00
594.00
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 06210
STEAM PROBES
1=3G7 2=7C10 3=8E12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06210
THIMBLES
1=6F4 2=6F6
TEMP - DEGREES F
-61.000
-0.0
100.00
200.00
300.00
400.00
500.00
594.00
TIME - SEC



RUN 06210
0-12FT
1.20E+0
5000.0
5.50E+0
750.00
500.00
250.00
0.0
-250.00
-300.00
0.0
100.00

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 06357

DATE: 6/13/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40		
Initial Clad Temperature (6 Ft)°F At Flood	1,000	Rod T/C	4H6
Rod Peak Power, kw/ft	0.74		
Flooding Rate, in/sec	1.5		

Coolant Temperature, °F	128		
Bundle Radial Power Profile	Uniform		
Disconnected Rods	7F		

B. INITIAL HOUSING TEMPERATURE

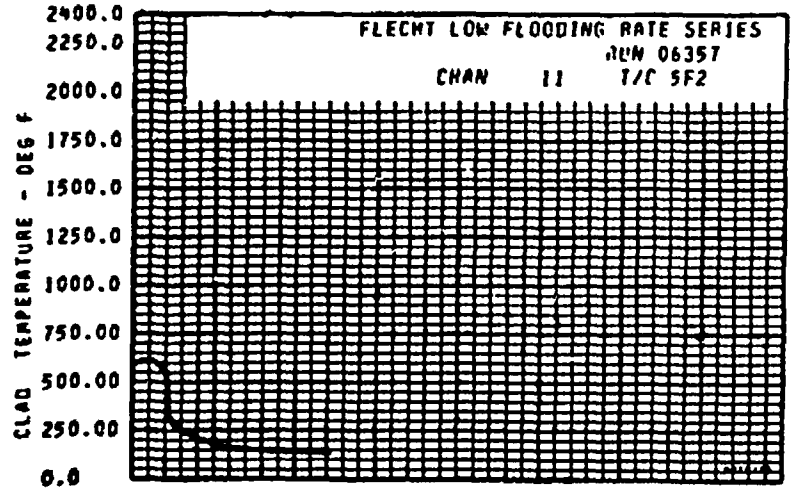
Back Side Elevation, Ft.	Temperature, °F
0	255
2	383
4	479
5.5	549
6	551
6.5	450
7	442
7.5	453
8	505
10	383
12	274
Average	429
Lower Plenum	122
Upper Plenum	288

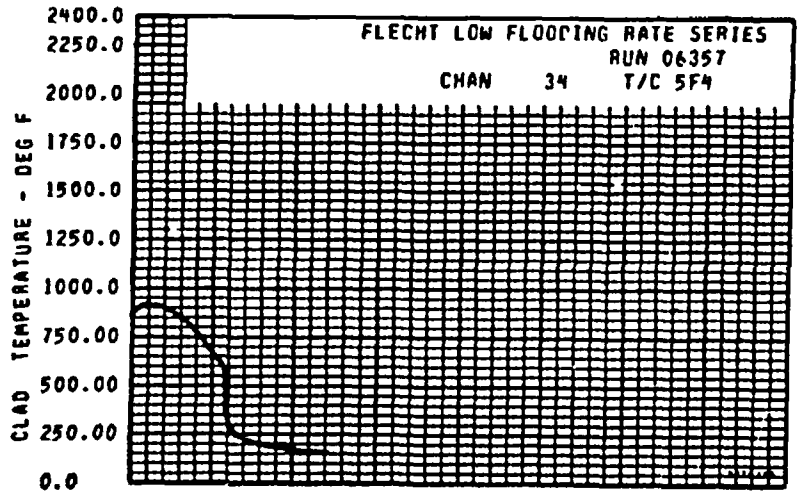
BLANK PAGE

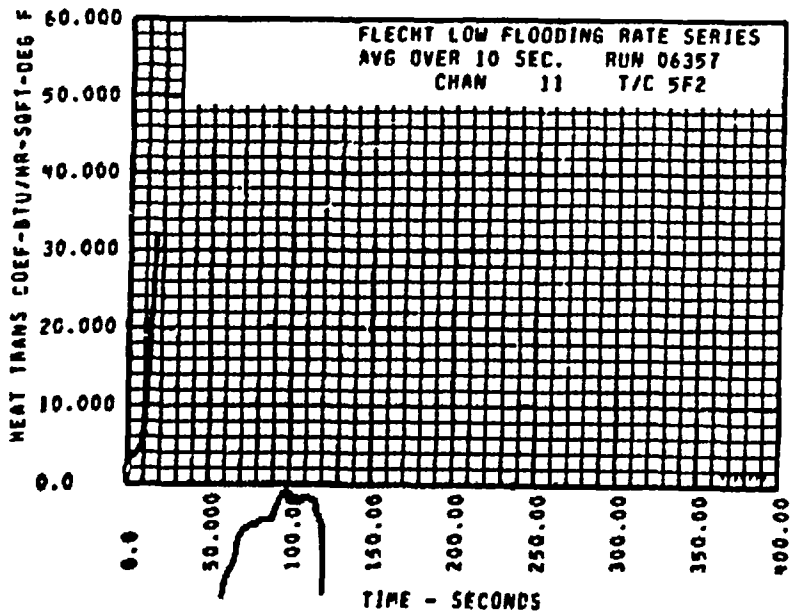
FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

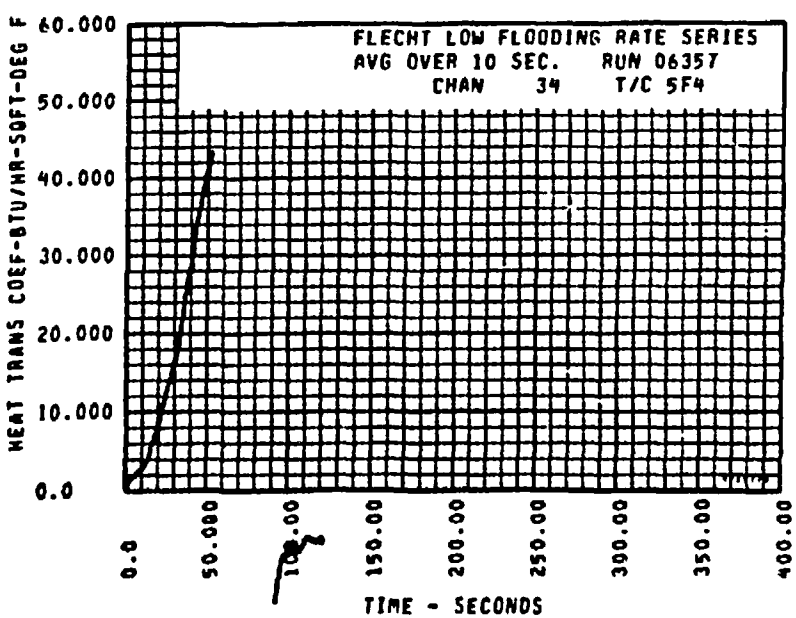
RUN NUMBER 06357

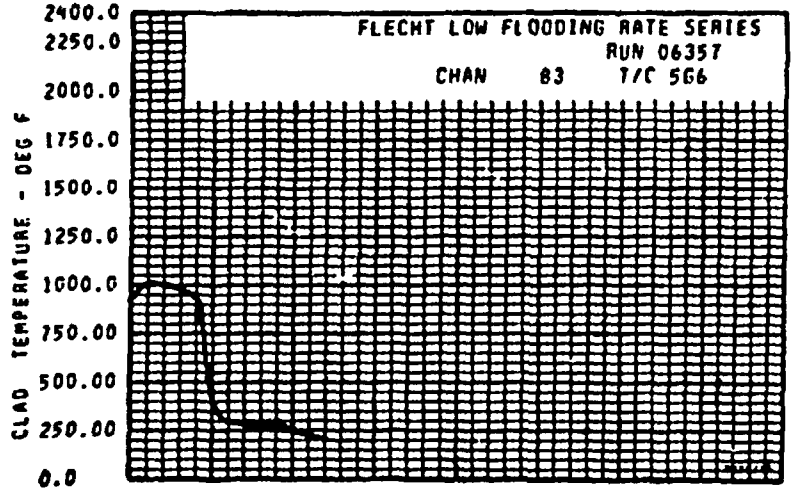
ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
4H0.5	239.	-35.2	421.	437.	16.	4.4	435.	5.0
4H1	349.	-37.2	449.	467.	19.	6.2	454.	9.8
4H1.5	327.	-35.2	474.	458.	24.	9.5	475.	14.4
4H2	374.	-37.2	[illegible]	629.	23.	7.2	526.	25.4
4H4	432.	-37.2	873.	32[illegible].	49.	7.6	609.	57.2
4H6	473.	-37.2	1303.	1372.	72.	9.9	771.	63.5
8D5	325.	-34.2	814.	893.	79.	11.5	750.	54.3
8D6.5	334.	-3[illegible].2	759.	479.	90.	11.4	781.	68.5
8D7	313.	-3[illegible].2	770.	133.	63.	13.4	625.	61.3
8D8	315.	-34.2	613.	79[illegible].	62.	13.5	516.	30.3
8D9	274.	-37.2	604.	655.	47.	20.9	553.	67.0
8D10	279.	-36.2	50[illegible].	547.	44.	24.2	459.	111.6
8D11	223.	-[illegible]	424.	437.	23.	24.9	452.	39.4
8D12	* * B A D	T H E R M O C O U P L E			D A T A * *			
5F0	234.	-37.2	267.	267.	3.	0.3	266.	.2
5F0.5	397.	-37.2	423.	434.	11.	3.7	432.	4.0
5F1	315.	-37.2	44[illegible].	461.	19.	6.3	452.	9.0
5F1.5	* * B A D	T H E R M O C O U P L E			D A T A * *			
5F2	492.	-37.2	5[illegible].	611.	25.	9.2	537.	21.1
5F3	437.	-37.2	747.	773.	34.	9.7	520.	43.3
5F4	474.	-37.2	[illegible]	917.	31.	9.9	589.	57.8
5F6	816.	-37.2	922.	1107.	83.	10.0	979.	22.6
5G6	453.	-3[illegible].2	916.	1309.	93.	11.4	975.	43.3
5G6.5	412.	-3[illegible].2	913.	594.	71.	13.4	874.	63.3
5G7	441.	-37.2	741.	471.	73.	11.4	786.	41.1
5G8	3[illegible].	-3[illegible].2	784.	831.	91.	15.5	490.	71.3
5G9	398.	-3[illegible].2	601.	663.	62.	24.4	499.	102.0
5G11	377.	-3[illegible].2	431.	457.	27.	37.9	433.	52.6
5G12	2[illegible].	-3[illegible].2	437.	492.	25.	72.4	470.	42.8
1G6	490.	-37.2	913.	984.	62.	9.9	611.	50.2
1G8	433.	-37.2	973.	1034.	55.	9.0	869.	90.4
1G10	31[illegible].	-3[illegible].2	224.	[illegible]	31.	70.5	395.	182.6
3H2	571.	-3[illegible].2	627.	656.	29.	9.3	557.	21.1
3H6	454.	-37.2	904.	1337.	71.	10.2	790.	64.7
3H8	4[illegible].	-37.2	814.	892.	67.	13.9	699.	62.2
3H10	314.	-37.2	529.	544.	81.	35.4	577.	57.6
4G2	547.	-39.2	634.	656.	24.	7.4	558.	21.3
4G4	413.	-3[illegible].2	934.	958.	55.	8.7	896.	57.3
4G6	471.	-3[illegible].2	1024.	1102.	79.	10.3	985.	49.7
4G8	431.	-37.2	737.	770.	75.	11.6	613.	33.9
4G10	447.	-3[illegible].2	513.	491.	43.	34.4	523.	54.4

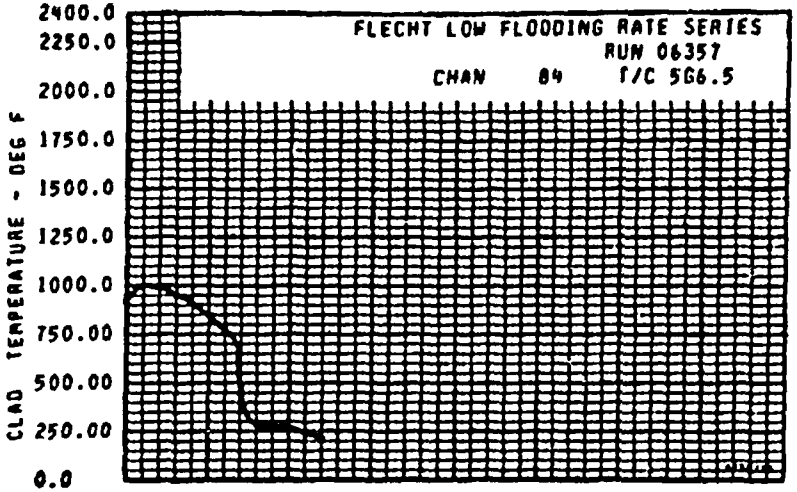

FLECHT LOW FLOODING RATE SERIES
RUN 06357
CHAN 11 T/C 5F2
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

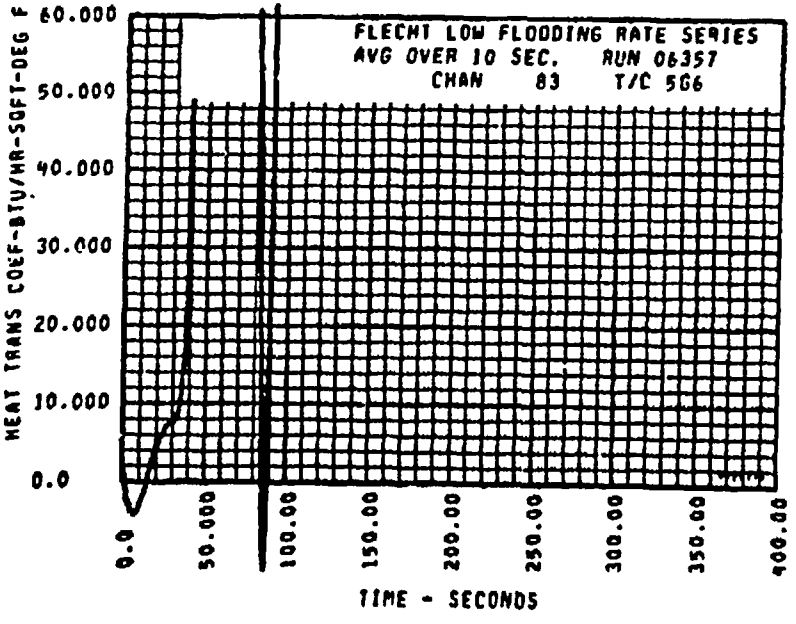

FLECHT LOW FLOODING RATE SERIES
RUN 06357
CHAN 34 T/C 5F4
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

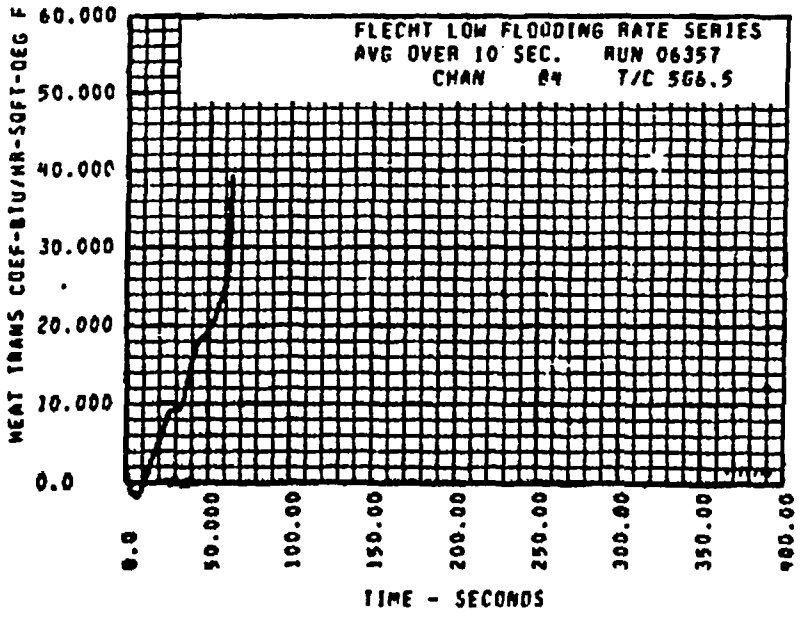

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06357
CHAN 11 T/C 5F2
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

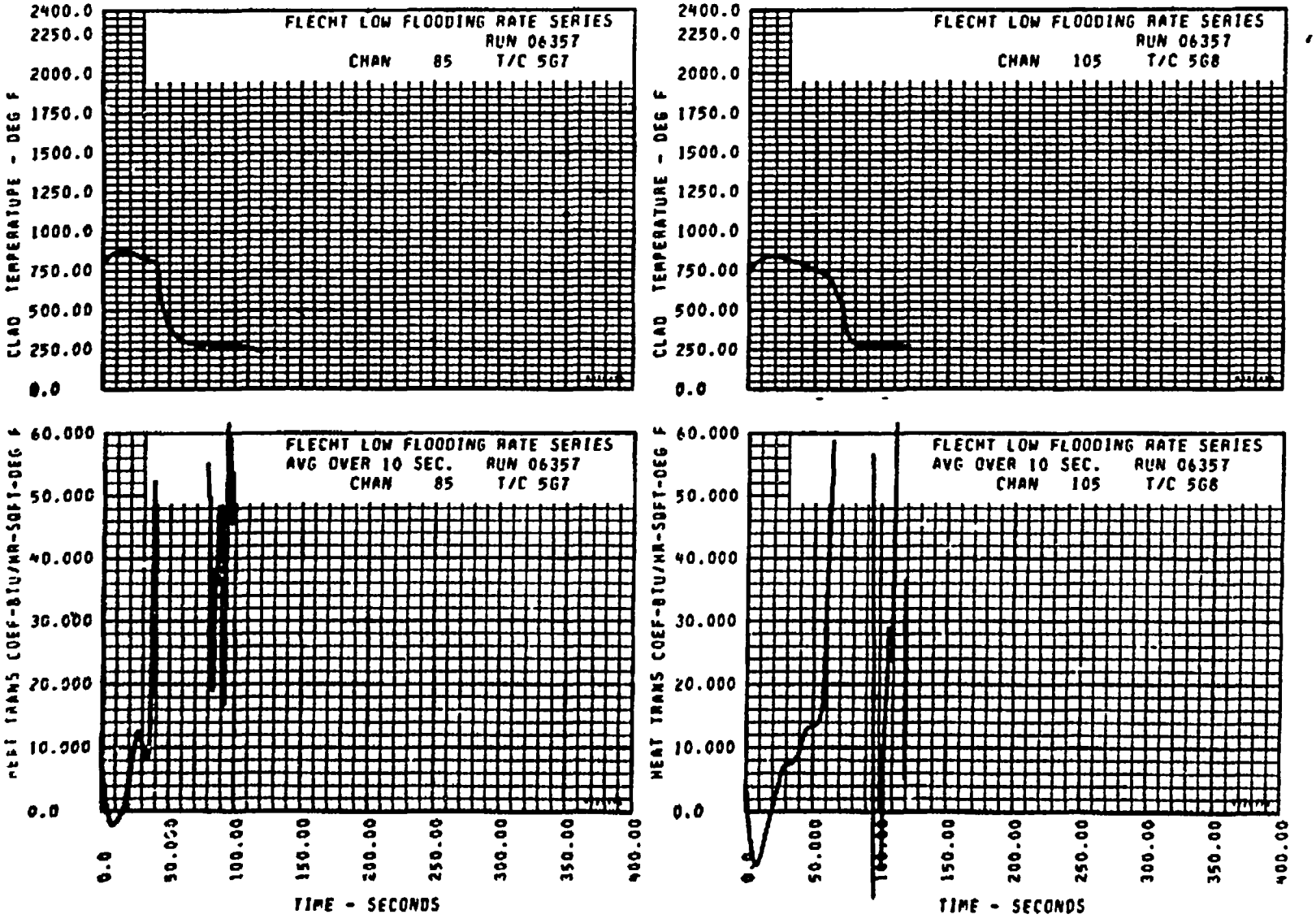

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06357
CHAN 34 T/C 5F4
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

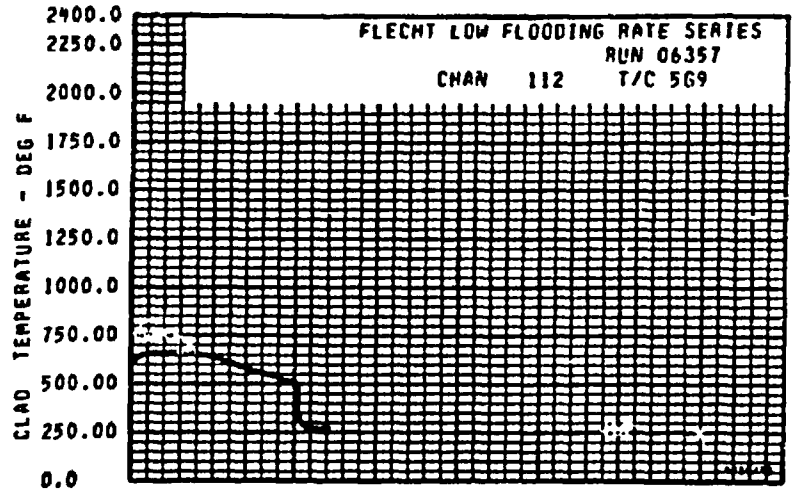

FLECHT LOW FLOODING RATE SERIES
RUN 06357
CHAN 83 T/C 5G6
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

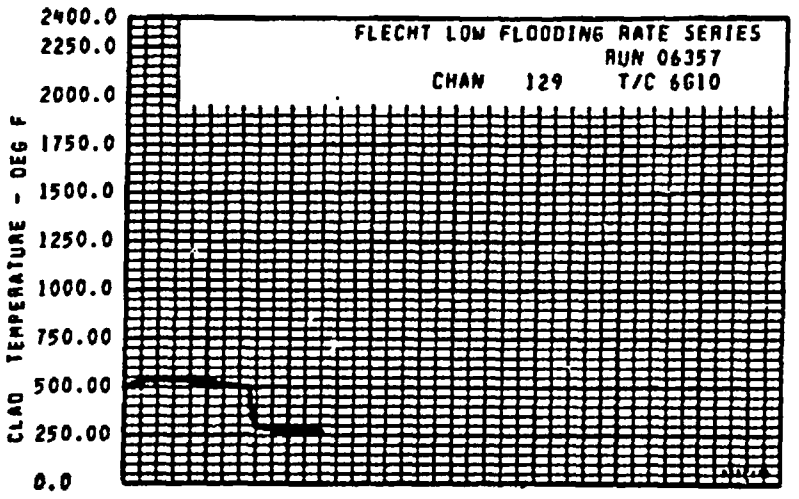

FLECHT LOW FLOODING RATE SERIES
RUN 06357
CHAN 84 T/C 5G6.5
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

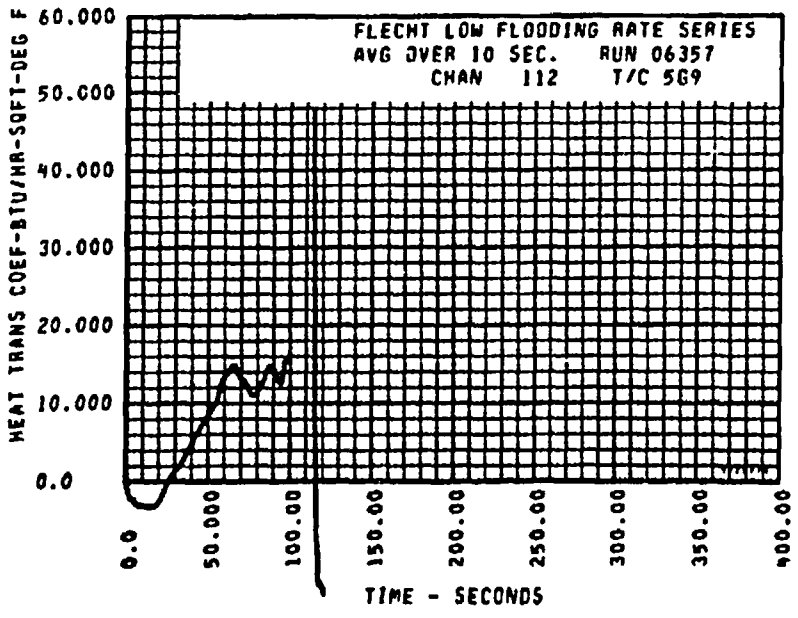

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06357
CHAN 83 T/C 5G6
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

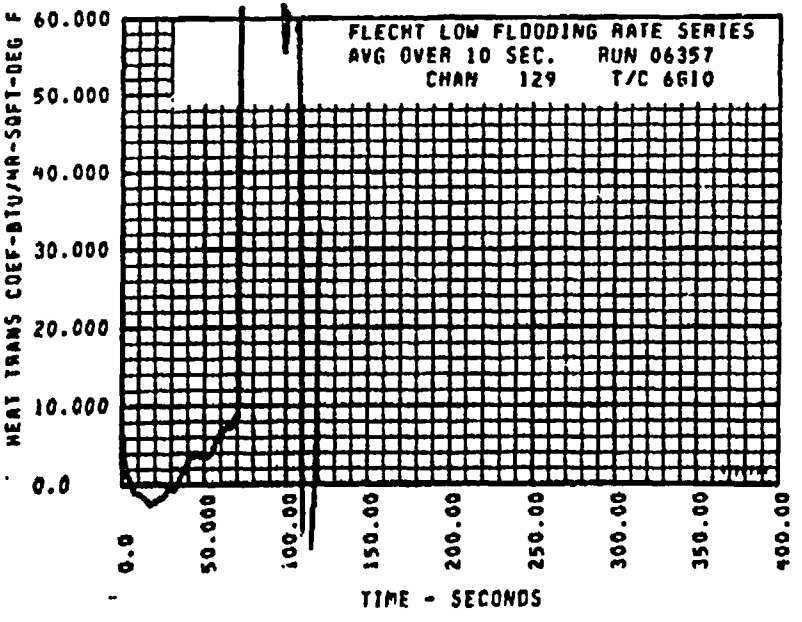

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06357
CHAN 84 T/C 5G6.5
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

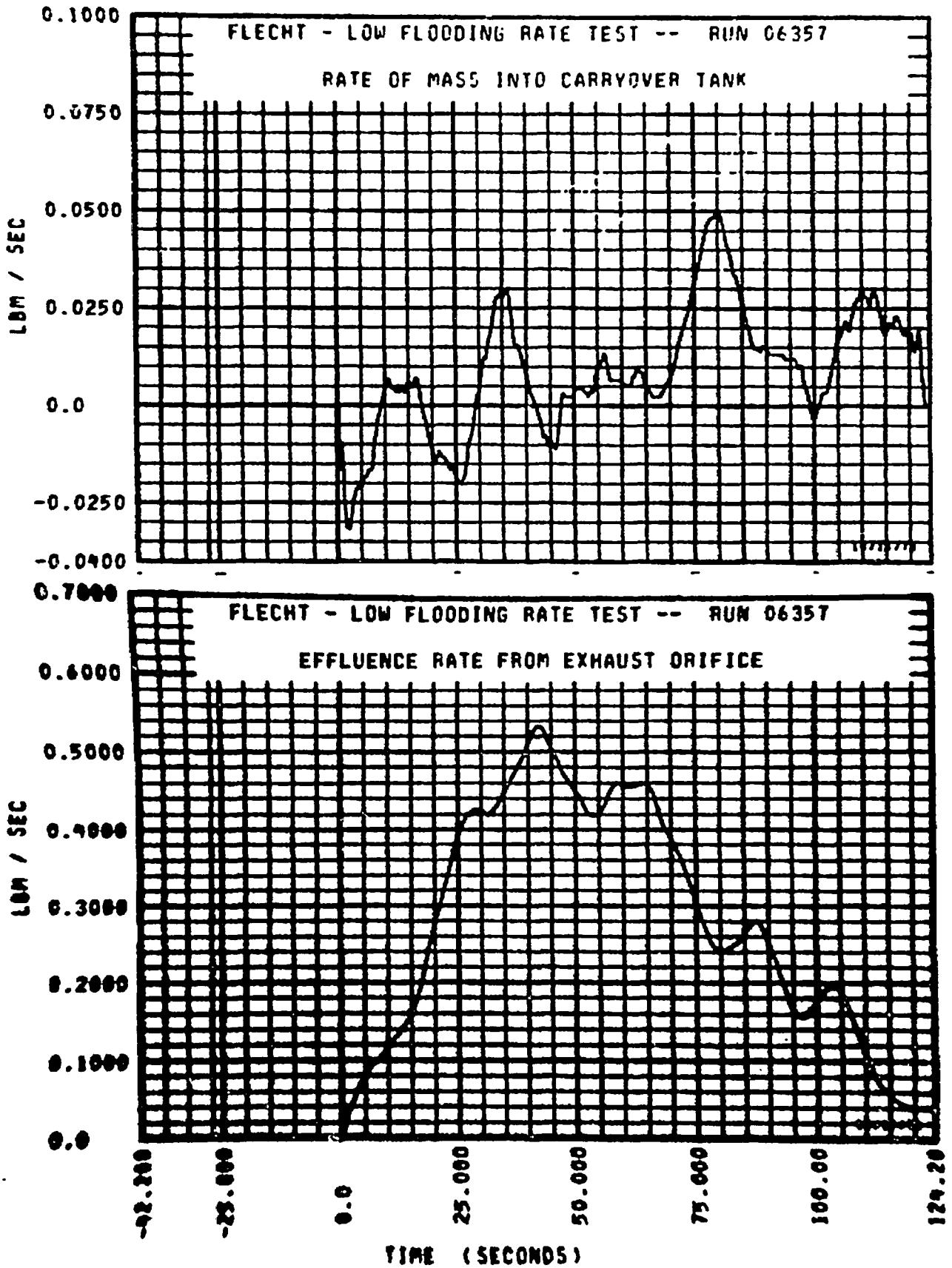

FLECHT LOW FLOODING RATE SERIES
RUN 06357
CHAN 85 T/C 5G7
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06357
CHAN 105 T/C 5G8
CLAD TEMPERATURE - DEG F
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06357
CHAN 85 T/C 5G7
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS
FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06357
CHAN 105 T/C 5G8
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
TIME - SECONDS

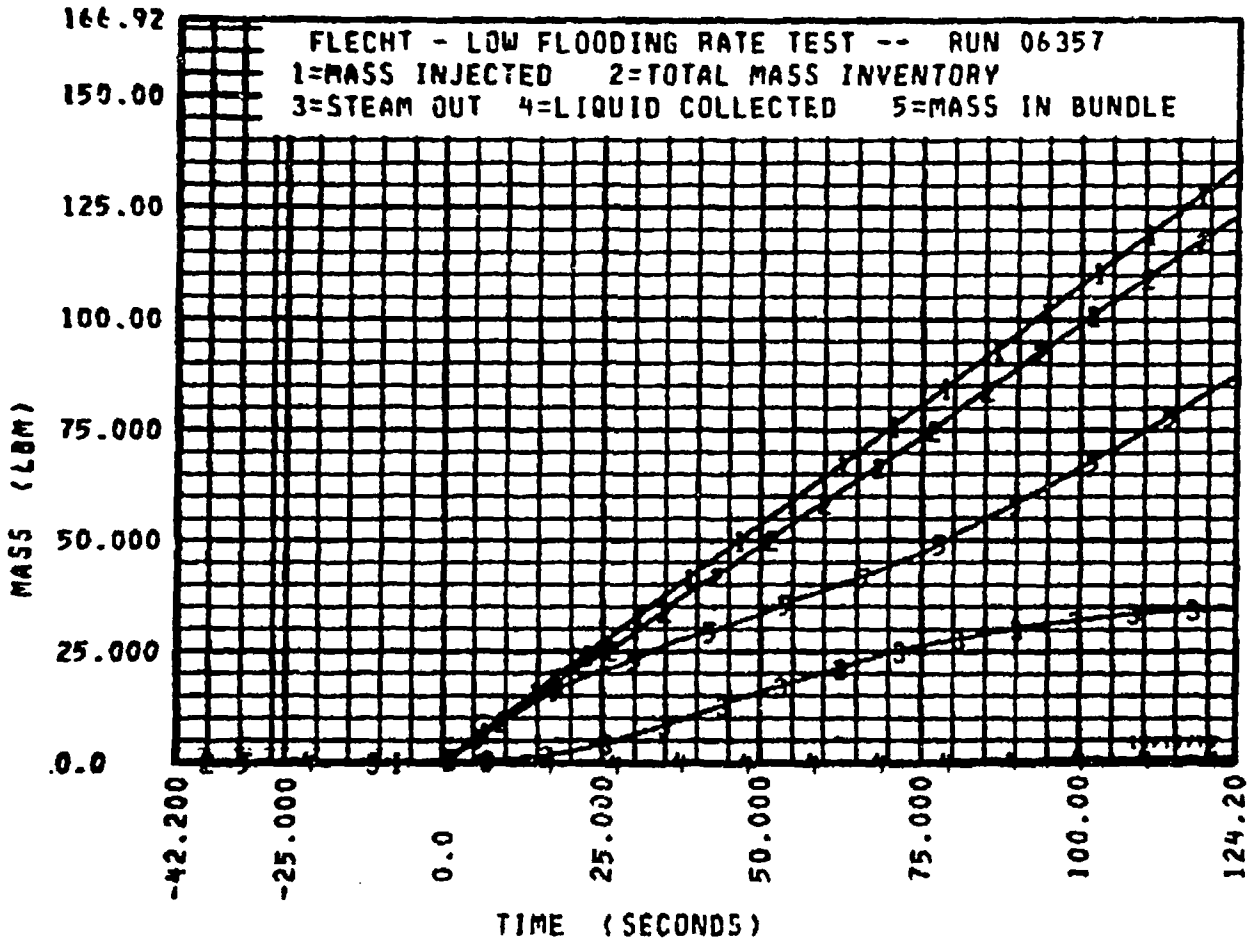

FLECHT LOW FLOODING RATE SERIES
RUN 06357
CHAN 112 T/C 5G9
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

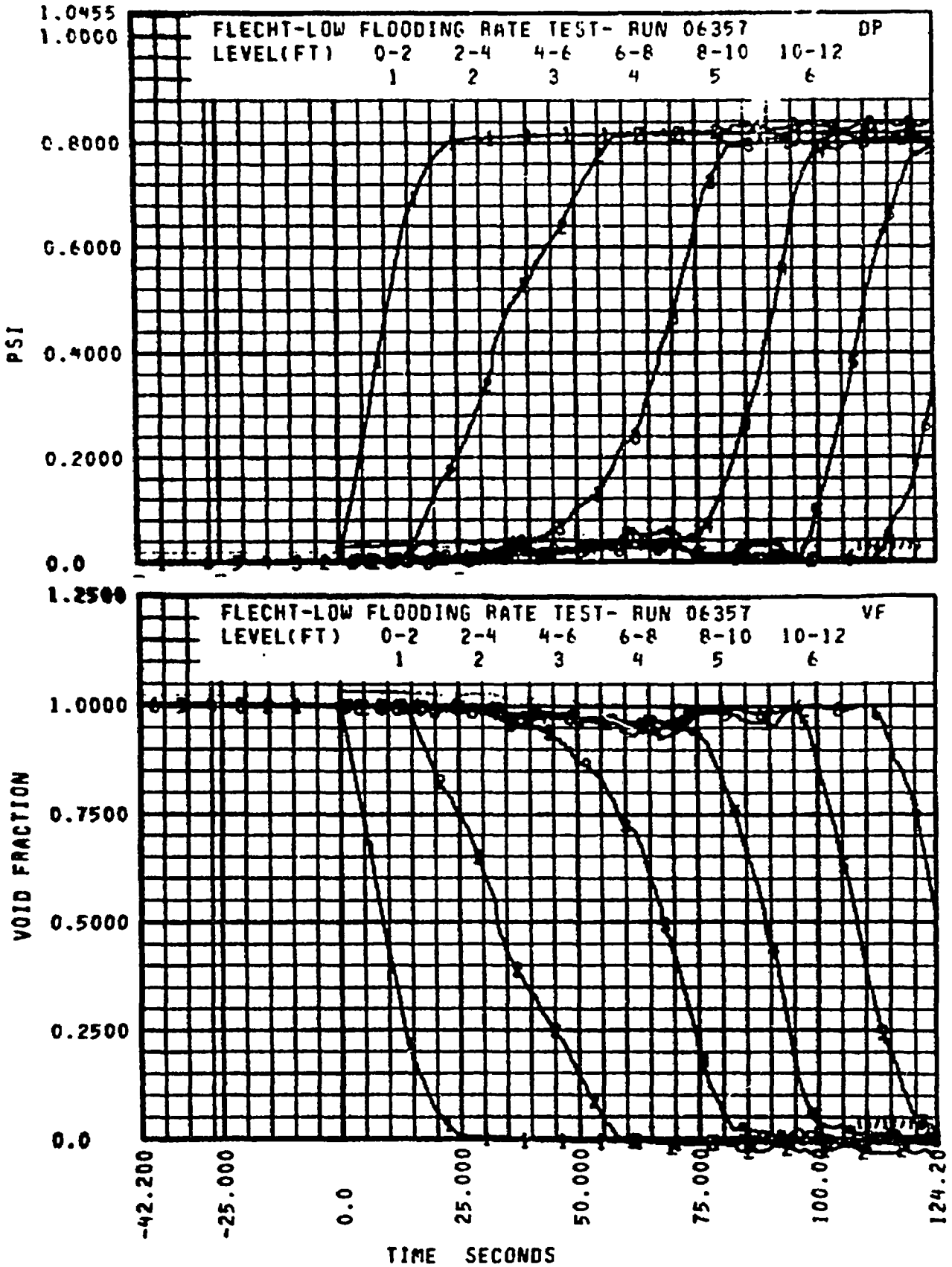

FLECHT LOW FLOODING RATE SERIES
RUN 06357
CHAN 129 T/C 6G10
CLAD TEMPERATURE - DEG F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0

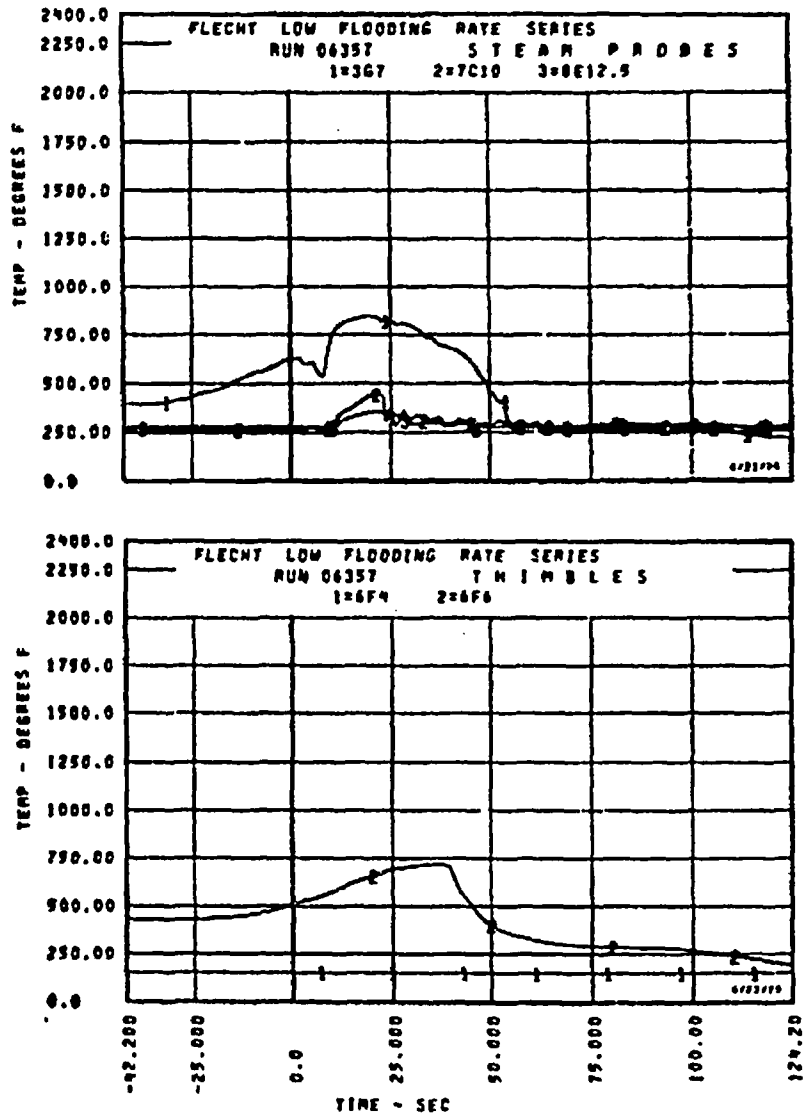

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06357
CHAN 112 T/C 5G9
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS

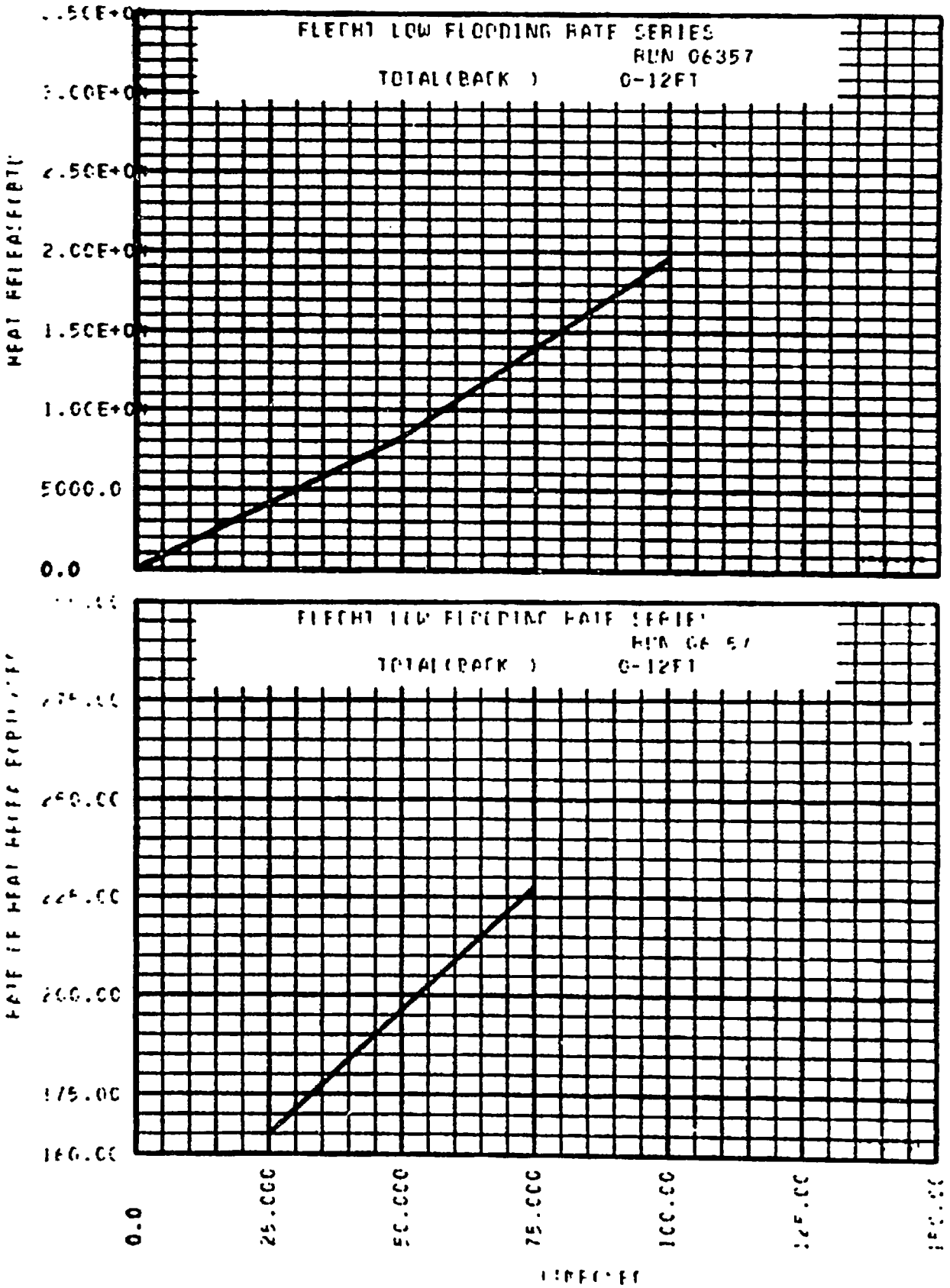

FLECHT LOW FLOODING RATE SERIES
AVG OVER 10 SEC. RUN 06357
CHAN 129 T/C 6G10
HEAT TRANS COEF-BTU/HR-SQFT-DEG F
60.000
50.000
40.000
30.000
20.000
10.000
0.0
0.0
50.000
100.00
150.00
200.00
250.00
300.00
350.00
400.00
TIME - SECONDS


FLECHT - LOW FLOODING RATE TEST -- RUN 06357
RATE OF MASS INTO CARRYOVER TANK
LBM / SEC
0.1000
0.0750
0.0500
0.0250
0.0
-0.0250
-0.0400
FLECHT - LOW FLOODING RATE TEST -- RUN 06357
EFFLUENCE RATE FROM EXHAUST ORIFICE
LBM / SEC
0.7000
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0
-50.000
-25.000
0.0
25.000
50.000
75.000
100.00
125.00
TIME (SECONDS)


FLECHT - LOW FLOODING RATE TEST -- RUN 06357
1=MASS INJECTED 2=TOTAL MASS INVENTORY
3=STEAM OUT 4=LIQUID COLLECTED 5=MASS IN BUNDLE
166.92
150.00
125.00
100.00
75.000
50.000
25.000
0.0
MASS (LBM)
-42.200
-25.000
0.0
25.000
50.000
75.000
100.00
124.20
TIME (SECONDS)


FLECHT-LOW FLOODING RATE TEST- RUN 06357
DP
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.0455
1.0000
0.8000
0.6000
0.4000
0.2000
0.0
PSI
FLECHT-LOW FLOODING RATE TEST- RUN 06357
VF
LEVEL(FT) 0-2 2-4 4-6 6-8 8-10 10-12
1 2 3 4 5 6
1.2500
1.0000
0.7500
0.5000
0.2500
0.0
VOID FRACTION
-42.200
-25.000
0.0
25.000
50.000
75.000
100.0
124.20
TIME SECONDS


FLECHT LOW FLOODING RATE SERIES
RUN 06357
STEAM PROBES
1=3G7 2=7C10 3=8E12.5
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06357
THIMBLES
1=6F4 2=6F6
TEMP - DEGREES F
2400.0
2250.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.00
500.00
250.00
0.0
-42.200
-25.000
0.0
25.000
50.000
75.000
100.00
124.20
TIME - SEC


FLECHT LOW FLOODING RATE SERIES
RUN 06357
TOTAL(BACK)
0-12FT
HEAT RELEASE(BTU
1.5CE+0
1.0CE+0
5000.0
0.0
FLECHT LOW FLOODING RATE SERIES
RUN 06357
TOTAL(BACK)
0-12FT
RATE OF HEAT RELEASE(BTU/
200.00
175.00
150.00
0.0
25.000
50.000
75.000
100.00
125.00
TIME(SEC

FLECHT - LOW FLOODING RATE TEST

SUMMARY SHEET

COSINE AXIAL POWER PROFILE

RUN NO. 06458

DATE: 6/17/75

A. RUN CONDITIONS

Upper Plenum Pressure, psia	40		
Initial Clad Temperature (6 Ft)°F At Flood	1,601	Rod T/C	4H6
Rod Peak Power, kw/ft	0.74		
Flooding Rate, in/sec	1.5		

Coolant Temperature, °F	126		
Bundle Radial Power Profile	Uniform		
Disconnected Rods	7F		

B. INITIAL HOUSING TEMPERATURE

Back Side Elevation, Ft.	Temperature, °F
0	253
2	434
4	562
5.5	628
6	644
6.5	527
7	523
7.5	525
8	550
10	427
12	271
Average	486
Lower Plenum	126
Upper Plenum	347

BLANK PAGE

FLECHT-LOW FLOODING RATE ROD THERMOCOUPLE DATA

RUN NUMBER 06454

ROD/ELEV	TEMPERATURE AT POWER ON (DEG.F)	TIME OF POWER ON (SEC.)	INITIAL TEMPERATURE AT FLOOD (DEG.F)	MAXIMUM TEMPERATURE (DEG.F)	TEMPERATURE RISE (DEG.F)	TURNAROUND TIME (SEC.)	QUENCH TEMPERATURE (DEG.F)	QUENCH TIME (SEC.)
6H0.5	[illegible]	[illegible]	426.	530.	4.	2.5	593.	8.8
6H1	108.	-47.4	[illegible]	547.	0.	.2	[illegible]	17.2
6H1.5	[illegible]	-47.[illegible]	573.	499.	13.	2.4	564.	24.2
6H2	473.	[illegible]	913.	913.	1.	.5	635.	34.5
6H4	[illegible]	[illegible]	13[illegible]3.	1348.	5.	1.4	695.	77.8
6H6	332.	-44.4	1501.	1513.	13.	2.5	933.	91.7
8J5	337.	-47.5	1381.	1403.	22.	4.3	910.	95.0
8J5.5	[illegible]	[illegible]	[illegible]	1379.	23.	4.6	829.	112.9
8J7	371.	-47.1	1229.	1242.	13.	1.5	691.	109.9
8J8	[illegible]	-47.[illegible]	1119.	1135.	13.	3.9	994.	73.9
8J9	264.	-47.8	980.	98[illegible].	7.	1.7	622.	123.2
8J10	763.	-47.9	747.	768.	21.	28.4	686.	121.0
8J11	373.	-47.[illegible]	625.	634.	9.	23.5	[illegible]	78.1
8J12	167.	[illegible]	202.	203.	3.	.2	203.	1.4
5F0	234.	-47.5	280.	280.	0.	0.3	279.	.2
5F0.5	269.	-44.[illegible]	624.	627.	0.	.2	532.	11.0
5F1	231.	[illegible]	636.	638.	2.	1.2	531.	17.0
5F1.5	* * BAD THERMOCOUPLE DATA * *							
5F2	314.	-47.0	477.	481.	4.	1.9	633.	31.0
5F3	434.	-47.5	1149.	1153.	5.	1.3	635.	55.5
5F4	325.	-34.4	1373.	1380.	7.	.6	659.	78.0
5F6	114.	-44.8	1462.	1484.	21.	3.6	1152.	66.1
5G6	446.	-43.[illegible]	1508.	1540.	32.	4.2	1146.	64.3
5G6.5	419.	-47.0	1492.	1514.	22.	4.4	1026.	74.3
5G7	331.	-57.8	1309.	1330.	21.	5.0	1059.	71.1
5G8	280.	-46.8	1161.	1204.	42.	8.4	813.	91.3
5G9	259.	-47.0	968.	981.	13.	8.2	622.	118.7
5G11	275.	-67.8	625.	627.	2.	15.0	545.	80.6
5G12	278.	-47.8	580.	582.	3.	1.3	533.	57.9
1G4	551.	-47.0	1293.	1300.	6.	1.2	669.	69.4
1G6	583.	-45.0	1488.	1494.	7.	1.6	651.	112.5
1G10	388.	-37.0	754.	757.	3.	.4	489.	96.3
3H2	408.	-87.0	917.	925.	8.	1.8	644.	38.1
3H6	558.	-37.0	1564.	1581.	17.	3.8	855.	100.2
3H8	484.	-37.0	1255.	1272.	17.	3.6	953.	85.1
3H10	278.	-37.0	797.	818.	21.	24.2	673.	185.4
4G2	484.	-87.0	922.	926.	4.	1.8	635.	31.7
4G4	535.	-88.0	1420.	1431.	11.	1.4	648.	77.3
4G6	513.	-87.0	[illegible]	[illegible]	18.	2.8	1142.	87.3
4G8	317.	-86.0	1213.	1238.	25.	4.0	763.	93.1
4G10	275.	-87.0	881.	887.	6.	1.2	682.	85.8