

LAST "DOPE & DATA"
INCLUDING FINAL TESTS
FOR ENGINE BE FORE
LEAVING FOR SPEEDWAY
1963.

ALSO COMPLETE INJECTOR
IDENTIFICATION AS OF
APRIL 1963

ENGINE TEST DATA

Date _____ Time _____ Test No. _____ Remarks _____

[illegible]

Notes, calculations, etc.

$$T = \frac{5252 \times \text{HP}}{\text{RPM}} \quad \text{HP} = \frac{T \times \text{RPM}}{5252} \quad \text{BHP} = \frac{W \times \text{RPM}}{200}$$

Test Information:

Jet size _____

Spark plug_____

Timing _____

Exhaust system _____

Compression-Leakage Check

	Comp	Leak	Supercgr.	Leak	Comp
1					5
2					6
3					7
4					8

Other Remarks-

Cam Timing:

Intake _____

Exhaust_____

ENGINE TEST DATA

Date _____ Time _____ Test No. _____ Remarks _____

[illegible]

Notes, calculations, etc.

$$T = \frac{5252 \times \text{HP}}{\text{RPM}} \quad \text{HP} = \frac{T \times \text{RPM}}{5252} \quad \text{BHP} = \frac{W \times \text{RPM}}{200}$$

Test Information:

Jet size _____

Spark plug_____

Timing _____

Exhaust system _____

Compression-Leakage Check

Comp	Leak	Supercgr.	Leak	Comp

Other Remarks-

Cam Timing:

Intake _____

Exhaust _____

ENGINE TEST DATA

Date 5-1-63 Time 9:45Test No. 1

Remarks

HERC'S N°2

(DONE) BEFORE

RPM	W	HP	TORQUE	Fuel Flow data			Air Flow	Last Test	
				FLOW	W/HP.HR.	A/F Ratio		HP	Torque
				FUEL	AIR	A/F RATIO			
1st 4000	73.5	147		232	32	200	900	4.50	42
1st 5000	100	250		345	32	313	1500	4.79	50 51
2nd 5000	101	253		340	32	308	1490	4.84	50
1st 6000	125.5	376		495	31	464	2350	5.06	61 63
2nd 6000	121.5	365		490	31	459	2300	5.02	60
1st 7000	146	511		680	28	652	3300	5.06	75 77
2nd 7000	144	505		680	28	652	3290	5.05	74
1st 7700	156	600		900	25	875	4260	4.86	89 93
1st 8000	153	613		1015	26	989	4400	4.46	92 <u>861</u>

Notes, calculations, etc.

$$T = \frac{5252 \times HP}{RPM}$$

$$HP = \frac{T \times RPM}{5252}$$

$$BHP = \frac{W \times RPM}{200}$$

Test Information:

Jet size 1 DOT (ALKY)Spark plug CP 113 (CLEAN)Timing 21-29Exhaust system MUFF

Compression-Leakage Check

	Comp	Leak	Supercgr.	Leak	Comp
1					5
2					6
3					7
4					8

Other Remarks-

Cam Timing:

Intake _____

Exhaust _____

NEW RINGS - 1st BLAST
 .052 (BIG) SPRAY RING
 STAGGERED MAGNETO
 "STP" & ROUGE' ADDED TO OIL
 THIS ENGINE OILED ON
 ALL CYLINDER BUT 1+8
 UNTIL I ADDED 10% STP
 + ROUGE ENGINE NOW SHOWS
 ON SMALL TRACES ON 2+6
 THIS IS THE SAME ENGINE
 THAT WE TORE DOWN BECAUSE
 OF 2+7

TEST NO.

1

DATE

5-1

TIME

RPM				
3500				
4000			32	
4500				
5000	31.50	31.25		
5500				
6000	31	30.75		
6500				
7000	28	28		
7500	25			
8000	26			

NOTES:

SERVO

TEST NO.

1

DATE

5-1

TIME

9:45

RPM				
3500				
4000	2.4		900	
4500				
5000	7.5	7.2	1500	1490
5500				
6000	17.2	16.9	2350	2300
6500				
7000	36	35.5	3300	3290
7500	65 71		4260 4400	
8000				
NOTES: Bar. - 30.00 T - 60° H - 84% M. S. D.				

TEST NO.

DATE

TIME

RPM				
3500				
4000			(9) 35/36	
4500				
			(10)	
5000	(1) 40/41	40/41		
5500				
			(11)	
6000	(2) 46/47	46		
6500				
			(12)	
7000	(3) 53/54	53		
7500	(4) 61/62			
8000				

NOTES:

HC MAN

DMB

TEST NO. 1DATE 5-1

TIME _____

RPM				
3500				
4000			42	
4500				
5000	50	50		
5500				
6000	61	60		
6500				
7000	75	74		
7500				
7700				
8000	89			
NOTES:				
8000	92			
Blower				
"Hg low				

TEST NO. 1DATE 5-1TIME

RPM				
3500				
4000			232	
4500				
✓ 5000	345	340		
5500				
✓ 6000	495	490		
6500				
✓ 7000	680	680		
700	900			
8000	1015			
NOTES:				
Fuel				

TEST NO. 1 DATE 5-1 TIME

RPM				
3500				
4000			30	
4500				
5000	30	30		
5500				
6000	30	30		
6500				
7000	28-29	28-29		
7500				
8000	28			
NOTES 28				
Fuel Press				

TEST NO.

1

DATE

5-1

TIME

RPM				
3500				
4000			23.5	
4500				
5000	30	51		
5500				
6000	25.5	71.5		
6500				
7000	46	94		
7500				
7700	56			
NOTES: 8000 53				
LIMITS				

Date 4-2-65 Time 0750 Test No. 3 Remarks ITEMC'S N-3

RPM	Inch	HP	Torque	Fuel Flow data				Air Flow	Last Test	
				Flow	W/HP	W	A/F Ratio		HP	Torque
4000	80	160	210	236	32	20.4	4.50	920	42½	1.27
5000	103	258	335 271	355	32	32.3	4.70	1520	50½	1.25
6000	130	390	341	505	31	47.4	5.00	2370	62	1.21
7000	153	535	401	745	27	71.8	4.93	3540	79	1.34
7500	155½	583	408	850	26	82.4	4.80	3950	86	1.41
8000	158	632	415	1000	25	97.5	4.71	4590	94	1.54
8000	158½	634	416	1010	25	98.5	4.76	4600	94	1.55

Notes, calculations, etc.

$$T = \frac{5252 \times \text{HP}}{\text{RPM}}$$

$$HP = \frac{T \times RPM}{5252}$$

$$\text{BHP} = \frac{W \times \text{RPM}}{200}$$

Test Information:

Jet size 1 DOT (ALCOHOL)

Spark plug CP WARM 113 (CLND.)

Timing _____

Exhaust system MUFFS

Other Remarks-

Cam Timing: *Nº 4 INJ.*

Cam Timing:

Intake _____

Exhaust _____

SAME AS LAST, EXCEPT
SWITCHED FLOWER TO
SAME AS USED ON 665 HP
BLAST ON THE LAST ENGINE.

LITTLE RICH @ 5000 WHEN IDLED
@ 4000 THEN ACCELLERATED.

NO 2 RETARD PLUG SHOWED SEVERE
DETONATION & ALSO HAD A CRACKED
INSIDE PORCELAIN,

ENGINE VERY SMOOTH @ ALL SPEEDS. POWER GOOD.

84% @ 60°

Compression-Leakage Check

Comp	Leak	Supercgr.	Leak	Comp

TEST NO.

3

DATE

4-30

TIME

RPM				
500				
4000		30		
4500				
5000	30			
5500				
6000	30			
6500				
7000	28			
7500	28			
8000	28	28		

NOTES:

Fuel Press

TEST NO.

3

DATE

4-30

TIME

RPM				
500				
4000		31.50		
4500				
5000	31.50			
5500				
6000	30.50			
6500				
7000	27			
7500	26			
8000	25.50			

NOTES:

25

SERVO

TEST NO.

3

DATE

7-30

TIME

(MO.

RPM				
3500				
4000		42 1/2		
4500				
5000	50 1/2			
5500				
6000	62			
6500				
7000	79			
7500	86			
8000	94			
	94			

NOTES

Browne Press

3

DATE _____

4-30

RPM		
500		
4000	36	36
4500		
5000	40 $\frac{3}{4}$	
5500		
6000	47	
6500		
7000	57	
2nd 7500	59	
	62 when off-of-it	
	~94"	
8000	60 $\frac{1}{2}$ ↑	60 $\frac{1}{2}$ ↑
NOTES:	(91")	(91")
	11 Hg	Ma

LiLi Ricit
@ \$600

NOVI- 1011

TEST NO.

3

DATE

4-30

TIME

RPM				
500				
4000				30
4500				
5000	3			
5500				
6000	30			
6500				
7000	53	55.5		
7500		55.5		
8000		58	58.5	

NOTES:

UNITS

TEST NO.

3

DATE

4-30

TIME

9:30 PM

	RPM				
	500				
-	4000	2.8		920	
	4500				
-	5000	7.9		1520	
	5500				
-	6000	17.8		2370	
	6500				
-	7000	42		3540	
	7500	54		3950	
-	8000	78.5	79.5	4590	4

NOTES:

T - 60°
 H - 84%

M. S. D.

TEST NO.

3

DATE

4-30

TIME

RPM				
500				
4000	-236			
4500				
5000	-355			
5500				
6000	-505			
6500				
7000	-745			
7500	-850			
8000	-1000	1000		

NOTES:

FUEL FLOW
Ryans
J

Date 4-30-63 Time 7:50 Test No. 2 Remarks Herc's 3rd

RPM	"W"	HP	TORQUE	Fuel flow data				Air Flow	Last Test	
				FLOW	LB/HP.HR.	A/F Ratio	HP		Torque	
5000	118½	296	310	465	32	373	4.83	1800		1.26
6000	154	462	404	650	30	620	4.76	2960		1.34
6500	540	540	436	770	28	742	4.97	3690		1.37
4000	89 178	178 533	233	268	32	236	4.66	1100	48	1.32
5000	124	310	325	405	32	373	4.82	1800		1.20
6000	153	459	401	635	30	605	5.00	3020		1.32
7000	171½	600	450	900	26	874	4.98	4360	← GUESSIMATE ON FUEL	
7000	173	606	454	950	26	924	4.72	4350		1.52

Notes, calculations, etc.

$$T = \frac{5252 \times \text{HP}}{\text{RPM}}$$

$$HP = \frac{T \times RPM}{5252}$$

$$\text{BHP} = \frac{W \times \text{RPM}}{200}$$

Test Information:

Jet size

Spark plug.

Timing

Exhaust system

Other Remarks-

No 4 INJECTOR
Cam Timing:

Cam Timing:

Intake

Exhaust

SAME AS LAST EXCEPT FOR
NEW 10" BLOWER (BLUE BABY)
AND REMOVED SPRAY RING.
NOTE, BLOWER GEAR RATIO IS SAME
@ 5.08.

KEE-12YST, LOOK AT THE POWER. THE
IS THE BEST EVER AT ANYTIME,
ANY PLACE, UNDER ANY CONDITIONS. PERIOD

82% @ 60°

Compression-Leakage Check

	Comp	Leak	Supercgr.	Leak	Comp	
1						5
2						6
3						7
4						8

TEST NO.

2

DATE

4-30

TIME

RPM				
500				
4000		-30		
4500				
5000	30	30		
5500				
6000	30	29=30		
6500	28-29			
7000		28	26	
7500				
8000				

NOTES:

F. P

TEST NO.

2

DATE

4-30

TIME

RPM		✓		
500		GAGE		
4000		48		
4500				
5000	46 $\frac{1}{2}$			
5500				
6000	57			
6500	63	61		
7000		81		
7500		(10)	950	Feet
8000				

NOTES:

NOTE BACK TO

11/4g Man

GAGE ON 2ND RUN

950
26
924

TEST NO.

2

DATE

4-30

TIME

RPM				
3500				
4000		-268		
4500				
5000		-405-405		
5500				
6000		-650-635		
6500		-770		
7000		(about -900 950)		
7500				
8000				

NOTES:

FUEL FLOW

Ryall

F

TEST NO.

2

DATE

4-30

TIME

RPM				
3500				
4000		32		
4500				
✓ 5000	3150	3150		
		↓		
5500		30		
✓ 6000	30	26		
6500	28	↓		
✓ 7000		26		
7500				
8000				
NOTES:				
SERVO				

TEST NO.

2

DATE

4-30

TIME

RPM				
500				
4000		48		
4500				
5000	62	61.5		
5500				
6000	83	81		
6500	94			
7000		102.5	105	
7500				
8000				

NOTES:

MANIFOLD GAGE

TEST NO. 2 DATE 4-30 TIME 8:30 PM

RPM				
3500				
4000		4 1100		
4500				
5000	10.5	10.6	1800	
5500				
6000	28.7	30 3220	2960	
6500	46		3690	
7000	② 69	① 68.5	4360	4350
7500				
8000				
NOTES:				
T - 62°				
H - 82%				
M. S. D				

TEST NO.

2

DATE

4-30

TIME

RPM				
3500				
4000		39		
4500				
5000	18.5	24		
5500				
6000	54	53		
6500	66			
7000		71.5	73	
7500				
8000				
NOTES:				
UNITS				

ENGINE TEST DATA
 Date 4-30-63 Time 6:00 Test No. 1 Remarks HERC'S 3RD

RPM	"W"	HP	TORQUE	Fuel flow data			Air Flow	Last Test	
				FLOW	LB/HP.HR.	A/F Ratio		<u>BLOW</u>	<u>Temp.</u>
								<u>GAGE</u>	<u>Coor.</u>
6100	126	385		505	30.475	5.13	18½ 2440	62	
7100	147½	524		710	27.683	4.96	38 3390	77	
7100	146	519		720	28.692	5.00	40½ 3470	77½	
5000	96	240	252	340	33.307	4.86	1490 900	51	
6000	119½	359	314	475	31.444	5.03	2230	61	
7000	146	511	384	710	27.683	5.00	3410	79	
8000	156	624	409	1030	24.986	4.76	4700	99	

Notes, calculations, etc.

$$T = \frac{5252 \times \text{HP}}{\text{RPM}}$$

$$\text{HP} = \frac{T \times \text{RPM}}{5252}$$

$$\text{BHP} = \frac{W \times \text{RPM}}{200}$$

Test Information:

Jet size DOT N° 1

Spark plug CP (WARM) 113

Timing _____

Exhaust system MUFFERS

Other Remarks-

Cam Timing:

Intake _____

Exhaust _____

ALCOHOL FUEL, N° 4 INS.

AFTER INSTALLING ROUGE IN ENGINE SEALED UP UNTIL RUN AT 30" Hg

Compression-Leakage Check

	Comp	Leak	Supercgr.	Leak	Comp	
1	154	3%		2%	149	5
2	154	2%		2%	151	6
3	156	3%		3%	150	7
4	150	3%		2%	149	8

63% @ 70° & 30.00

TEST NO.

1

DATE

4-30-63

TIME

6 PM

RPM	1	2	1	2
3500				
4000				
4500				
5000		7.3		1490 900
5500				
6000	18.5	15.7	2440	2230
6500				
7000		39		3410
7100	38	40.2	3390	3470
7500				
8000		85		4700

NOTES:

T - 70°

H - 63

M. S. D.

TEST NO.

1

DATE

4-30

TIME

RPM				
3500		↓		
4000				
4500		$40\frac{1}{2}$		
5000				
5500		$45\frac{1}{2}$		
6000		$54\frac{1}{2}$		
6500				
7000		$64\frac{1}{2}$		
7500				
8000				

NOTES:

"Ltg Man

TEST NO.

1

DATE

4-30

TIME

RPM				
3500				
4000				
4500				
5000	26	46	46	
5500				
6000	26	46	19 1/2	
6500			46	
7000	47.5	46	46	
7500				
8000			56	

NOTES:

UNITS

TEST NO.

1

DATE

4-30

TIME

RPM				
3500				
4000				
4500				
5000			50	
5500				
6100	62		60	
6500				
7100	77	77 1/2	77 1/2	
7500				
8000			97	
NOTES:				
BLOWER				
GAGE				

TEST NO.

1

DATE

4-30

TIME

RPM				
3500				
4000				
4500				
5000			340	
5500				
6000	505		475	
6500				
7000	710	720	710	
7500				
8000			1030	
NOTES:				
FUEL				
Report				
F				
O				

TEST NO.

1

DATE

4-30

TIME

RPM				
3500				
4000				
4500				
5000			NR	
5500				
6000	30		3050	
6500				
7000	27	27.50	27	
7500				
8000			24	
NOTES:				
SERVO				

Memo From

JOHN C. THOMPSON

4/29/63

RPM	UNITS	HP	Net FUEL	AIR	A/FR	Hg MAN
5150	101	260	323	1510	4.67	51
6000	122	366	450	2320	5.16	62
6000	125	375	469	2390	5.10	64
7000	146.5	513	670	3300	4.92	78
7000	146	511	671	3340	4.97	78
8000	152.5	610	1006	4670	4.65	98
8000	153	612	990	4540	4.58	96
SN-25	INJECTOR					
UNIT	#4					
Jet	1 DOT					
Fuel	Alcohol					
(Same as Test No 7 - 4/28/63, except Blower)						
Blower w/ large clearance at Inducer)						

TEST NO. 2DATE 4-29-63 TIME 8:20

RPM				
500				
4000				
4500				
5000	232			
5150				101
5500		125		
172 6000	465			
6500				
146 1/2 7000	525	146		
7500				
152 1/2 8000		153		

NOTES:

UNITS

TEST NO. 2 DATE 4-29-63 TIME 8:20

RPM				
500				
4000				
4500				
5000	355		355	
5150			32	323
5500				
6000	480	500	450	469
6500				
7000	698	700	670	671
7500				
8000	1030	1015	1006	990

NOTES:

FUEL FLOW

Ryan

[Signature]

TEST NO.

2

DATE

4-29-63

TIME

8:20

RPM				
500				
4000				
4500				
5000		7.8		1510
5500				
6000	17	18	2320	2390
6500				
7000	36	37	3300	3340
7500				
8000	83	77	4670	4540

NOTES:

Bar. 30.02

T 66

MSD

H - 66

AIR TEMP AT INJECTOR 75° @ 8000

TEST NO. 2DATE 4-2-96 TIME

RPM				
500				
4000				
4500				
			⑦	
5000			40.5	51
5500				
	①	④		
6000	45/46	46/47	62	64
6500				
		⑤		
7000	② 54/55	54	78	78
7500				
		⑥		
8000	③ 64	63	98	96
NOTES:				
MAN AG				
DMS'				

TEST NO.

2

DATE

4-29-63

TIME

8:20

RPM				
500				
4000				
4500				
5000			32	
5500				
✓ 6000	30	31		
6500				
✓ 7000	28	29		
7500				
✓ 8000	24	25		

NOTES:

31
29
25 SERVO

TEST NO.

2

DATE

4-29-63

TIME

RPM				
500				
4000				
4500				
5000			30	
5500				
6000	30	30		
6500				
7000	28-29	28-29		
7500				
8000	28	28		

NOTES:

FUEL PRESSURE

TEST NO. 1DATE 4-29-63 TIME 60n

RPM	#			
500	Run	32.50		
	#			
4000	1, 31.50	31.50		
4500	2, 31.50			
5000	3, 31.00			
5500	4, MISSED → AIR			
6000	5, 31.00			
6500	6, 31.00			
7000	7, 28.00			
7500	8, 31.50			
8000	9, 31.00			

NOTES:

Servo

TEST NO.

DATE

4-29-63

TIME

6PM

RPM		Alt	Net Fuel	A/FR
500	1			
①	21	2580	515	5.0
4000 ②	29	2980	593	5.02
③	26.2	2850		
1500 ④	18.5	2410		
⑤	22	2630		
5000 ⑥	23	2680		
⑦	23.4	2700		
5500	15.5	2200		
	12	2000		
6000	26	2600		
	7.2	Lights		
6500	16	"		
7000				
7500				
8000				

NOTES:

MSD

TEST NO.

2

DATE

4-29-67

TIME

RPM				
500				
4000				
4500				
5000				
5500				
5150			# 50	
6000	61	62		
6500				
7000	76	76		
7500				
8000	96	95		

NOTES:

MAN - GAGE

TEST NO.

1

DATE

4-29-63

TIME

6 PM

RPM	Run 1			
500	548	21	32.50	515.5
	625	22	31.50	593.5
1000	585	26.2	31.10	552.5
	510	18.5	31	479
4500	550	22	31	519
	550	22	31	519
5000	555	23.4	31	524
	475	15.5	28	447
5500	590		31.50	558
	340		31	309
6000	410			379
6500				
7000				
7500				
8000				

NOTES:

FUEL

TEST NO.

1

DATE

4-29-63

TIME

6 PM

RPM	RPM	UNITS		
500	6300	81	131	412
7.	6800	84	134	455
4000	6500	84	134	436
	6100	76	126	384
4500	6300	80	130	410
	6300	80	130	410
5000	6400	83	133	425
	6000	73	MOVED	
5500	6500	85	135	438
	5000	48	98	245
6000	6500	53	PT. 103	335
6500				
7000				
7500				
8000				

NOTES:

UNITS

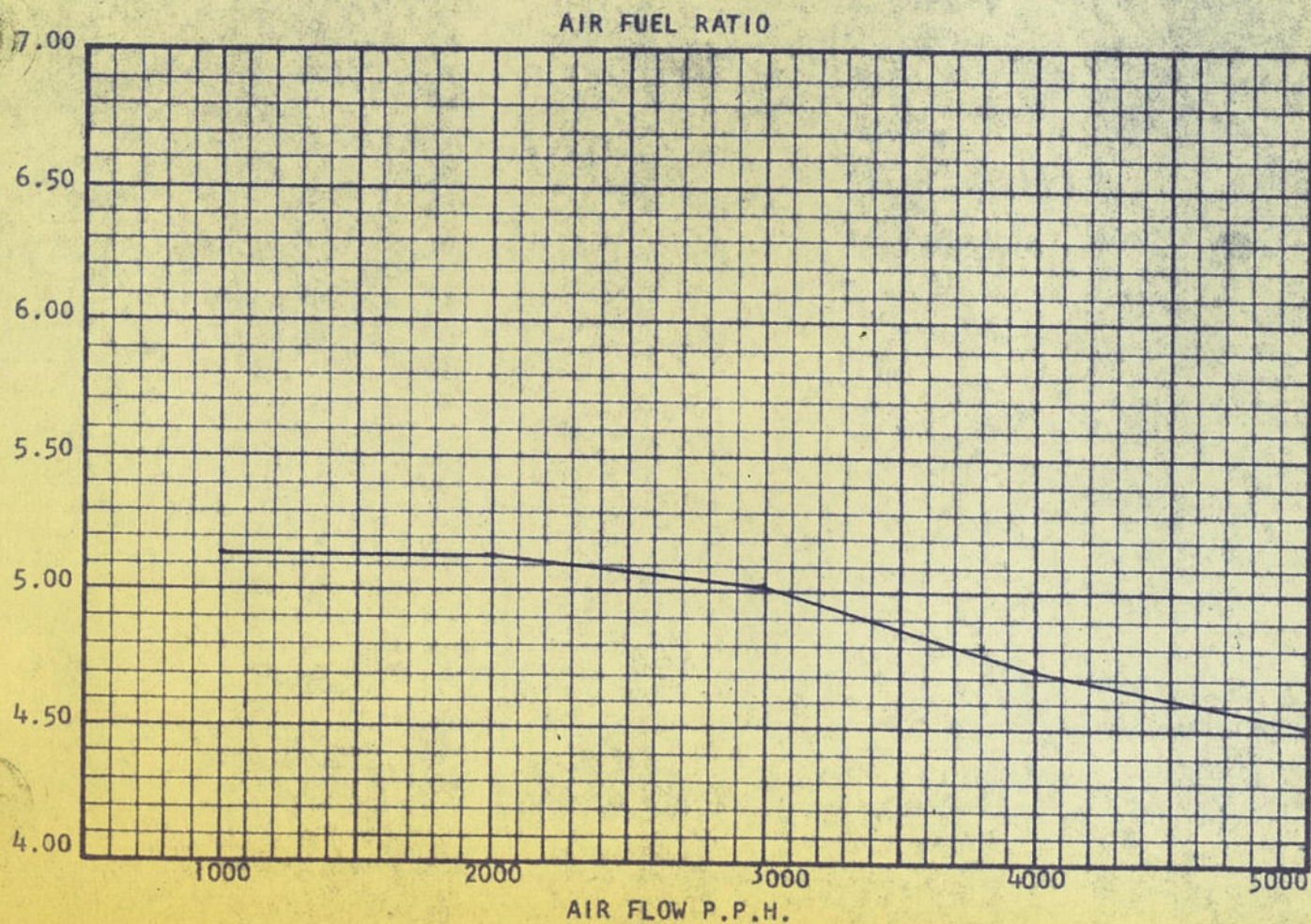
FLOW SHEET NO. 1

UNIT NO. 2 MODEL NO. D-22 JET NO. 3 DOT FUEL ALCOHOL S.G. .794

CONDITIONS AND OTHER SETTINGS: (1) I.C.O. IN FULL RICH POSITION. (2) WITHOUT
CONSTANT EFFORT SPRING. (3) 30 PSI FUEL PRESSURE

M.S.D.	AIR FLOW	FUEL FLOW	A/F RATIO				
3.1	1000	195	5.13				
13.0	2000	389	5.13				
29.2	3000	597	5.02				
56.5	4000	848	4.72				
104.0	5000	1125	4.45				

NOTE:



FLOW SHEET NO. 2

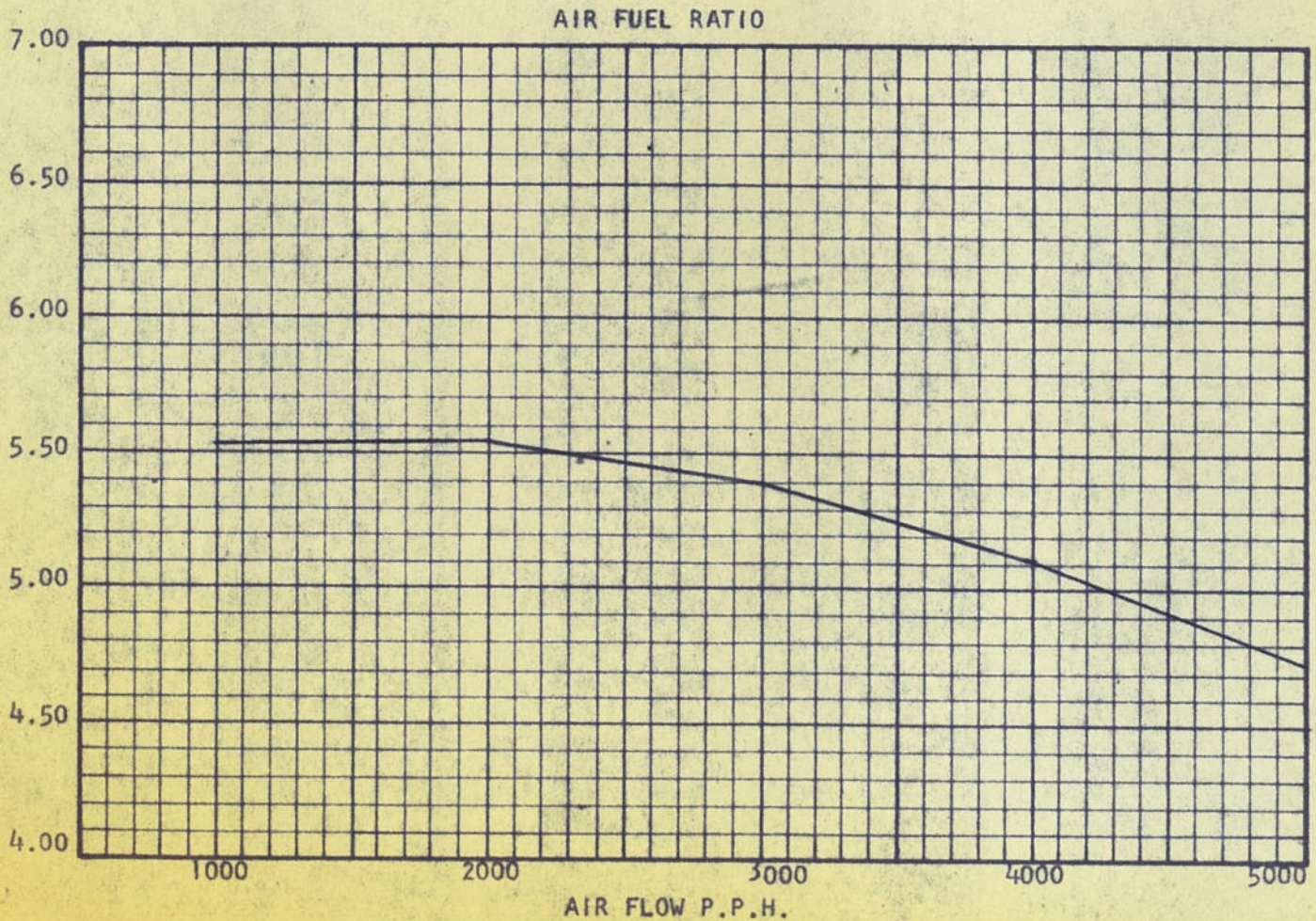
UNIT NO. 2 MODEL NO. D-22 JET NO. 4 DOT FUEL 80-10-10 S.G. .786

CONDITIONS AND OTHER SETTINGS: (1) I.C.O. IN FULL RICH POSITION. (2) NO

CONSTANT EFFORT SPRING. (3) 30 PSI FUEL PRESSURE.

M.S.D.	AIR FLOW	FUEL FLOW	A/F RATIO				
3.1	1000	181	5.52				
13.00	2000	360	5.55				
29.2	3000	556	5.40				
56.5	4000	782	5.12				
104.0	5000	1060	4.72				

NOTE:



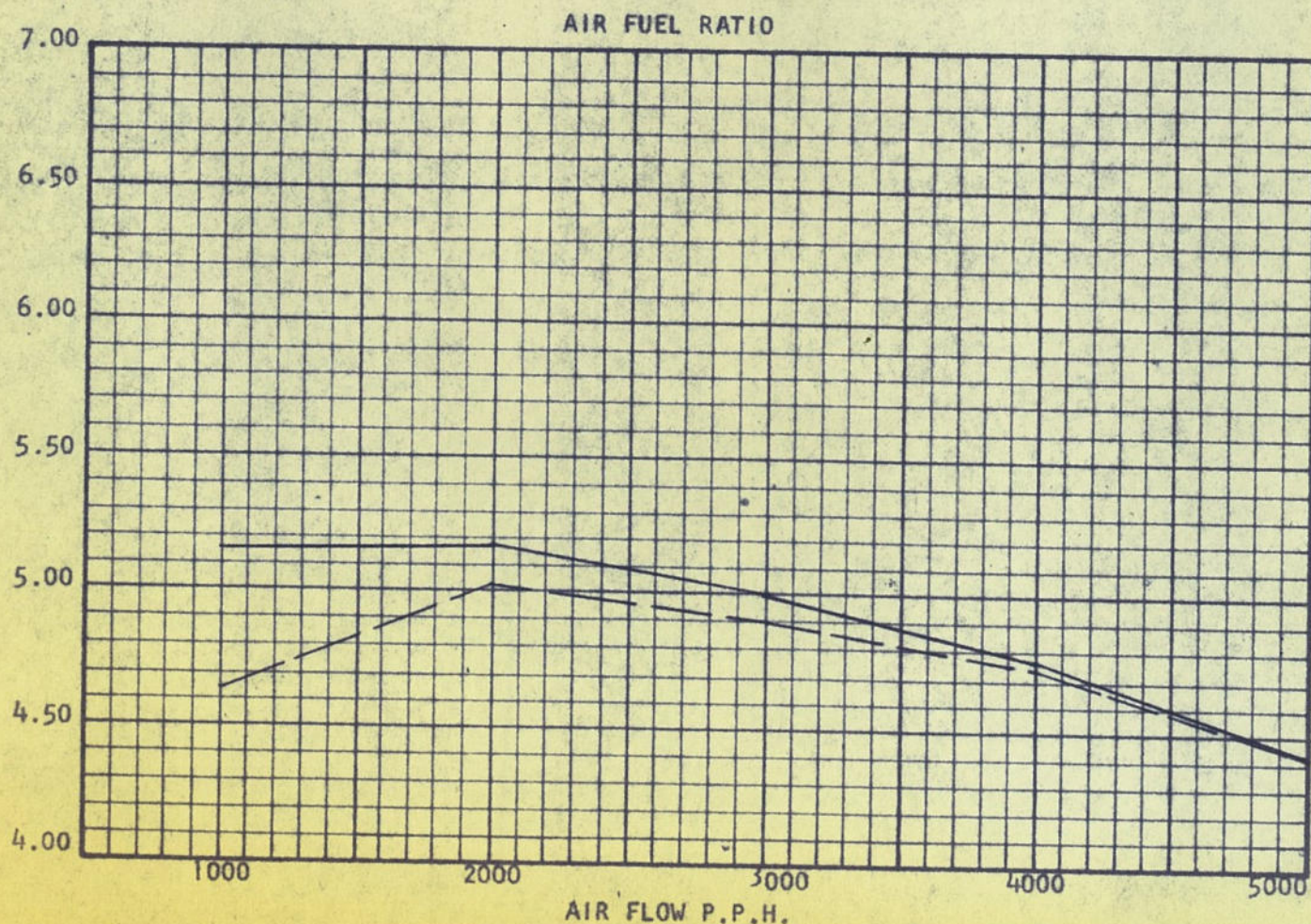
FLOW SHEET NO. 3

UNIT NO. 3 MODEL NO. SN-26 JET NO. 5 DOT FUEL ALCOHOL S.G. .794

CONDITIONS AND OTHER SETTINGS: (1) I.C.O. IN FULL RICH POSITION. (2) WITH AND WITHOUT CONSTANT EFFORT SPRING. (3) 30 PSI FUEL PRESSURE.

M.S.D.	WITHOUT THE SPRING			WITH THE SPRING		
	AIR FLOW	FUEL FLOW	A/F RATIO		FUEL	RATIO
3.1	1000	194	5.15		214	4.65
12.7	2000	386	5.18		398	5.02
29.8	3000	600	5.00		611	4.90
58.0	4000	838	4.77		840	4.75
104.0	5000	1130	4.42		1130	4.42

NOTE: EFFECT OF CONSTANT EFFORT SPRING IS SHOWN BY THE DOTTED LINE IN THE CURVE BELOW.

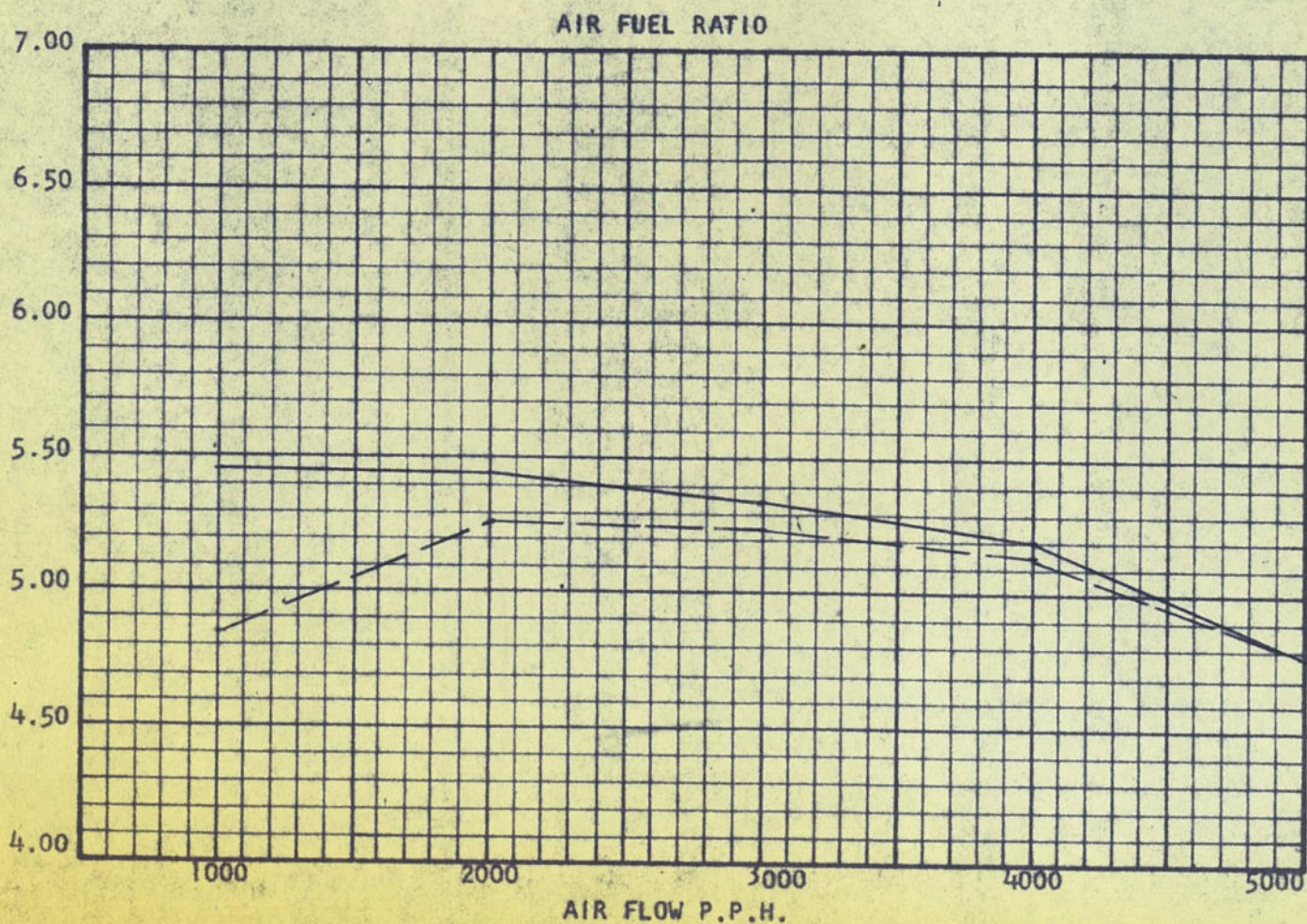


UNIT NO. 3 MODEL NO. SN-26 JET NO. 6 DOT FUEL 80-10-10S.G. .786

CONDITIONS AND OTHER SETTINGS: (1) I.C.O. IN FULL RICH POSITION. (2) WITH AND WITHOUT CONSTANT EFFORT SPRING. (3) 30 PSI FUEL PRESSURE.

WITHOUT THE SPRING				WITH THE SPRING			
M.S.D.	AIR FLOW	FUEL FLOW	A/F RATIO		FUEL	RATIO	
3.1	1000	183	5.46		206	4.85	
12.7	2000	368	5.43		380	5.26	
29.8	3000	562	5.35		573	5.23	
58.0	4000	770	5.20		775	5.14	
104.0	5000	1045	4.78		1045	4.78	

NOTE: EFFECT OF CONSTANT EFFORT SPRING IS SHOWN BY THE DOTTED LINE IN THE CURVE BELOW.



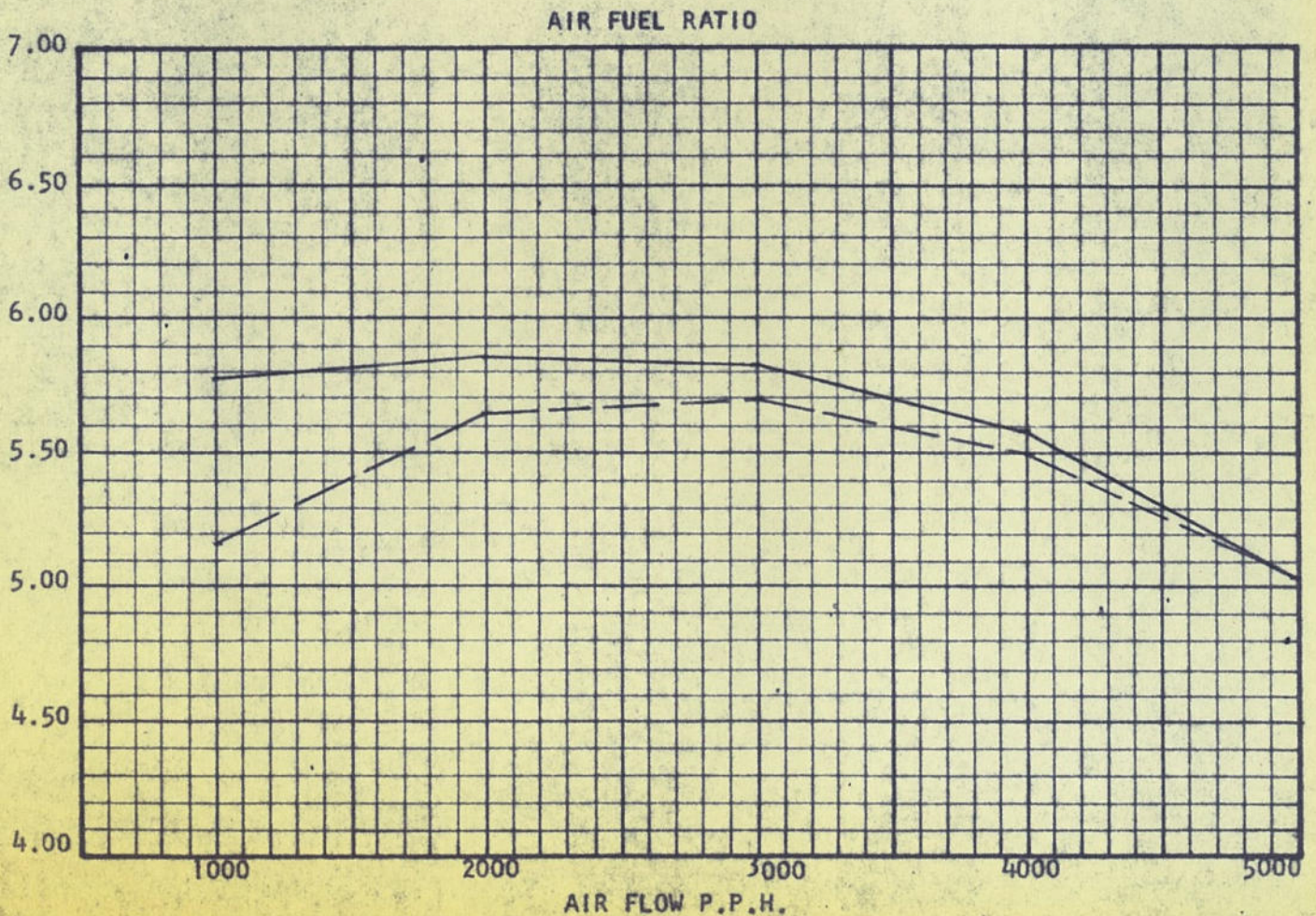
FLOW SHEET NO. 5

UNIT NO. 3 MODEL NO. SN-26 JET NO. 7 DOT FUEL 80-10-10S.G. .784

CONDITIONS AND OTHER SETTINGS: (1) I.C.O IN FULL RICH POSITION. (2) WITH AND WITHOUT CONSTANT EFFORT SPRING. (3) 30 PSI FUEL PRESSURE.

WITHOUT THE SPRING				WITH THE SPRING			
M.S.D.	AIR FLOW	FUEL FLOW	A/F RATIO		FUEL	RATIO	
3.1	1000	173	5.78		193	5.17	
12.7	2000	352	5.85		354	5.65	
29.8	3000	515	5.82		526	5.70	
58.0	4000	717	5.58		728	5.50	
104.0	5000	995	5.03		995	5.03	

NOTE: EFFECT OF CONSTANT EFFORT SPRING IS SHOWN BY DOTTED LINE IN THE CURVE BELOW.



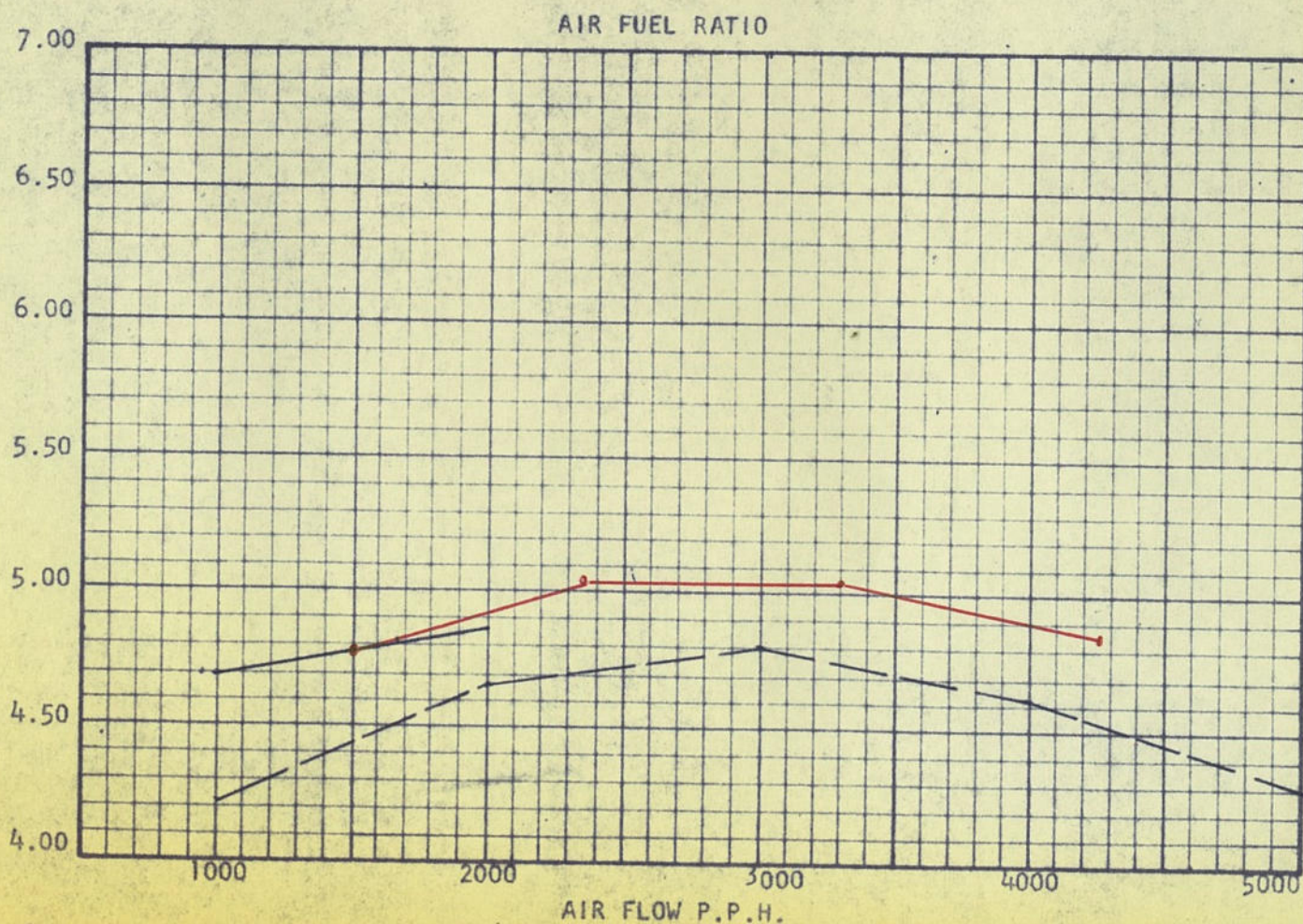
FLOW SHEET NO. 6

UNIT NO. 4 MODEL NO. SN-25 JET NO. 1 DOT FUEL ALCOHOL S.G. .794

CONDITIONS AND OTHER SETTINGS: (1) I.C.O. IN FULL RICH. (2) WITH AND WITHOUT THE CONSTANT EFFORT SPRING. (3) 30 PSI FUEL PRESSURE.

WITHOUT THE SPRING				WITH THE SPRING			
M.S.D.	AIR FLOW	FUEL FLOW	A/F RATIO		FUEL	RATIO	
3.1	1000	213	4.70		234	4.22	
12.7	2000	414	4.84		427	4.67	
29.0	3000	625			625	4.80	
56.5	4000	860			860	4.65	
103.0	5000	1165			1165	4.30	

NOTE: EFFECT OF CONSTANT EFFORT SPRING IS SHOWN BY THE DOTTED LINE IN THE CURVE BELOW.



FLOW SHEET NO. 7

UNIT NO. 4 MODEL NO. SN-25 JET NO. 8 FUEL 80-10-10 S.G. .786

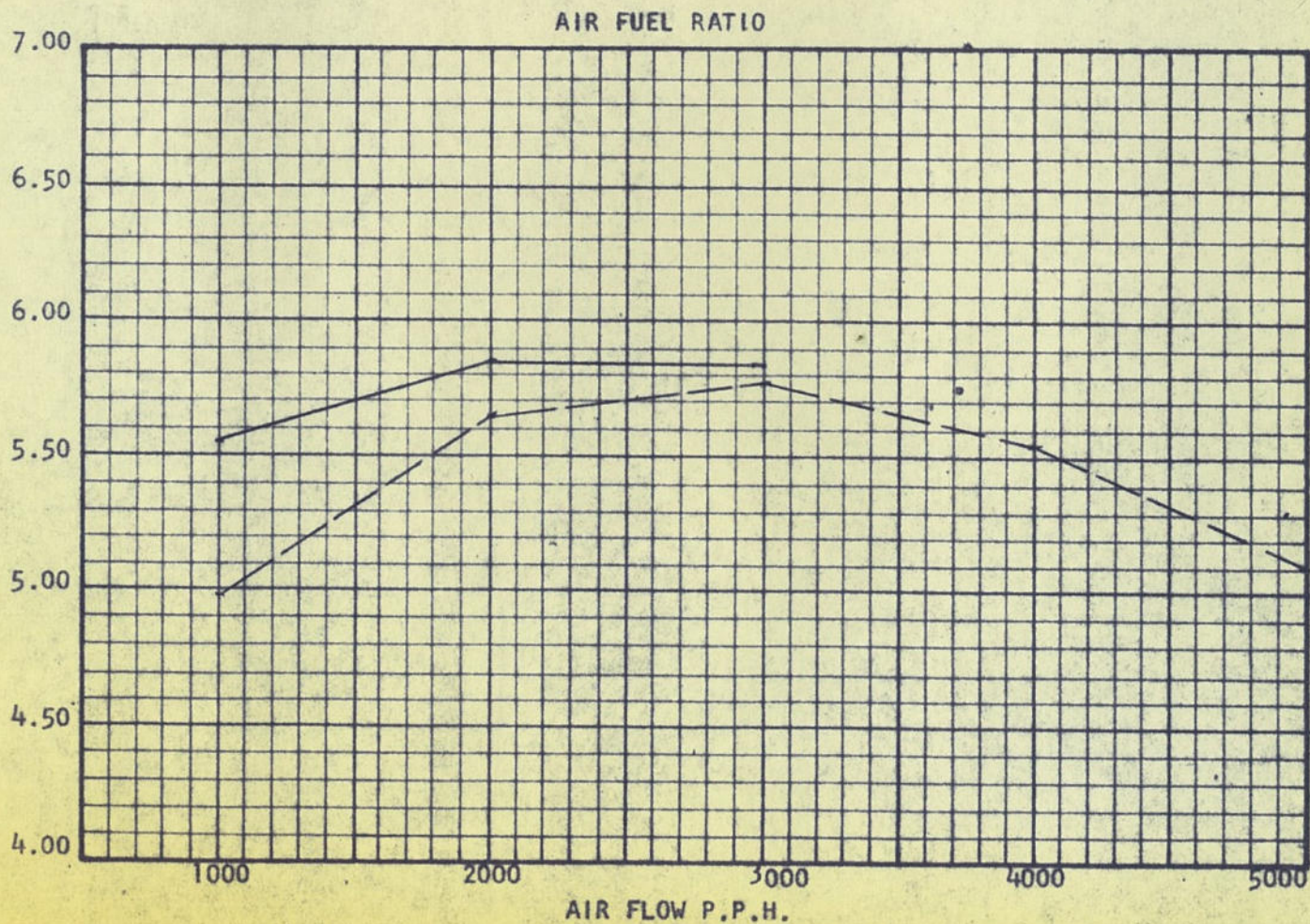
CONDITIONS AND OTHER SETTINGS: (1) I.C.O. IN FULL RICH POSITION. (2) WITH AND WITHOUT THE CONSTANT EFFORT SPRING. (3) 30 PSI FUEL PRESSURE.

WITHOUT THE SPRING

WITH THE SPRING

M.S.D.	AIR FLOW	FUEL FLOW	A/F RATIO		FUEL	RATIO	
3.1	1000	180	5.55		200	4.97	
12.7	2000	342	5.85		354	5.65	
29.0	3000	515	5.83		520	5.78	
56.5	4000				720	5.55	
103.0	5000				980	5.10	

NOTE: EFFECT OF CONSTANT EFFORT SPRING SHOWN BY DOTTED LINE IN THE CURVE BELOW.



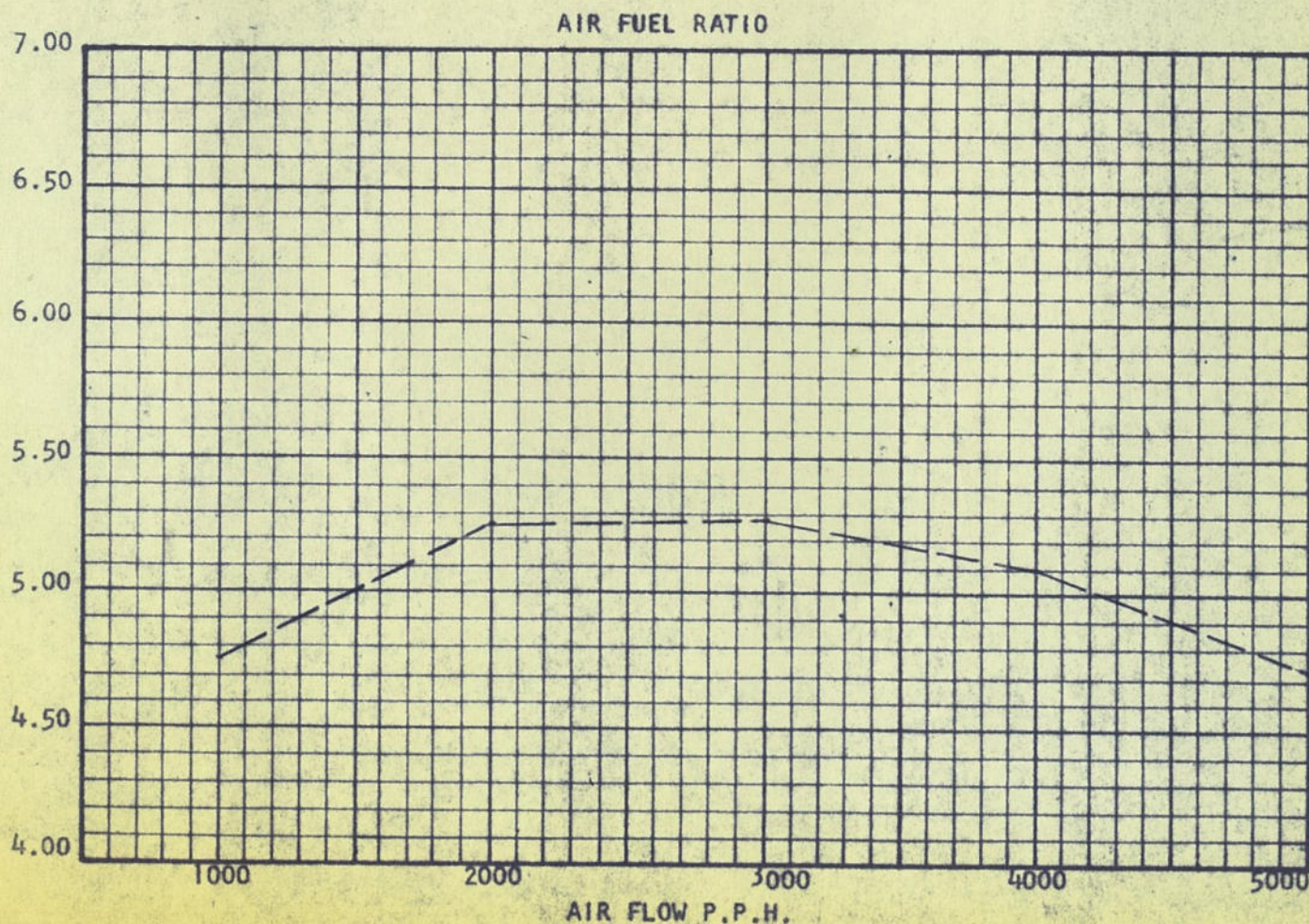
FLOW SHEET NO. 8

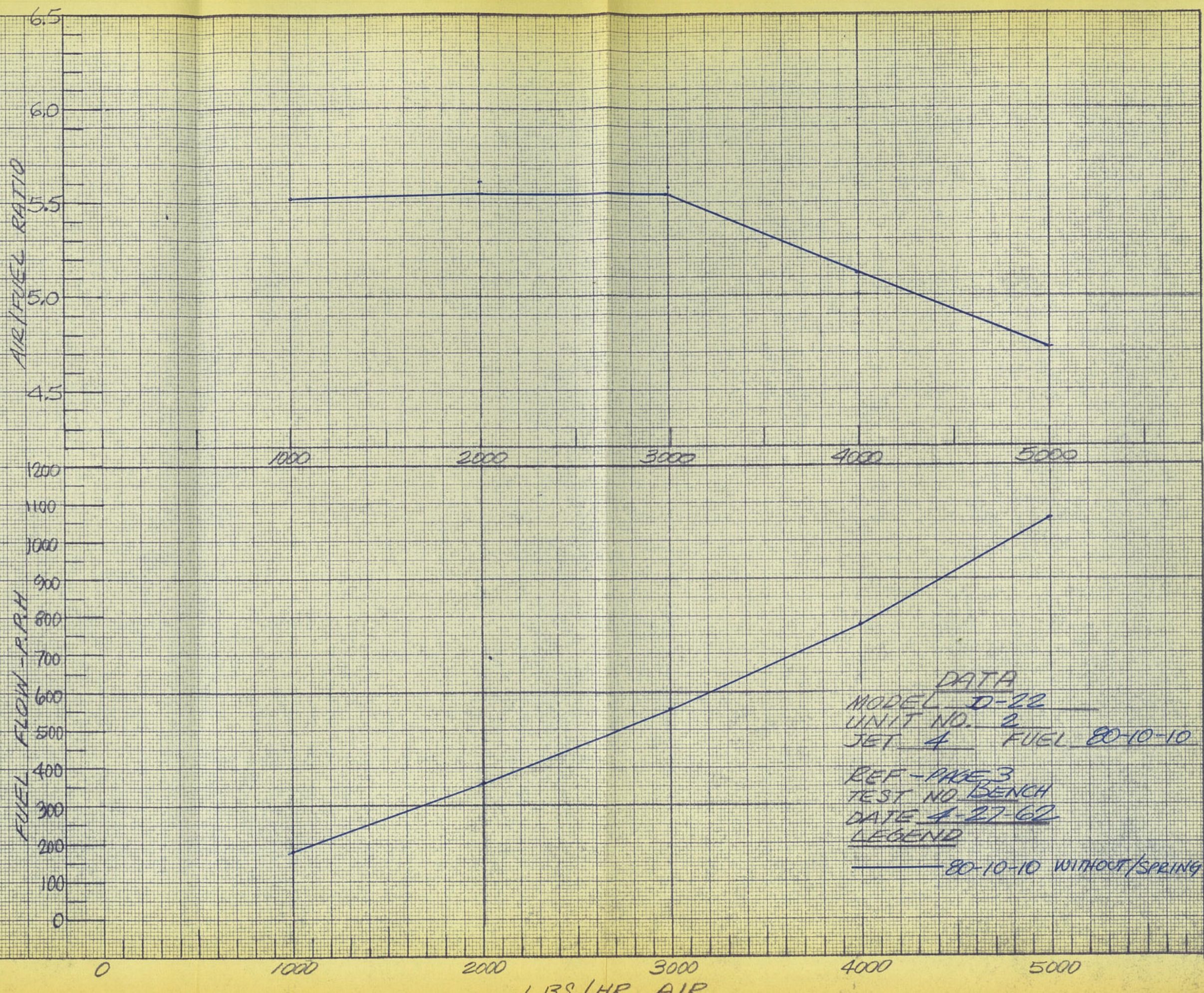
UNIT NO. 4 MODEL NO. SN-25 JET NO. 9 FUEL ACOHOL S.G. .794

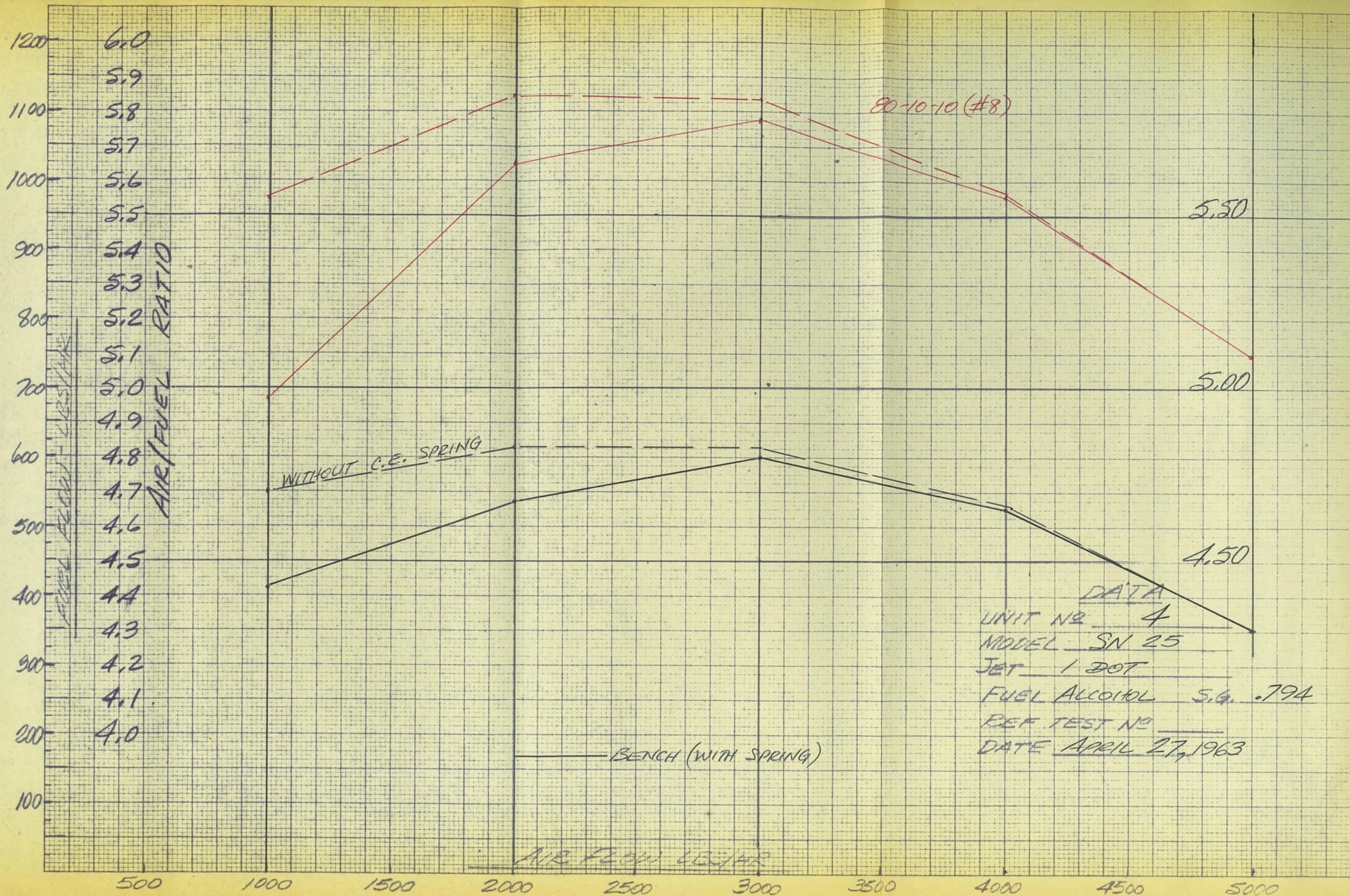
CONDITIONS AND OTHER SETTINGS: (1) I.C.O. IN FULL RICH POSITION. (2) WITH
CONSTANT EFFORT SPRING INSTALLED.

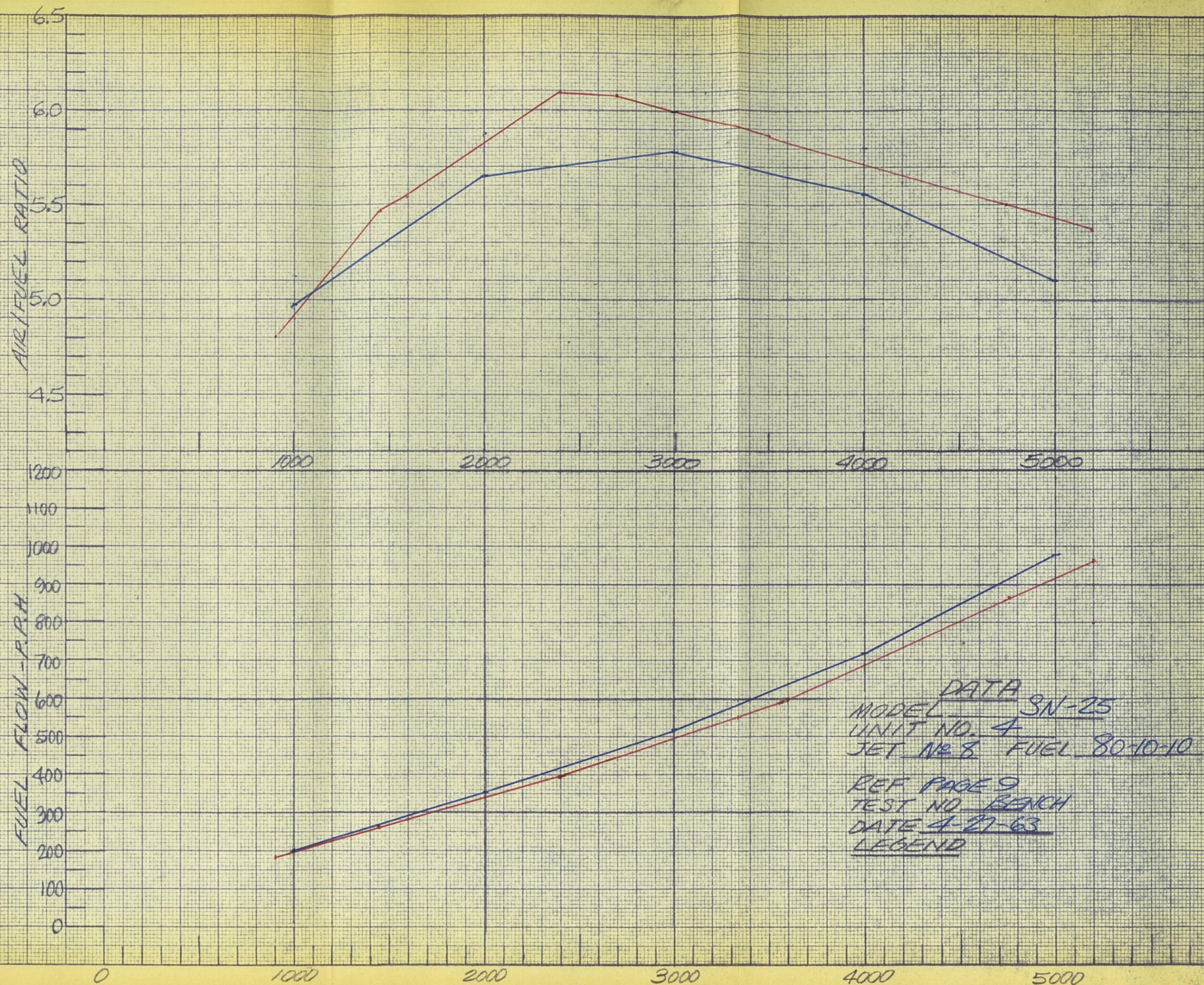
M.S.D.	AIR FLOW	FUEL FLOW	A/F RATIO				
3.1	1000	211	4.75				
12.7	2000	382	5.24				
29.0	3000	568	5.28				
56.5	4000	785	5.10				
103.0	5000	1060	4.72				

NOTE:









FROM: R. FALK
TO: ALL CONCERNED
DATE: 4-13-63

SUBJ: "BENDIX INJECTOR IDENTIFICATION"

INJECTOR NO 1 - MODEL SN-17

GENERAL DESCRIPTION THIS IS THE
2ND UNIT RECEIVED FROM
SO. BEND WITH A $2\frac{1}{2}$ " VENTURI.
CUT-OFF INLET FLANGE.

JETS: ALCOHOL - SIZE - .1520 & .082
- MARKED - 1 (ONE) DOT

80-10-10 - SIZE - . & .
MARKED - 2 (TWO) DOT

INJECTOR NO 2 - MODEL D-22 - SCRAP

GENERAL DESCRIPTION THIS IS THE
1ST UNIT RECEIVED FROM
SO. BEND WITH A $2\frac{1}{2}$ " VENTURI
THE "OLD STAND BY".

JETS: ALCOHOL SIZE - .1535 & .070
MARKED - 3 (THREE) DOT

80-10-10 SIZE - .1520 & .059
MARKED - 4 (FOUR) DOT

INJECTOR NO 3 MODEL SN-26

GENERAL DESCRIPTION THIS IS THE
3RD ~~UNIT~~ UNIT RECEIVED FROM
SO. BEND WITH $2\frac{1}{2}$ " VENTURI

JETS: ALCOHOL SIZE -
MARKED - 5 (FIVE) DOT

80-10-10 SIZE - .1435 & .073
MARKED - 1 (ONE) DOT

FUELS

1. AVIATION GASOLINE

Specific Gravity (Average)	.721
Weight, lb. per gallon	6.0
BTU per lb. - Net (AV)	19,200
Air/Fuel Ratio - Chem. Correct	15:1
Latent Heat Evap., BTU/lb.	140

2. METHANOL (Methyl Alcohol)

Specific Gravity	.794
Weight, lb. per gallon	6.6
BTU per lb. - Net	9,000
Air/Fuel Ratio - Chem. Correct	6.46:1
Latent Heat Evap., BTU/lb.	475

3. ETHANOL (Ethyl Alcohol)

Specific Gravity	.788
Weight, lb. per gallon	6.56
BTU per lb. - Net	12,050
Air/Fuel Ratio, Chem. Correct	9:1
Latent Heat Evap., BTU/lb.	365

4. ACETONE

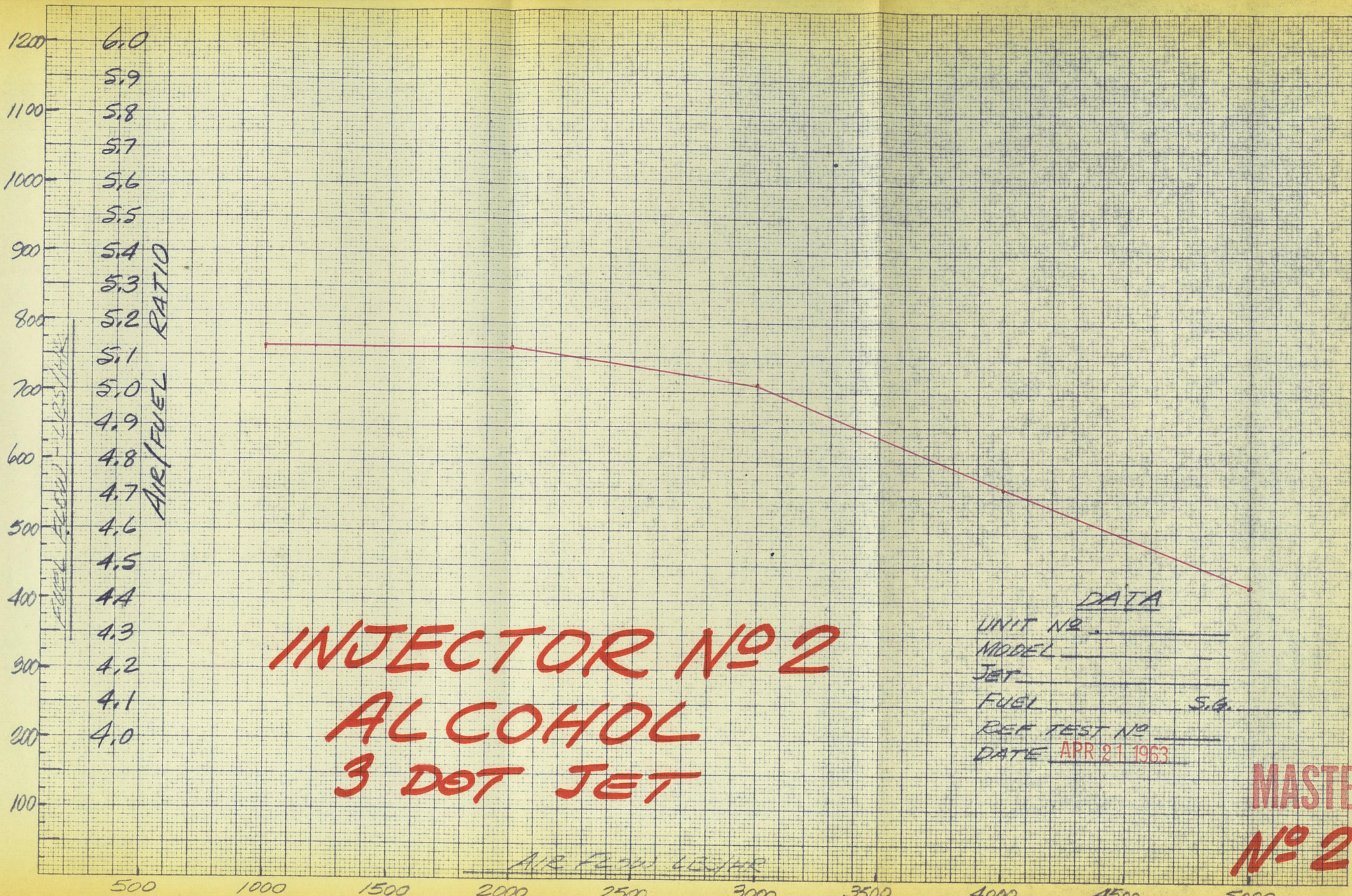
Specific Gravity	.79
Weight, lb. per gallon	6.56
BTU per lb. - Net	12,500
Air/Fuel Ratio, Chem. Correct	9.5:1
Latent Heat Evap., BTU/lb.	225

5. 80-10-10 (.80 Methanol-.10 Gasoline-.10 Acetone)

Specific Gravity	.786
Weight, lb. per gallon	6.544
BTU per lb. - Net	10,350
Air/Fuel Ratio, Chem. Correct	7.62
Latent Heat Evap., BTU/lb.	416

6. 70-20-10 (.70 Methanol-.20 Gasoline-.10 Acetone)

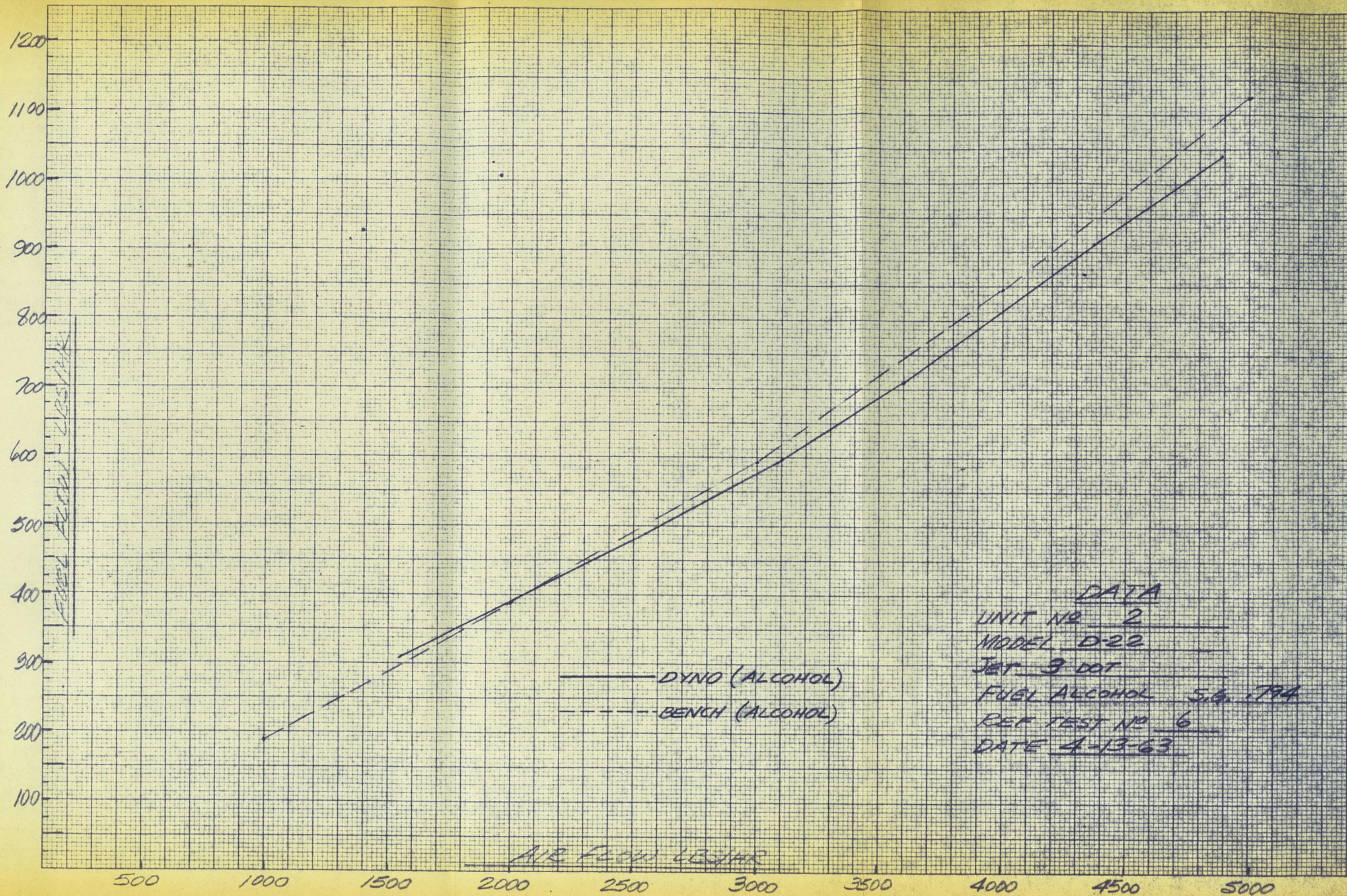
Specific Gravity	.779
Weight, lb. per gallon	6.476
BTU per lb. - Net	11,390
Air/Fuel Ratio, Chem. Correct	8.47
Latent Heat Evap., BTU/lb.	383

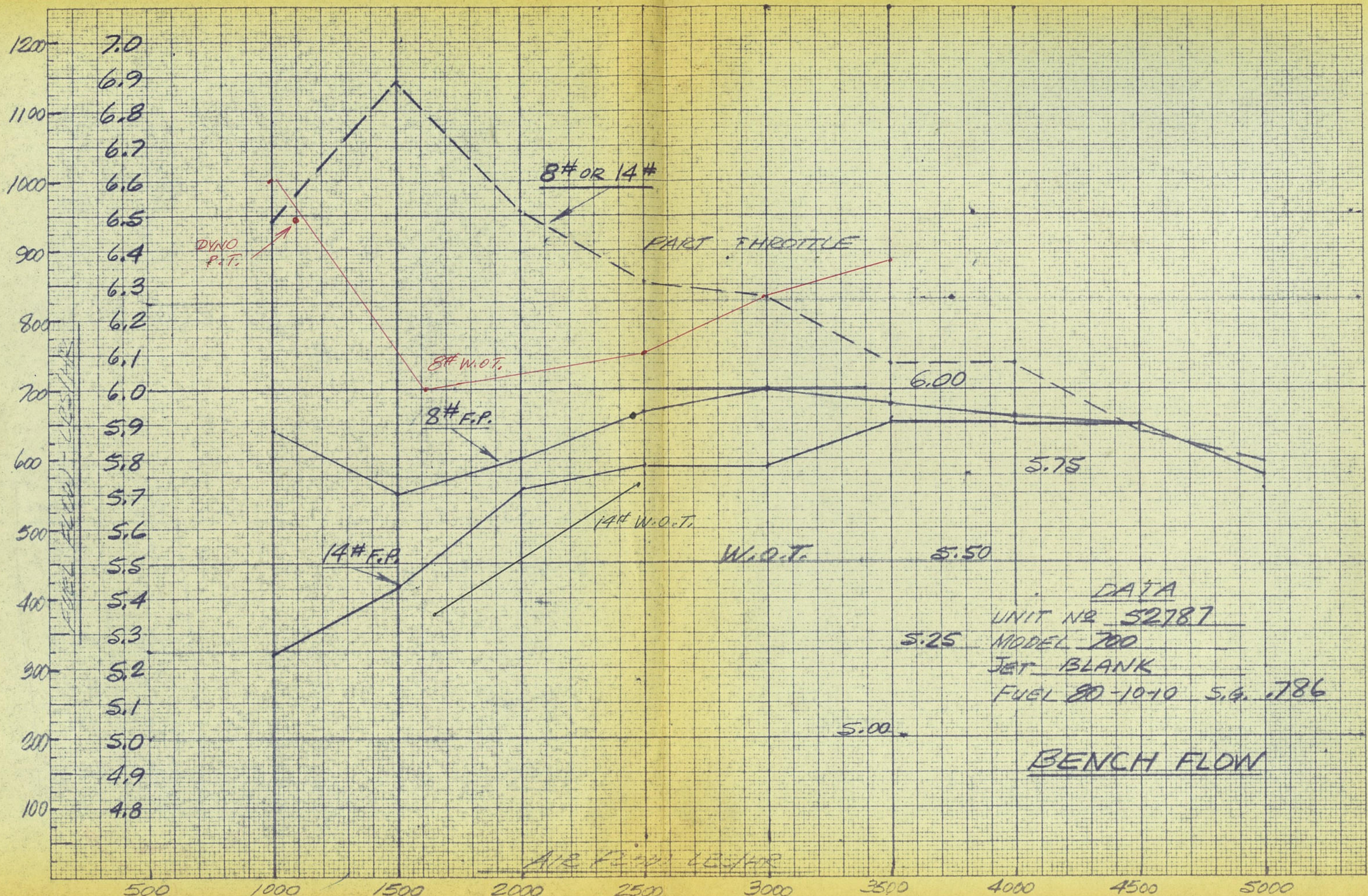


INJECTOR NO 2
ALCOHOL
3 DOT JET

DATA
UNIT NO _____
MODEL _____
JET _____
FUEL _____ S.G. _____
REF TEST NO _____
DATE APR 21 1963

MASTER
NO 2





56 @ 80
61½ @ 90
@ 100

$$\frac{y-30}{2} =$$

$$2(y-30) + x = y$$

24

24.5

$$2(y-30) + 30 = y$$

$$24-60+30=y$$

$$24-30=y$$

$$y+30=2x$$

$$\frac{y+30}{2} = x$$

$$100 + 2 \overline{)130} \underline{65}$$

GAGE	Correct Man	Actual	LEFT SURF 9
40	35	35½	114 30 84
50	40	41	111 2 109
60	45	46½	48 72
70	50	51	
80	55	57	
90	60	62½	
100	65	68	

WHEN THIS IS