

234

dfy

23.9 +21 38

4381  
82

6,337

6.4

$\frac{213}{212}$   
 $\frac{212}{9}$

.324 .123 .356 ⑤ SPC 2.610 ③ C+

$\frac{324}{325}$   $\frac{120}{122}$   $\frac{367}{362}$  20mm

462.3 -1.1 -34.8 -0.225<sup>5</sup> +42.0

+536 +334 -1842 -026

595  
325

450  
454  
⑤ 345  
450

110  
108  
110

2.615

11.64  
3

7

58551

HR2835

GC4534

$\frac{213}{212}$   
 $\frac{212}{11}$

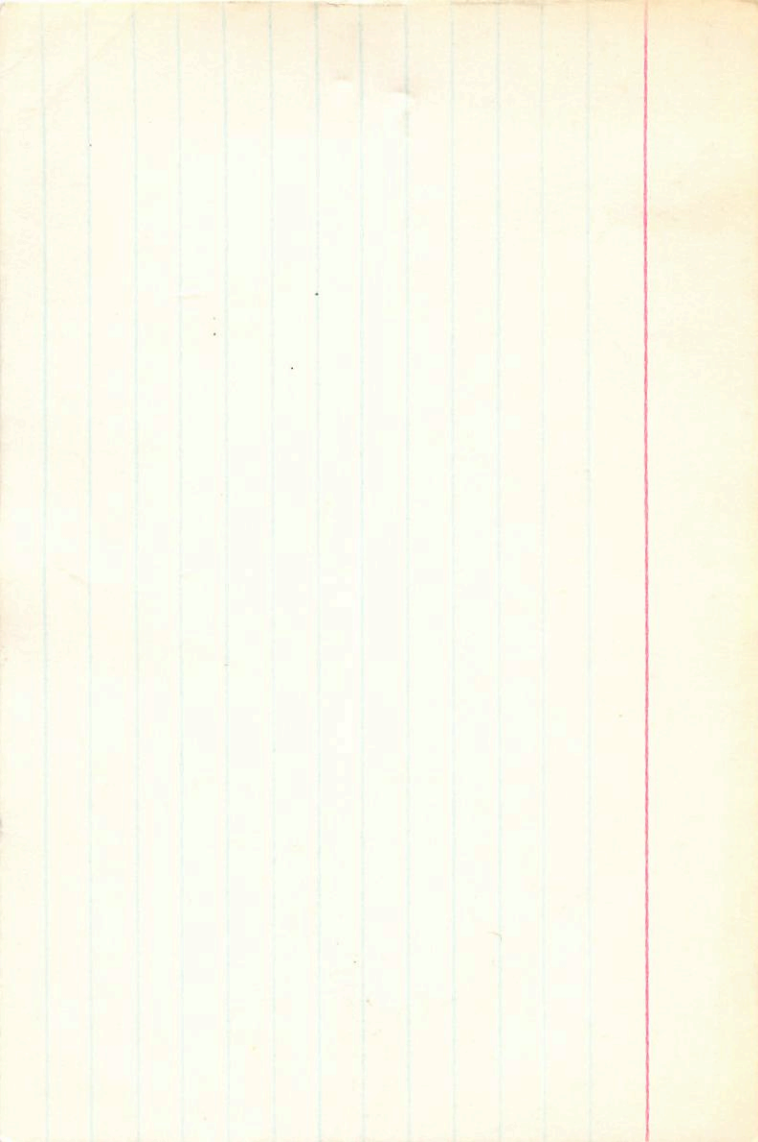
180150

2.80

THYR

SYSTEM

314-n8



58551 7 23.9 +21 88 6.4 def4 +47c <sup>SB</sup>

9934

4946 53.048 +905.2

7.4  
+216  
-348  
-14

-0225-15 -027.5 N30

-0225±3.6 -025±3.1

avg

70 +13

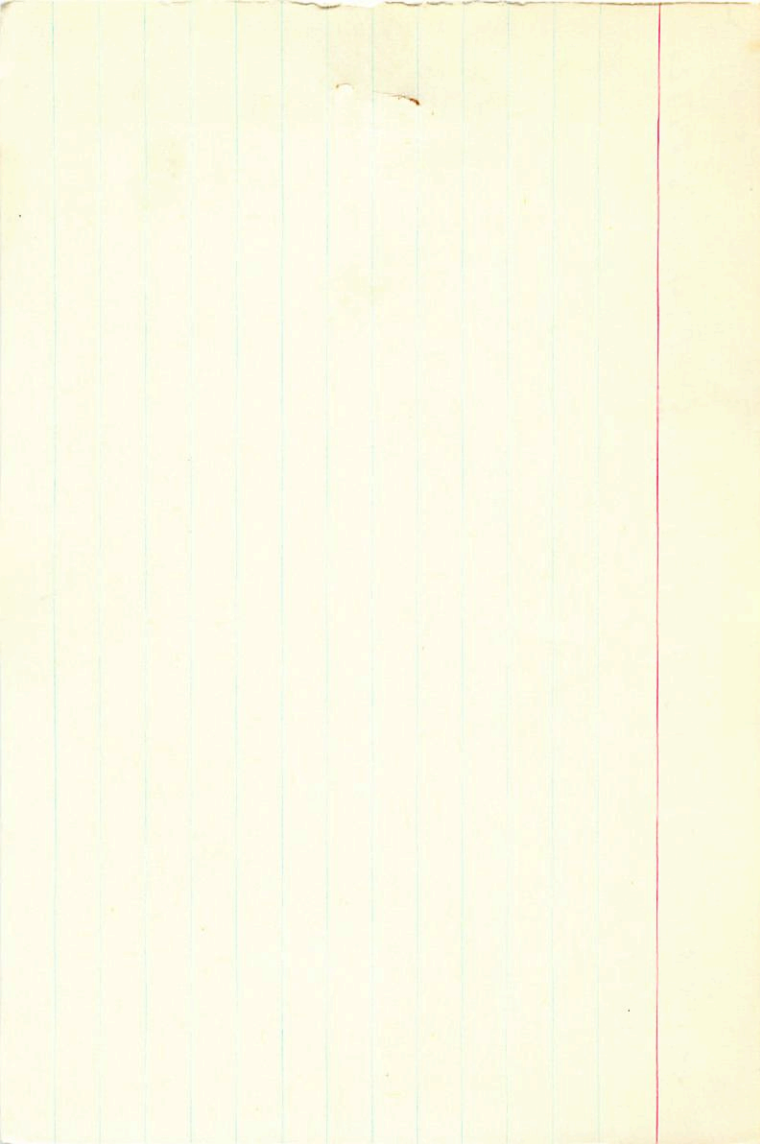
325 122 → 360 2610 -0235 ± -0187 ZC

324 121 341 2 -0174

324 121 354 2 -0160

358

324 -324-014



44495 (X)

35410

1107

0116  
086.3  
187.52  
11.40  
11.29  
11.29  
2E

7 23.3 -58 24 65.19

6.58 0.71

6.73 +0.71 +0.28 3E

6.53

11.40 +1.39 +1.29 2E

10.46 +0.69

87.99

206.0.53

49.0

7582 -5177 / 1631  
6520 8556 / 6534

DEC. : 7.400  
M. R.A. : -58.400  
M. DEC. : 0.000  
DISTANCE : 0.000  
MODULUS : 0.000  
RAD. VEL. : 10  
          : 0.000

q1 (U) : -0.375  
q2 (U) : 0.927  
q3 (U) : 0.003  
dU : 0.000  
U : 0.000

q1 (V) : -0.299  
q2 (V) : -0.118  
q3 (V) : -0.947  
dV : 0.000  
V : 0.000

q1 (W) : 0.877  
q2 (W) : 0.356  
q3 (W) : -0.321  
dW : 0.000  
W : 0.000

βC mi

7

27.4

408

23

+ 22.2

2845

$38\frac{1}{2}$

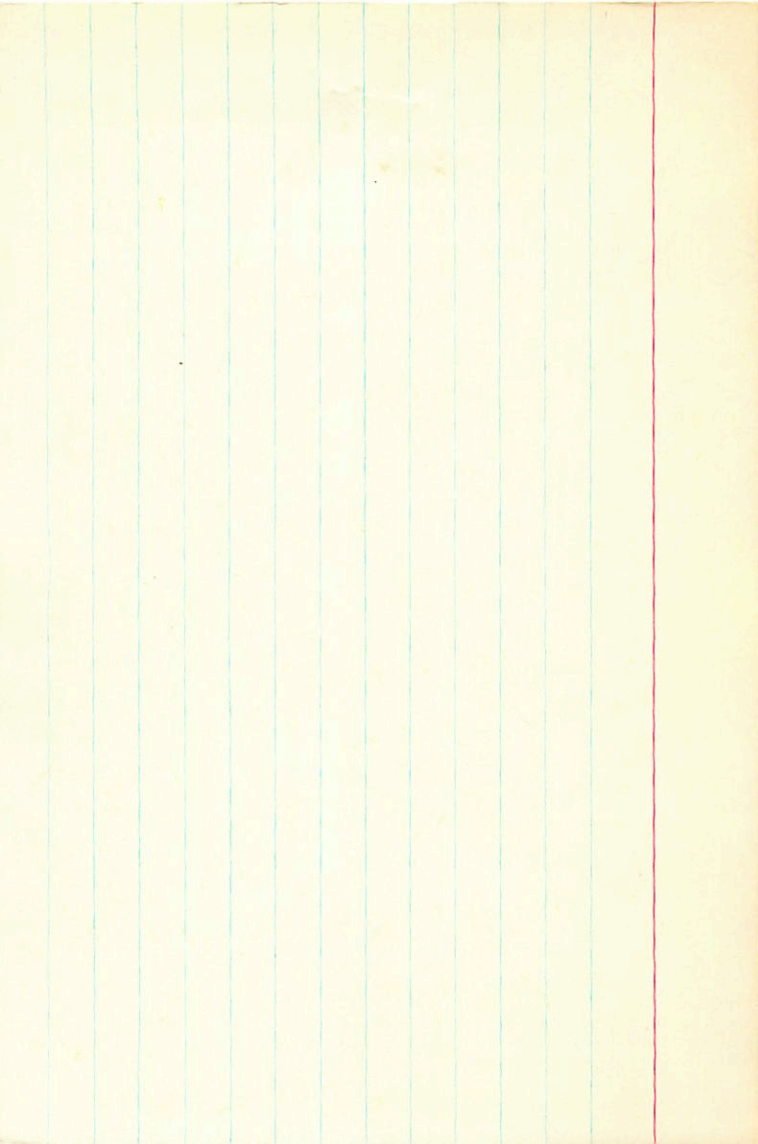
-050 -01200

-055 -02100

-055 -04000

-053 -041

17.50000





889

7

24.8

-34

50

+25.5(4) < 5

59027

8.03 + 96

(1.95)

RLP

" -0.38 + 1.034 CP

2



001  
002  
003  
004  
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094  
095  
096  
097  
098  
099  
100

2

7.400  
- 34.800  
- 46.800  
31.800  
5.300  
115  
25.500

- 8.375  
8.848  
8.373  
191.856  
31.549

- 8.299  
8.271  
- 8.915  
93.242  
- 12.632

8.877  
8.455  
- 8.152  
- 98.255  
- 14.232

2

$$\begin{array}{r} -0049 \pm 4.7 \\ -0044 \end{array} \quad \begin{array}{r} -089 \pm 3.7 \\ -069 \end{array}$$

58640 7 25.0 +45 01 6.9 g m 4 +25.58

9463

4961

1.124 1500.5 +45 0 28.51 1895-9

$$\begin{array}{r} 243 \\ \hline 1.367 \end{array}$$

$$\begin{array}{r} 9.74 \\ 51.64 \\ \hline 1.340 \\ \hline 1.00 \\ \hline 2.60 \end{array}$$

28.1

$$\begin{array}{r} 485 \\ \hline 242 \end{array}$$

$$\begin{array}{r} 1.14 \\ +035 \\ \hline 1.225 \end{array}$$

$$\begin{array}{r} -125 \end{array}$$

$$\begin{array}{r} 4.51 \\ \hline 33.32 \end{array}$$

$$\begin{array}{r} 30.8 \quad 1927.3 \\ \hline 52.55 \end{array}$$

$$\begin{array}{r} 32.92 \\ \hline 1.90 \end{array}$$

$$\begin{array}{r} 31.02 \end{array}$$

$$\begin{array}{r} 31.1 \\ \hline 0 \\ \hline 31.10 \\ \hline 91 \\ \hline 31.09 \end{array}$$

1930.0

$$\begin{array}{r} 31.06 \\ \hline 2.26 \end{array}$$

$$\begin{array}{r} 573 \\ \hline 2816 \\ \hline 32.7 \end{array}$$

3



7.400  
48.000  
-69.000  
-79.000  
7.500  
316  
25.500



$$\begin{array}{r} -0008 \pm 3.5 \\ +0002 \\ \hline \end{array}$$

$$\begin{array}{r} -002 \pm 3.1 \\ +006 \\ \hline \end{array}$$

$$n_1(0.0)$$

59219

7

25.1

-50

55

5.1

9166

+7.88

4962

9964

4.862

1907.4

-50 55

1.01

19043

$$\begin{array}{r} 34 \\ \hline 896 \end{array}$$

$$\begin{array}{r} +09 \\ \hline .92 \end{array}$$

$$\begin{array}{r} 4.925 \\ - .22 \\ \hline \end{array}$$

$$\begin{array}{r} 0.168 \\ +3 \\ \hline 0.165 \end{array}$$

0 0.168 1940.27

903

$$\begin{array}{r} +3 \\ \hline 0.165 \end{array}$$

$$\begin{array}{r} 906 \\ \hline +010 \end{array}$$

40.2

0.53

1954.97

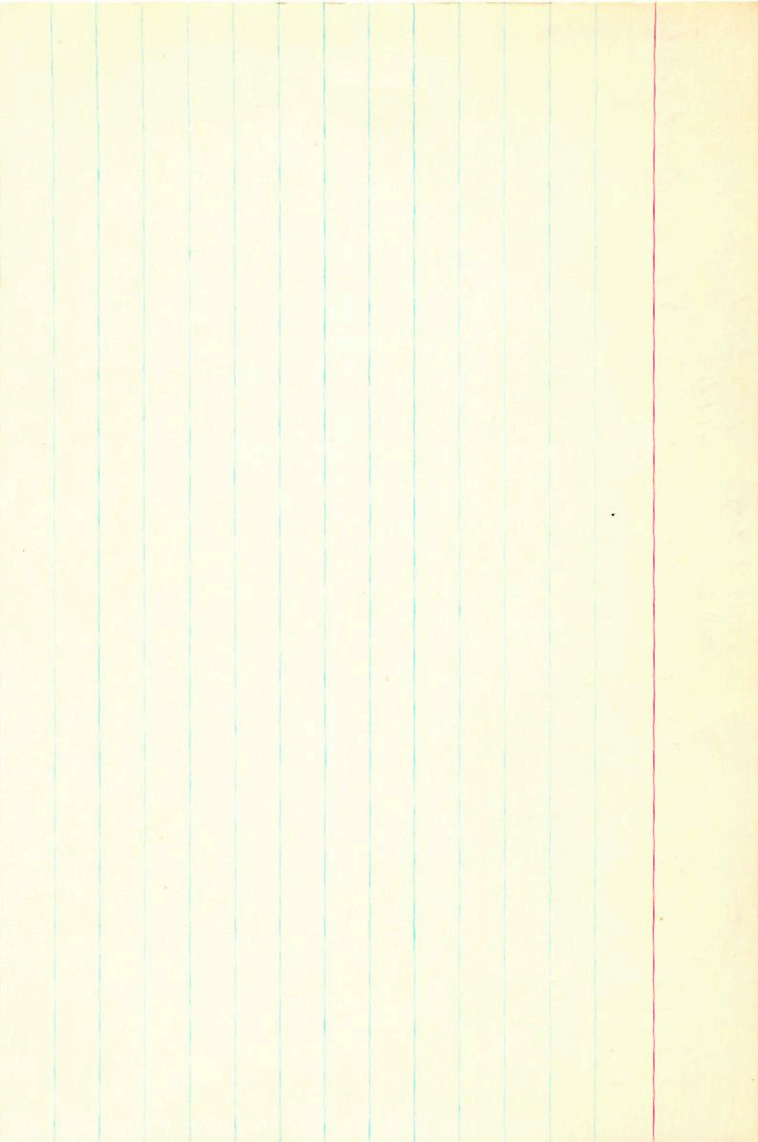
$$\begin{array}{r} 4.920 \\ - .12 \\ \hline 4.80 \end{array}$$

$$\begin{array}{r} -14 \\ \hline 0.67 \end{array}$$

$$\begin{array}{r} 9524 \\ \hline 47.6 \end{array}$$

$$\begin{array}{r} 0.66 \\ \hline +.26 \end{array}$$

43.3



2854

6

288

11

27

425

① 730.60  
 ② 5414  
 ③ 7206

2800-2820

2800-2820

2810  
 [2800-2820]

-1002 8728  
-1003 228  
-1004 233  
-1005 873  
-1006 873  
-1007 873  
-1008 873  
-1009 873  
-1010 873

26.58 TT  
30.605 873  
25/100  
30.504  
14  
53

30.586 340 15.15  
26/100  
14.52  
14.52  
14.52  
14.52

14.59  
14.61  
14.65

62439  
1472

2.407  
26.212  
30.613  
15  
6.26

1472

4205

1472

1472

1472

1472

+5001435

7 26.2 +50 04 d.f. 3 → 6584(3)

233399

9.49 +0.68 +0.14 G → E R

W4977

$\delta = .09$

$\Sigma 1091$  3057062

$\Delta m = 0.5$  29" *opt. read*

$p(0) = -1.18 W(3)$

-73 -14 -25 .020

~~+050 +009~~ X

-78 -18 -16 .010

~~+5004~~  
~~+055~~ ±1  
~~+018 ±1~~

-71 -19 -26 .010  $\mu$  025, 000

-79 -10 -14 .010  $\mu$  050, 025

-83 0 -11 .010  $\mu$  050, 050

P

7<sup>n</sup> 26

08.42

+500 Off. 48.6

→ 35.

P 105

09.99

+500 04 23.7

S 9.9

360  
233

2869 7 26.7 -37 42 6.58 A1TB

1018-050 7.4  
 1019 0493 37.7  
 -22  
 45  
 5.75  
 1017-048  
 1018-048  
 1019-048

9754 -2291 0506  
 -2197 -9334 -1056  
 1.4  
 0.107  
 4.32

1017-048 1018-048 1019-048  
 1017-977 -971-238 1018-048

4



W

7.400  
-37.700  
-22.000  
-48.000  
5.750  
141  
0.000

-0.375  
0.866  
0.330  
-166.106  
-23.463

-0.299  
0.224  
-0.928  
-26.338  
-3.720

0.877  
0.447  
-0.175  
-174.035  
-24.583

-0012 ± 4.4  
-0001  
-010 ± 4.8  
-0008

59311 7 26.8 -01 48 5.89105 -4.98

4988 -0006 -000

10017 46.963 1906.6 48 3.28 1910.7

$\frac{052}{47.013}$   
-009 -000  
012

2.89  
+ 39  
2.89

31.154  
15.870  
 $\frac{024}{47.024}$

5940 1933.17

29.1

-387 511 748  
-289 723 427  
874 465 133

$\frac{017}{017}$   
 $\frac{12}{029}$   
 $\frac{013}{013}$

46.983  
13  
994

3.34  
+ 23  
3.13

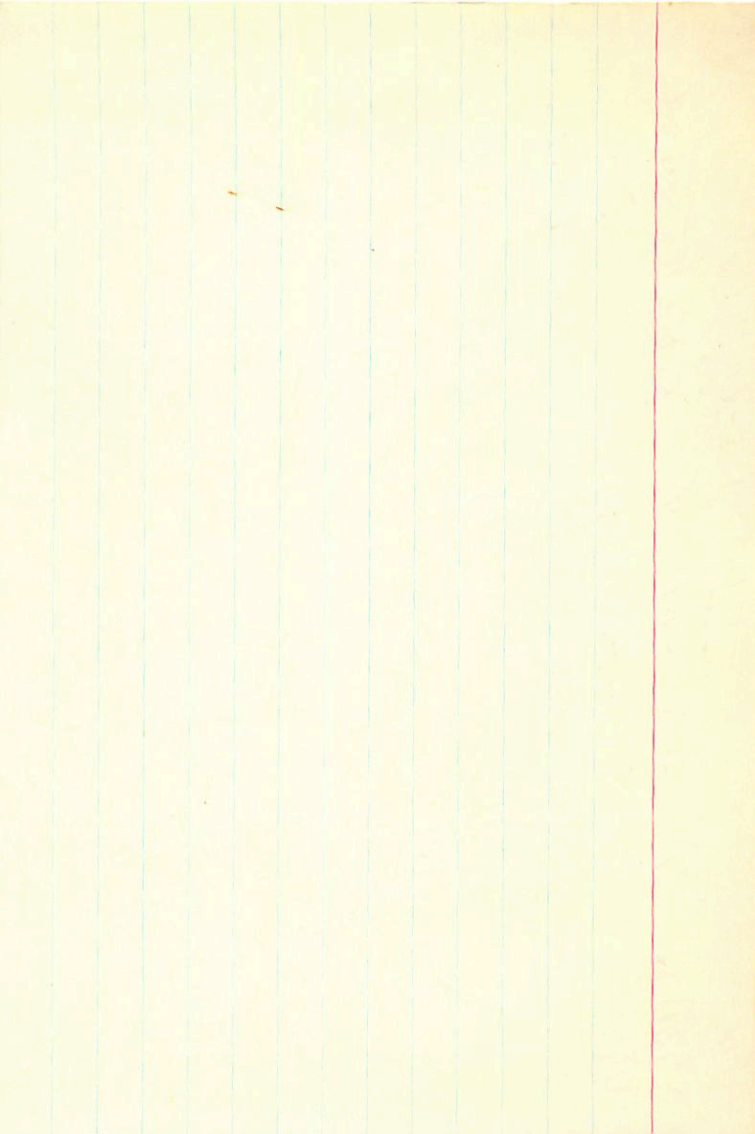
-10 -3.8 -5  
-3.0 -3.1 -6  
-8.2 -0.6 -9

7135  
35.7  
25.0

-0573 -0220 -0593

-0077  
-0220

002



6 CMA

7 27.0 t12 07 -15.4a

2864

7000 - 0206

000 - 019

54244

$\frac{+1005}{-1018} - 0140$

0280  
08A

4943

4.61  $\frac{+1.23}{K22II}$

484 - 417  
466 - 440

10024

0000 59 - 022 N30  
-0002 ± 1.6 - 018 ± 1.6 GC → N30

10001 - 020

7.45  
+12.1

-00011 - 0220 N350

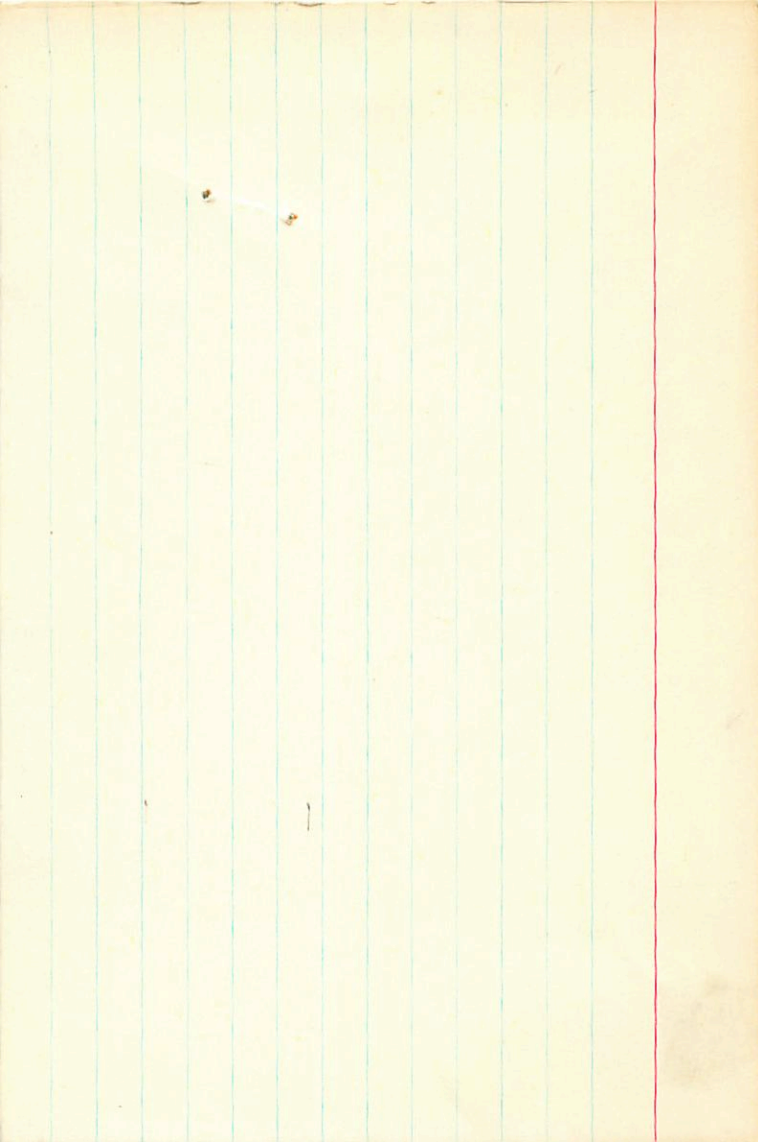
-0009 - 0220

1110

$\frac{+001 - 026}{-001 - 026}$

-1  
-20  
5.35  
-15.4

5000 - 8000 - 453 - 8415



6Cmi 7 27.0 +12 07 9.123 -15.49

HR2864

000

W4993

4.60

+1.23

R211

000 -01966

000 -022N

22A(14)

31A(5)

000 -017P

000 -02366+

929-371 210978 000-023 -15.4-005 -3.2-194

0 005 0 002 -009 024<sub>1</sub> -15.1 + 8.6-14.0 009

+5.3-11.3-14.8

$\frac{-12.3-3.3-6.9}{}$   $\int$

015

44.9-12.4-10.3

$\frac{-15.3+0.1-7.1}{}$

52

+8.2-12.5.4

$\frac{-14.2+1.9-6.3}{}$

017

+5.1-12.7-5.0

44.9+1.4-6.5

-15 +1 -7

016

59381

29 87  
7 27.0

-0006 ± 8.3  
-0003  
-0001  
10 13 6.0

13 6.0 915 -7.38

4991

-0004 -020

10022

59.605 1904.8 -10 13 20.88 1900.8

166

27  
632

-006 -027 1.48  
19.40

F<sub>10</sub> = 4.20

-389 612 689

48.365

HR 2867

15.45

1935.68 P<sub>10</sub> 485

-389 629 721

11.242

3.25

P<sub>5</sub> = 447

875 479 066

59.607  
2  
605

18.73

3054 F<sub>5</sub> 3.60  
610

+0111 -0638

623  
621

29.8

-1.20

19.72

+0083 -0656

59.610  
15

-019

67.50

19.93

19.32

-0249 -0500

625

59.600  
24  
620

19.84  
-9

19.50

20.28

1933.51

6919  
34.6

-0527 -8.7 -5.0

625

19.93

+27

M(I)<sub>5</sub> + 1 = 1.5

33.8

-0573 -4.5 +5.3

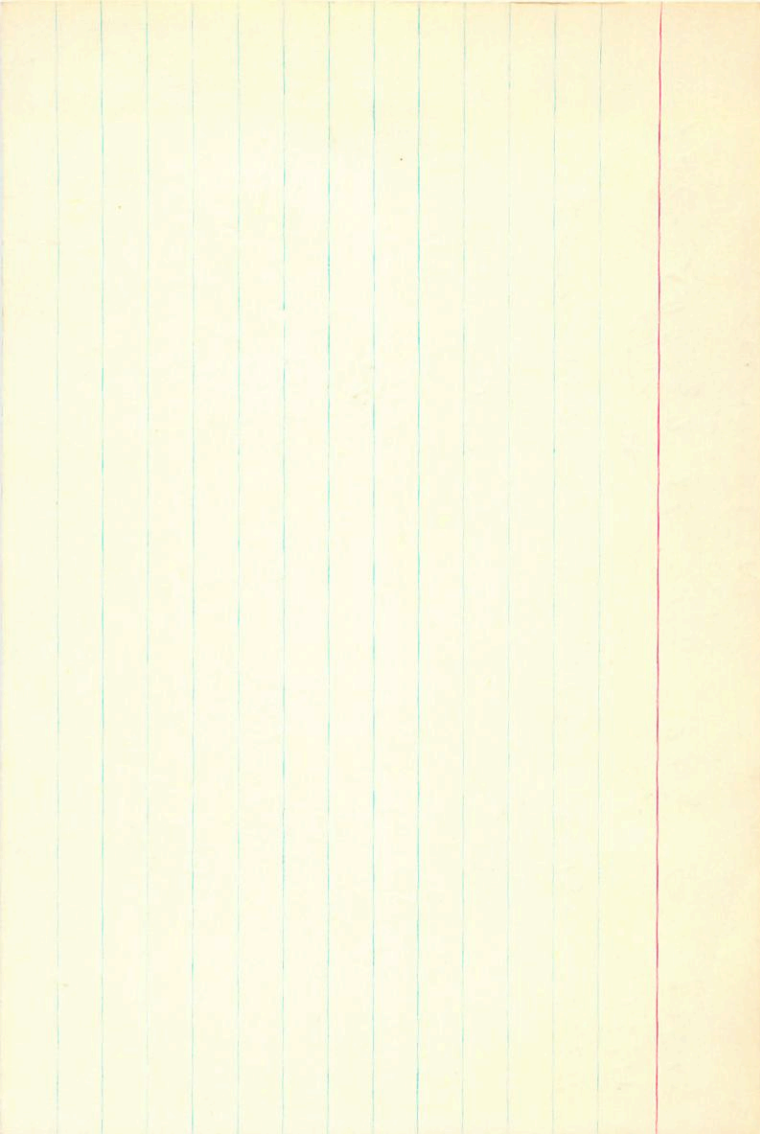
625

9097 -1152 -6292 7747

0209 +0092 -7.5 -2.30060

6.10





6.03 + 98(1.58) Corp

59438

7 27.1 -14 53 F4E -7 356

6610027 + 1000000

(var)

$-255 \pm 3.1$   
 $-27.86$  1845.9  
 $\frac{13.80}{14.06}$

$-0128 \pm 44$   
 $-0128$

$5.320$   
 $1902.3$

$\frac{611}{5.931}$   
 $5.9 \left\{ \begin{array}{l} 2.5 \\ 7.8 \end{array} \right.$

$-0128 - 250$

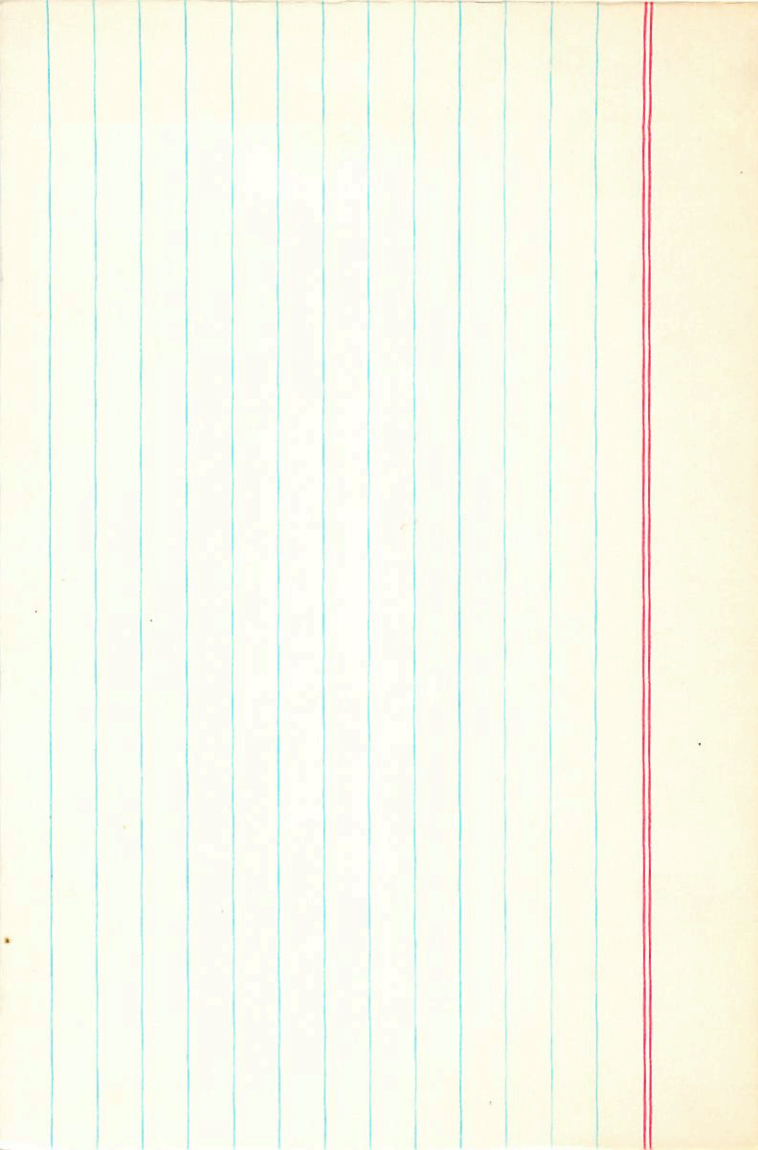
-180

$5.453$   
 $+$   
 $\frac{4}{457}$

$24.46$  1939.20

$\frac{var + 26}{24.70}$

$316$  103 089 24.70  
 J12 1000



+0004 ± 12.2  
-0005

-046 ± 11.3  
-060

58917 7 27.1 +62 36 6.8 A0 +1.58

4994

10025 3,574 1913.7 +62 36 28.13 1912.4  
$$\begin{array}{r} -0.15 \\ \hline 3559 \end{array}$$

46.67

17.062

$$\begin{array}{r} 3.237 \\ -1.9 \\ \hline 5.137 \end{array}$$

$$\begin{array}{r} 3.522 \\ -1.5 \\ \hline 5.022 \end{array}$$

3.492

3.444

$$\begin{array}{r} 1.044 \\ \hline 3.436 \end{array}$$

21.9

$$\begin{array}{r} 5.477 \\ \hline -0.172 \end{array}$$

$$\begin{array}{r} 32.13 \\ -1.118 \\ \hline 1926.1 \end{array}$$

31.12

$$\begin{array}{r} -2.32 \\ \hline 28.80 \end{array}$$

$$\begin{array}{r} 28.75 \\ +2.5 \\ \hline 29.25 \end{array}$$

29.0

28.75

$$\begin{array}{r} 28.66 \\ -1.14 \\ \hline 28.50 \end{array}$$

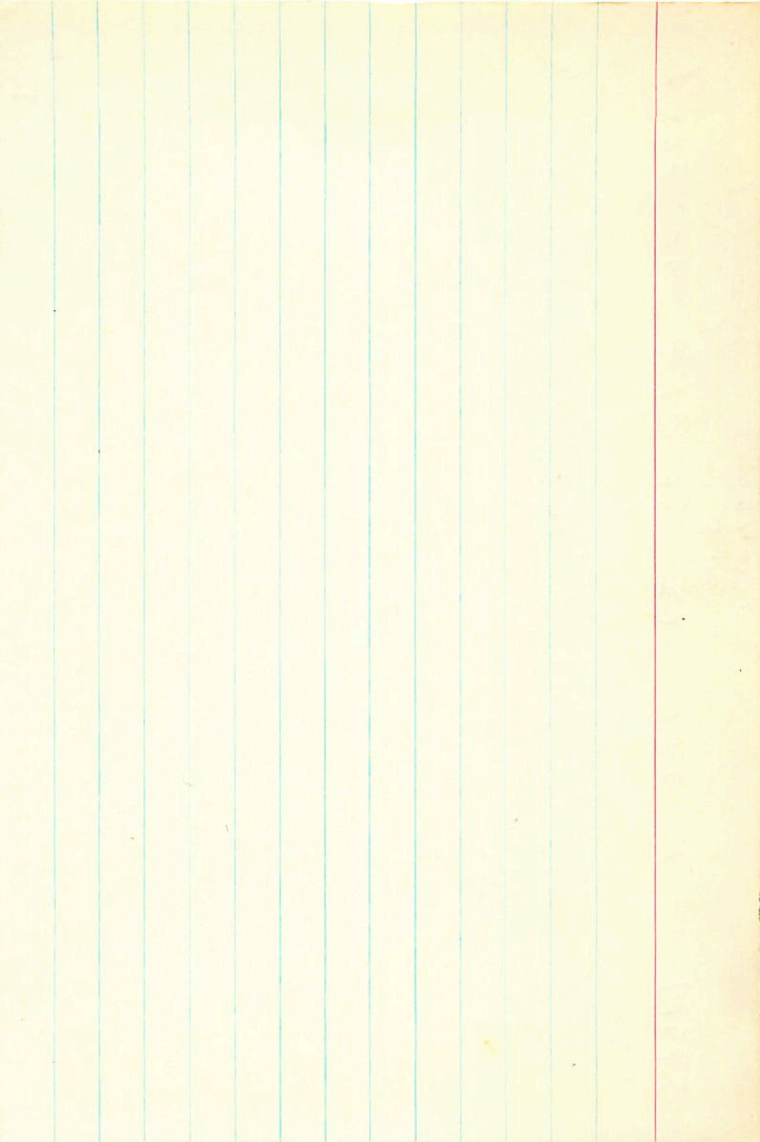
7113

579

$$\begin{array}{r} 35.60 \\ \hline 24.2 \end{array}$$

1944.63

$$\begin{array}{r} 28.50 \\ \hline 1.14 \end{array}$$



-0001 ± 5.3    -005 ± 3.3  
-0010            -0010

59604    7    28.2 + 8    39    7.2    df=2    +23.86

5004  
10048

13.583    18973    + 8    39    29.73    1882.8  
-004  

---

587

34  

---

30 07    515

13.526  
25  

---

551

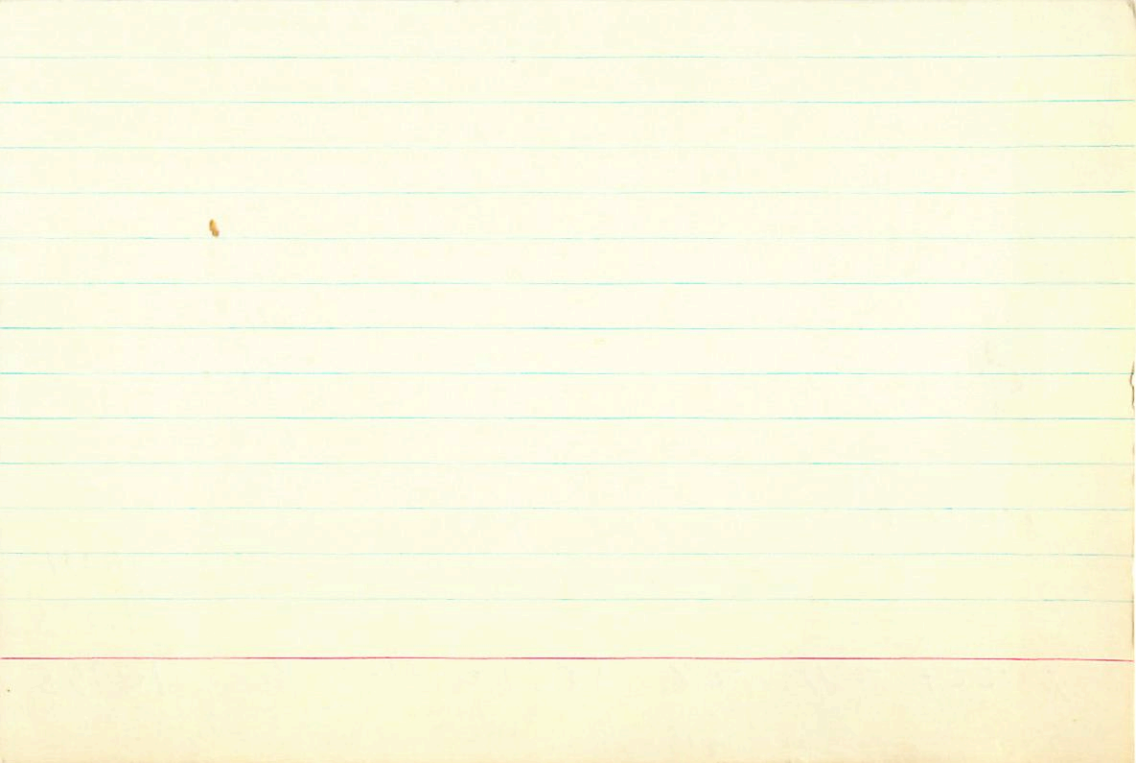
29.09    1934.3  
15  

---

29.24

-0.36

-0.83



55643

8201056

285.8 + 27 37 • PL + 418

780 + 224

8.03 + 0475 ① porch

~~1004 - 0024~~

+003 - 0024

+ 3 - 2  
7006 - 004

+0.003

-0003 - 009 bal in

- 2 0  
-0005 - 009

+410

-007 - 009 584M.

96

680 705

+04

-396 116 911

+0181 - 0049

+0082

+42.5 +37.4

642

102

-283 928 - 241

+0044 - 0396

-0302

-27.7 -9.9

500

345

874 353 334

-0260 - 0150

-0440

-12.2 +13.7

345



112869

59764

5017

10079

$$11.594$$

$$\frac{12}{606}$$

6.52+100+69①

6.10+0.36⑤

574

523

⑤.3

$$11.608$$

$$\frac{+26}{634}$$

$$\frac{613}{+007}$$

28.5

$$-00005-0415$$

$$-00015-040$$

-0021

$$\boxed{-001-038}$$

$$-0003 \pm 12.7$$

$$+0002$$

$$7 \quad 29.2 \quad +12 \quad 46$$

$$-043 \pm 10.6$$

$$-040$$

$$6.6 \quad 6-8 \quad +59.08$$

$$1909.1 \quad +12 \quad 46 \quad 8.38 \quad 1906.5$$

$$\frac{1.87}{10.25}$$

$$9.07 \quad 1435.0$$

$$\frac{15}{9.22}$$

$$8.70 \quad 1940.10$$

+8

$$\frac{8.78}{9.00}$$

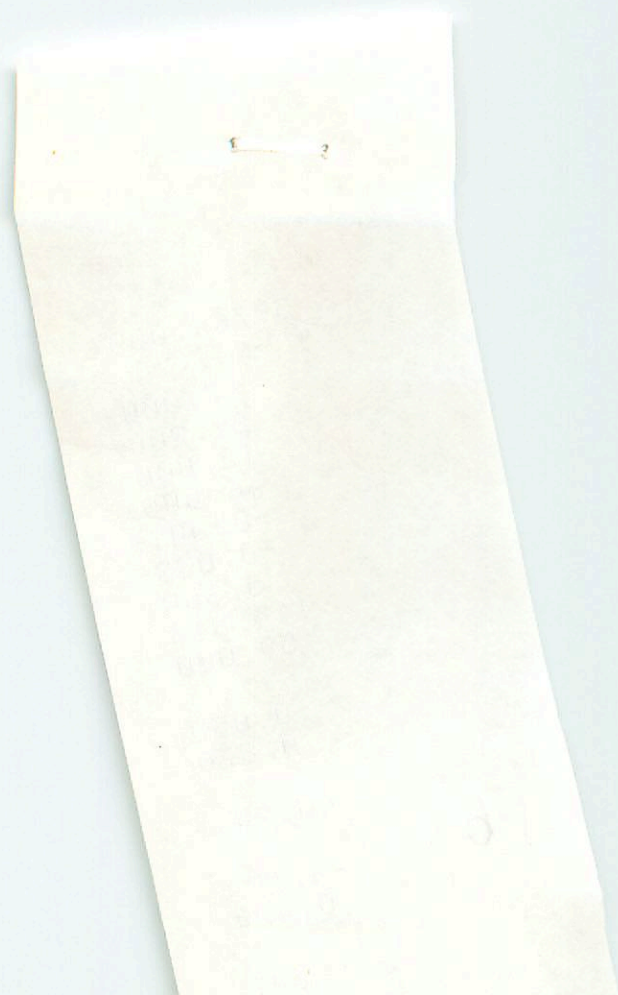
$$\frac{-0.44}{-1.25}$$

$$75.10$$

$$\frac{37.6}{31.1}$$

31.1

b



59764.000\*

7.000\*

29.200\*

12.000\*

46.000\*

-0.001\*

-0.038\*

5.300\*

114.815

59.000

-0.052

0.870

6

45.341

-0.153

-0.424

-42

59881 7 29.5 +2 01 5.3 A8 +29.18

5019

10085 30.085 - 1908.5 +2 1 18.96 1904.3  
 $\frac{037}{122}$

30072  
 $\frac{23}{95}$  20

28.2

30.101  
 $\frac{10}{111}$   
 $\frac{103}{-019}$

18.84 1934.5  
 $\frac{24}{98}$

18.43 1938.56  
 $\frac{+28}{18.71}$  37 73.1  
 $\frac{36.1}{18.90}$  32.0  
-1.20

-0009 +2.3 -003 +2.0  
-0007 -006

TV Syn

07

29.9

+47 54

-4.3

-7②

9.6'

over 4005 Under

1.1

7



67 New

-0004 ± 2.8  
-0011  
-010

60081 7 30.6 +15 45 6.7 96.8 + 55.38

5029

10103 33.718 1902.1 +15 44 52.68 1896.9  
$$\begin{array}{r} +19 \\ \hline 737 \end{array}$$

53.16  
52.74  
$$\begin{array}{r} 21 \\ \hline 227 \end{array}$$

33.680  
$$\begin{array}{r} 23 \\ \hline 703 \end{array}$$

1932.7  
52.52 - 1938.36

35.0

33.677  
$$\begin{array}{r} 17 \\ \hline 694 \end{array}$$
  
$$\begin{array}{r} 699 \\ \hline 038 \end{array}$$

52.68  
$$\begin{array}{r} +16 \\ \hline 16116 \end{array}$$

33.673

52.40 1940.10 37.1  
$$\begin{array}{r} 20 \\ \hline 40.2 \end{array}$$

$$\begin{array}{r} 24 \\ \hline 699 \end{array}$$

52.60

5-2.76 - 40



8

60156 > 30.6 -6 45 120 -46.7 2st  
-52d1

7.29 +1.2 +1.05 1.85

+504 -057 V  
+ 5 + 7

+509 -050  
0 -1

+509 -057

2

7.500  
15.750  
-10.000  
-10.000  
6.000  
150  
55.300

-0.396  
0.253  
0.883  
6.046  
49.768  
-0.283  
0

9





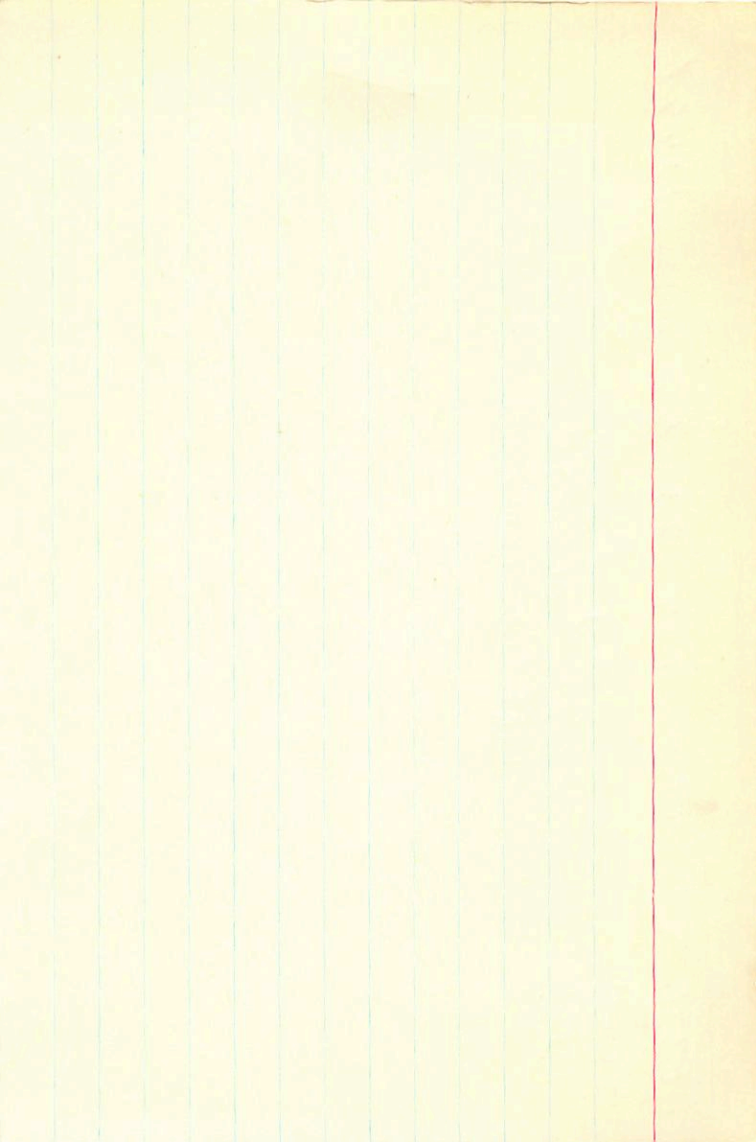
60336 7 32.0 +24 23 7.9 g m<sub>2</sub> +24.96

5049

10136

-0002 " -008 N30

-0008 ±5.6 -023±4.4 GC → N30





W5050 } 32.0 + 21.0Y # -5.5a

600137

474 474

-030 + 008 BC

4060316 472 492

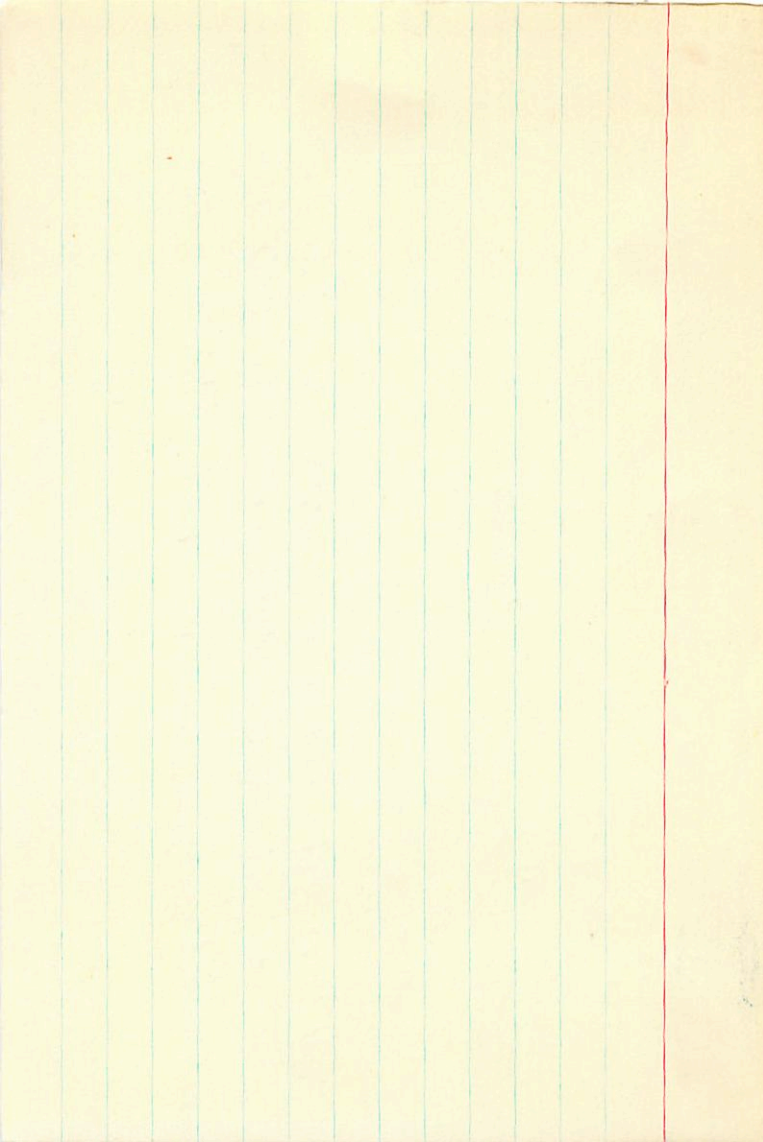
-0023

14R 2594 .1 037

-404 014 914 +0575 0 +0575 +6.2 -5.0 / +1.2

-256 950 -136 +0407 +0360 +0767 +8.5 +0.7 / +9.2

872 308 380 -1240 +0118 -1122 -123 -2.1 / -14.4



637 209 125 268 1000  
205 800  
267 715

32.1 + 43 05

412898

60330 10.2

-024 -052

$\boxed{-025 -050}$

0545

6378 -4648

+0006

7707 -8869

~~4009~~

0019 24.5 -05420.4

0089

3431 98.854

780

$\frac{780}{3711}$

5245

25.127 2.06

$\frac{90}{217}$

25.161

$\frac{25}{136}$

$\textcircled{58.02}$

3394

$\frac{71}{3393}$

-00165 -054

-00150 -0576

-0208

$\boxed{-022 -050}$

350

60584/5

7 32.2 -23 2/

2909/10 14R

10144/5 6C

AB 5.09 403 +03 C

5.87 +0.45 -0.025	①	1.70	2.176	②	1.14 2700 N
5.83 285		1.74	4.74		
1.279		1.59			
5.86 289		1.12	1.427	2.637	① 5942

5.84 289 171 475 2.670

~~1.284 1.65 4.53 2.637~~

5.85 283 171 448 2.665	①	1.272	1.165	4.413	
5.87		1.76	1.74	2.439	① 5960
5.82		10.47 -0.025	1.47	2.668	② 1.3, 2.5, 5

5.84 290 171 462 2.668

392 298 168 442 2.651

223 5.83 294 170 452

418

223 +1

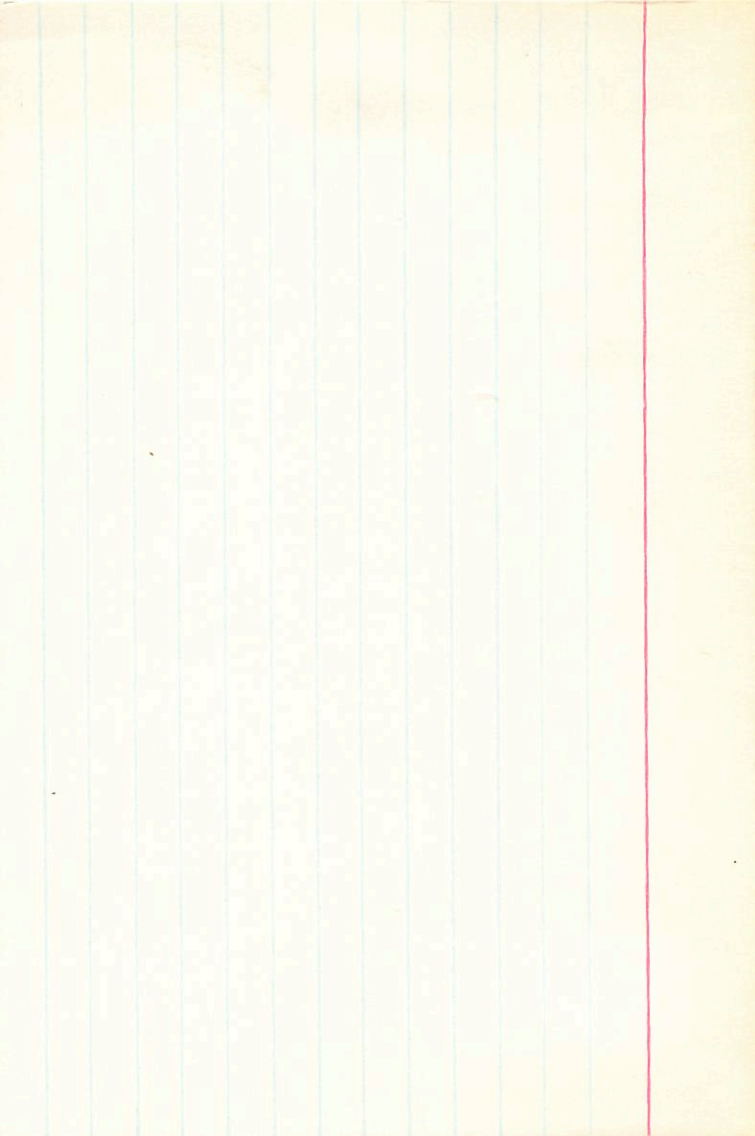
224 393 +10 3.00

+2.5 +9.2 -15.6

399

+143 +101 -397

286 170 449 2.639



405690

605854

5055

107445

10144

11767

1901.3

-23

21

48.40

1899.6

331

12,098

34.0

8,286

3,548

11,834

836

86

11,837

832

187

862

86

236

11,837

832

+05

48.35

33.88

14.08

47.96

1.06

49.01

7.83

49.12

+26

48.86

1933.43

200

576

35.3

35.7

1938.84

48.67

48.67

-0.32

-0068 ± 2.7

-0069

-23

22

9.5

5.9

df 4

(-52)

-001 ± 2.6

-009

6.0

df 5

-6.18

-0080 54.2  
-0072

-01353.5  
-018

10.145 12.366 1895.7 -23 21 52.32 1892.5

$\frac{434}{800}$

$\frac{8.953}{3.548}$

$\frac{12.50}{503}$

$\frac{25}{528} 1745$

$\frac{12.486}{481} \frac{515}{-285}$

$\frac{12.520}{534}$

39.6

$\frac{+75}{51.47}$

$\frac{37.02}{14.08}$

$\frac{51.10}{-1.45}$

$\frac{52.15}{+18}$

$\frac{51.93}{52.94}$

$\frac{+26}{52.68}$

$\frac{-2.39}{+23}$

$\frac{52.10}{52.10}$

$\frac{35.3}{42.8}$

1933.47

77  
26

$\frac{52.26}{-.99}$

1938.84

1933.49

87-4) 136160 7 82.2 +86 07  
 P=137340 -688 (33)  
 22-72 10.84 +0.66 -70.7 (orbit)  
 270072 75  
 +36.1  
 334  
 072  
 410  
 -70.7

2416 07 32.5 26 54.009 064  
 60666 -0036 -0040 1067 164 (2)  
 -0039 0021+6.7 1075+5.5 161 F(3)  
 162 977 9.55 95.0  
 170 13.67  
 333.56 4692 8.60  
 10 26  
 866 8.54  
 -0504 7.55  
 -049069 -26.9  
 32357 6452 8.47 -55  
 381 8.53 +1.5  
 21236 3446 8.33  
 1154 8.33  
 1475 9.33  
 1021  
 1.0  
 111.23 11.05  
 477/502  
 4.23 321.73  
 1471 014  
 60666 -4850  
 7150 8741

K.F. : 1.000  
 DEC. : 30.100  
 A.F. : 334.000  
 PM. DEC. : 25.000  
 DISTANCE : 4.000  
 MODULUS : 93  
 RAD. DEG. : -50.300

1.000  
 2.000  
 3.000  
 4.000  
 5.000  
 6.000  
 7.000  
 8.000  
 9.000  
 10.000



DU : -34.96  
 U : 1.29  
 q1 (M) : 0.87  
 q2 (M) : 0.27  
 q3 (M) : 0.39  
 PM : 1212.69  
 M : 48.0

R.A. : 3  
 DEC. : 33  
 PM. R.A. : 72  
 PM. DEC. : 4  
 DISTANCE : 63  
 MODULUS : -70  
 RAD. VEL. :  
 q1 (U) : -0  
 q2 (U) : -0  
 q3 (U) : 0  
 DU : -530  
 U : -97  
 q1 (V) : -0.2  
 q2 (V) : 0.9  
 q3 (V) : -0.0

11

1000  
1000  
1000

-0016 ± 4.6  
-0014  
-040

60294 7 32.7 52 6.0 g

5059

10164 43.334 1899.9 755 52 2.76 15983

$\frac{080}{414}$

-0015 -0394  
-0018 -0371

2.02  
4.78

41.2

41.05  
2.358  
43.408

58.6  
13.18  
5.45

1926.6

340  
36

3.40 936 3112  
2.3  
3.63

-0154  
-015-036

36

7700 -8977 0401  
6257 -9259 -1031

3.29 1944.911859  
-2.27  
3.07

43.315  
2.72  
342

39.5

43.346  
30

2.55 194 7.06

194 7.06

374

-19  
2.66

