

6761-35

262123 21 08.8 +73 30 484 +9.866(3)

GC29606 869 84 45

W13817 8.70 + 0.81 + 0.51 N15R

75104  $\delta = -06$

7330925

-85 + 38 + 0.026 +5.6 -330 -350 GC

-170 + 62 + 2 0.015 +4.6 -326 -385 GAZ

-228 + 89 + 2 0.010 +3.7

-64 + 32 + 2 0.035 +6.4 MS

32M(4)

266(8)

27±8

$$\begin{array}{r} -0774 \pm 5.2 \\ -774 \end{array}$$

$$\begin{array}{r} -390 \pm 5.2 \\ -400 \end{array}$$

$$\begin{array}{r} 45.005 \quad 1898.2 \quad +73 \quad 29 \quad 53.52 \quad 18963 \\ \underline{4.009} \\ 49.014 \end{array}$$

$$\begin{array}{r} 30 \quad 20.94 \\ \underline{14.46} \end{array}$$

$$\begin{array}{r} 46.49 \\ \underline{39} \\ 1.529 \end{array}$$

$$\begin{array}{r} 30 \quad 1.1 \quad 19303 \\ \underline{-25} \\ 0.85 \end{array}$$

201640

21 9.0 -40 28 F7E

HR8102

5.80-455-3 2844

GL29614

284.174 ~~267~~ 267 209,128

[m] 223 -1

520

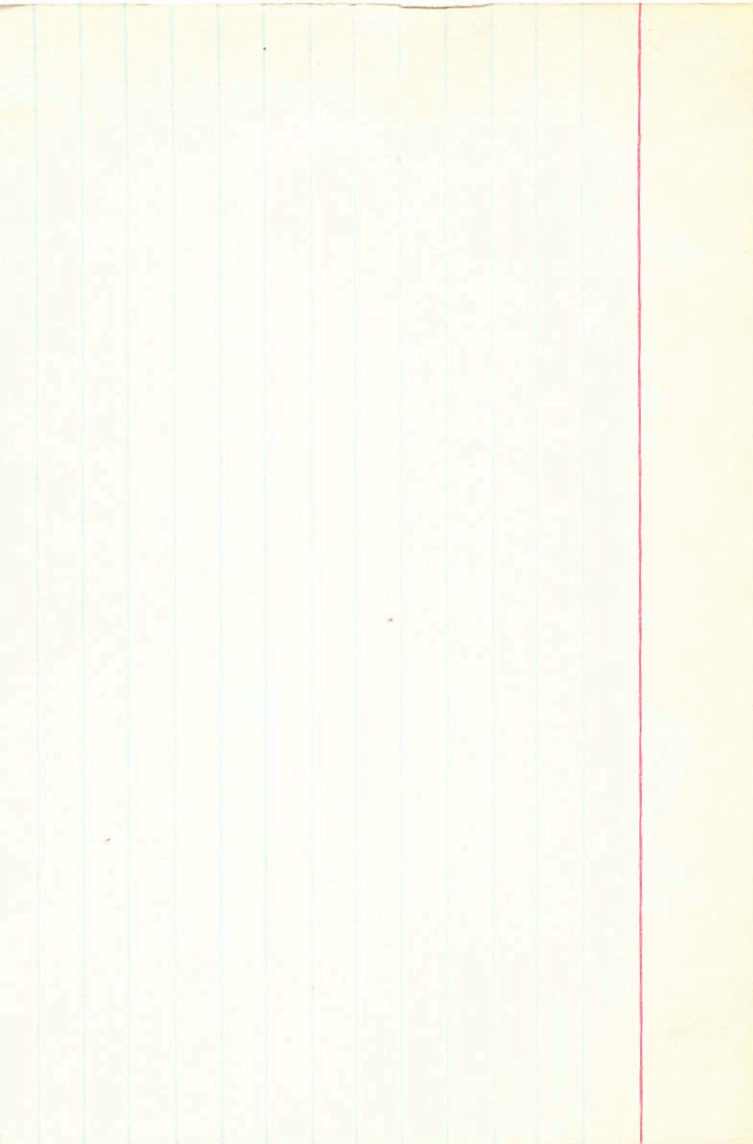
(463)

[G] 368-33

2.00 +1.8-26.1 -7.8

9889 1040  
Miller Mhar  
0407 6866

HR 2301-214  
+173-1042-224



+0038 ± 4.1  
-221 ± 3.6  
+0050  
-222

201647 21 09.0 -40 28 5.83 +46 1.60

29614

13322

F7E + 3.4 ± 0.4 C (4)

+12.0 25G

+7.8

12 N30

+0052 12 -222 ± 3.6

+0043 ± 4.1 217 ± 3.6

-40 28 19.80 1901.3

10.76  
9.04

1.347 1906.0

-1.67  
1.180

5  
16.0  
17.2

1.367  
-1.1  
3.53

41.0

17.64 1939.15

12  
17.52

94.62  
147.0  
45.7

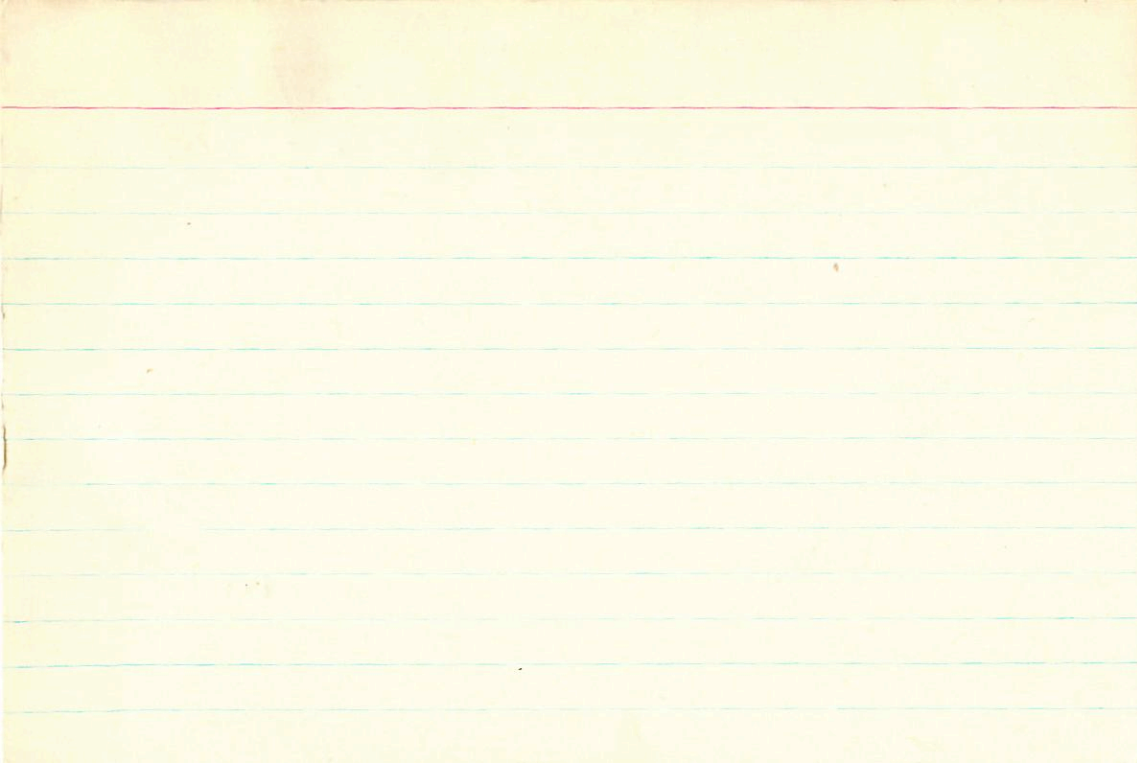
768  
384  
1152

384  
19.20  
10.16

01.424  
-9  
415

20.76 1954.87

-13  
20.89



201824

2 P 09.6

- 8 34

-805603

-31 Oct

12.1655

+0.22

+0.20

+0.12

48.10

+0.10

33.6

37044

+0.135

+ 24

0.12

47.86

-11

0.25

+0.135 + 0.215

0.12

47.86

+0.135

0.25

4.15

20.10

4685

37095

4.15

0.72

0.2 34.3

+0.135 + 0.215

0.12

4685

20.10

37095

4.15

0.72

56096

-23

0.72

0.2 34.3

+0.135 + 0.215

0.12

4685

20.10

37095

4.15

0.72

56096

-23

0.72

0.2 34.3

+0.135 + 0.215

0.12

4685

20.10

37095

4.15

0.72

56096

-23

0.72

0.2 34.3

+0.135 + 0.215

0.12

4685

20.10

37095

4.15

0.72

56096

-23

0.72

0.2 34.3

+0.135 + 0.215

0.12

4685

20.10

37095

4.15

0.72

56096

-23

0.72

0.2 34.3

+0.135 + 0.215

0.12

4685

20.10

37095

4.15

0.72

56096

-23

0.72

0.2 34.3

+0.135 + 0.215

0.12

4685

20.10

37095

4.15

0.72

56096

-23

0.72

0.2 34.3

+0.135 + 0.215

0.12

4685

20.10

37095

4.15

0.72

56096

-23

0.72

0.2 34.3

+0.135 + 0.215

0.12

4685

20.10

37095

4.15

0.72

$+0158 \pm 41$   
 $+0153$

$-123 \pm 3.7$

11 lin

201772 21 09.9 -39 38 5.3 off -44.28

29640  $+0155 -123$  stay 1968

13331 51.480 1905.4  $-39$  37 47.87 1902.8

$\rightarrow +0159 -119$  5.81

5.26 + 44 (1.58)  $-0.055$  42.06

$\delta = +06$

270 51.297

46.36 1938.76

$-\frac{13}{284}$

$\frac{17}{1479}$

(41.6)

$\frac{831}{416}$

44.19 47.38

5-1.556

48.45

1955.61

+ 638

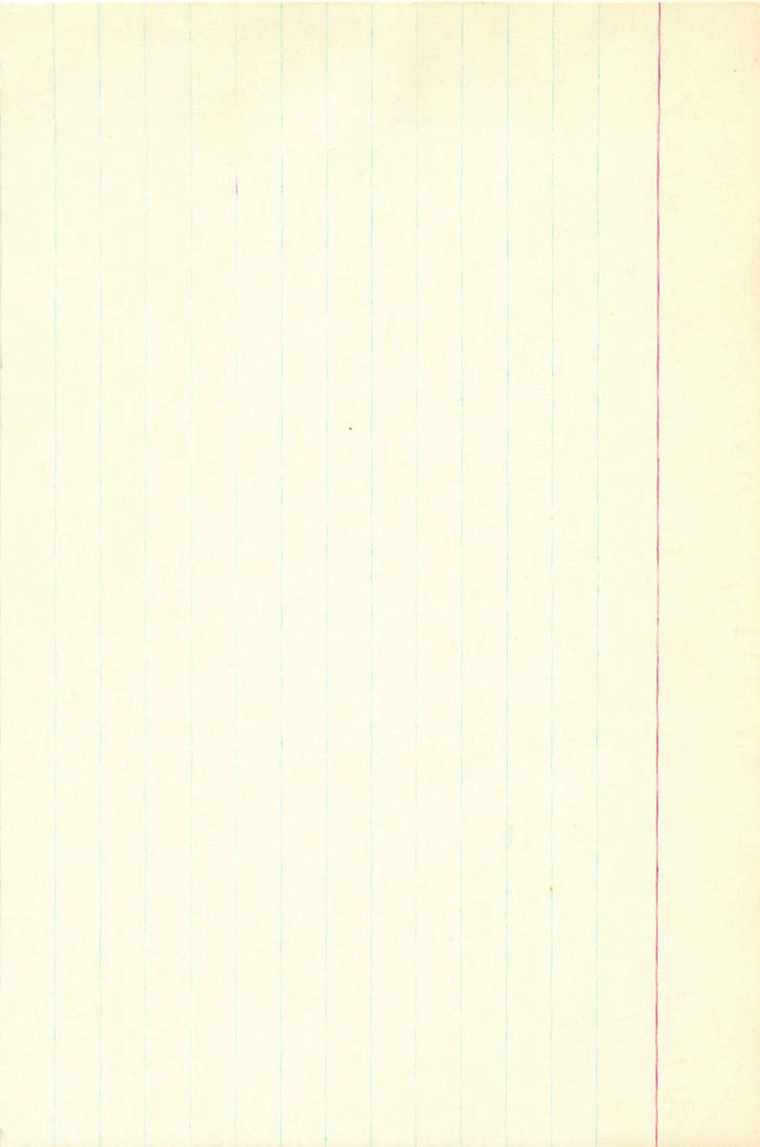
$-\frac{13}{48.58}$

94.37

47.2

(44.4)





Not Ryan?

201772 21 9.9 -39 38 dFY

ARR104

GC29670

2sp.

3.26+44 (-5.5) Cope

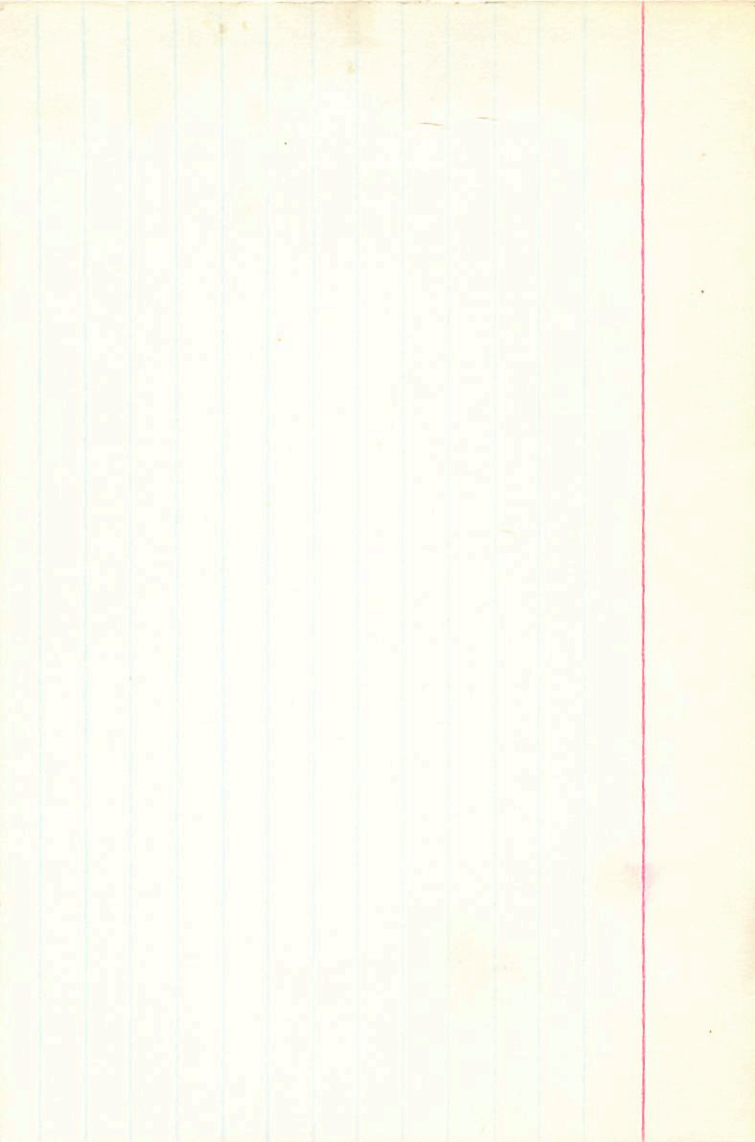
-P

.289 .158 .359 2.667(2)  
283 71343

[M] 210 +13

[C] 341 -11

2.14 +48 -16.8 +13 +0.160 -41.2  
+6 -6 -7 -117



201939

21

09.8

+30

25

GF

-15.68

7062-7040 GC

10045 +025  
058 025  
Coulbary

-23.5 (1)

9170  
9210  
7602  
8092  
5635  
9608  
1485

-676 737 344 537 7062 7040-19.6 014-7 175  
042-009 046 010 152 261-184-14 +12 009  
+3 441+12

201852  
8708

21 101

-36 35 40-4 ②

40729-008 step

4035-011

460

71

55

404

9

202017

+1404556

13337

2 10

8.08 10.5

R.A. : 21.150  
 DEC. : -82.650  
 R.A. : 20.800  
 DEC. : -11.800  
 R.A. : 19.500  
 DEC. : 120  
 DISTANCE : 0.400  
 MODULUS :  
 RAD. VEL. :  
 P1 (U) : 0.680  
 P2 (U) : 0.680  
 P3 (U) : -0.750  
 P1 (W) : 153.280  
 P2 (W) : 19.000  
 P3 (W) :  
 P1 (U) : 0.600  
 P2 (U) : 0.390  
 P3 (U) : 0.801  
 P1 (W) : -21.000  
 P2 (W) : -0.390  
 P3 (W) : 0.737  
 P1 (U) : 0.800  
 P2 (U) : -0.680  
 P3 (U) : -100.340  
 P1 (W) : -21.200  
 P2 (W) :  
 P3 (W) :



R.A. : 21.150  
DEC. : -36.650  
PM. R.A. : 60.000  
PM. DEC. : -11.000  
- : 5.500

Gobby

21 11.0 347 54

① HBP

mm 201

0986 9860

7451 1542  
- 7890 0896

1.88 0.22 2.003

R.A. : 21.200  
DEC. : 49.900  
PM. R.A. : 0.000  
PM. DEC. : 0.000  
DISTANCE : 0.000  
MODULUS : 10  
RAD. VEL. : 0.000

q1 (U) : 0.693  
q2 (U) : 0.720  
q3 (U) : 0.026  
dU : 0.000  
U : 0.000

q1 (V) : -0.005  
q2 (V) : -0.031  
q3 (V) : 1.000  
dV : 0.000  
V : 0.000

10  
q1 (W) : -0.721  
q2 (W) : 0.693  
q3 (W) : 0.018  
dW : 0.000  
W : 0.000

10

202128

21

11.1

+15

47

6.2

A3m - 29.68

+0026 ± 4.6 - 023 ± 4.1  
+0022 - 026

29673

13340

7.580

1907.5

+15

46

31.92

19049

ADJUST

20.70  
0.2

-111  
469

+12  
25  
3

7.525

531

29.7

7.537

+2

539

104

7.534

+  
535  
+066

32.96

1.04

32.96

32.52

18

19340

658

32.70

31.95

1939.78

11.58

+22

37.2

32.3

32.17

19378

31.71

32.10

-80

8115  
64 Cygn

29661

13338

21 10.951

30° 2'

3-40 KO

+30.0

+15.3 (11)

3,20 G8II

+1.00

+0.75

H+R

+17.4a

$V_0 = +17 \text{ km}$

- 0.223

0.691 0.687

- 0.950

- 0.002 0.311

- 0.723 0.657

- 0.217

0.440

+7101053      21   10.7      +71      29      -22.1   15ml

G2II

9.74 +0.54 -0.02      25ml

S=+09

+5.0

m.M=4.75

89.2 pencils

+214      +248 GAZ  
+212      +248 P80

+147.6  
-45.7  
+11.9

+689	+666	+281	+6924	+7841	+14765	+131.7	-6.2
+001	-389	+921	6010	-4573	-4563	-40.7	-20.4
-725	+634	+266	-7286	+7453	+0167	+1.5	-5.9

1262  
-12.951.1

HR 8114 21 12.2 -53 25

5.73 +0.20 A7E Sum  
ASII dVane 72

+022 -01866  
+034 -013 N  
016 -01112  
+024 -014

Sum=0.0

~~HR 8113 -0134~~ FIRE  
ASII dVane

— 555 KOB —



202103

29704

$\Delta m = 0.02$

21 12.2 -53 28 A7E -12.9 ± 1.1  $\sigma_{112}$

5.73 ± 2.0

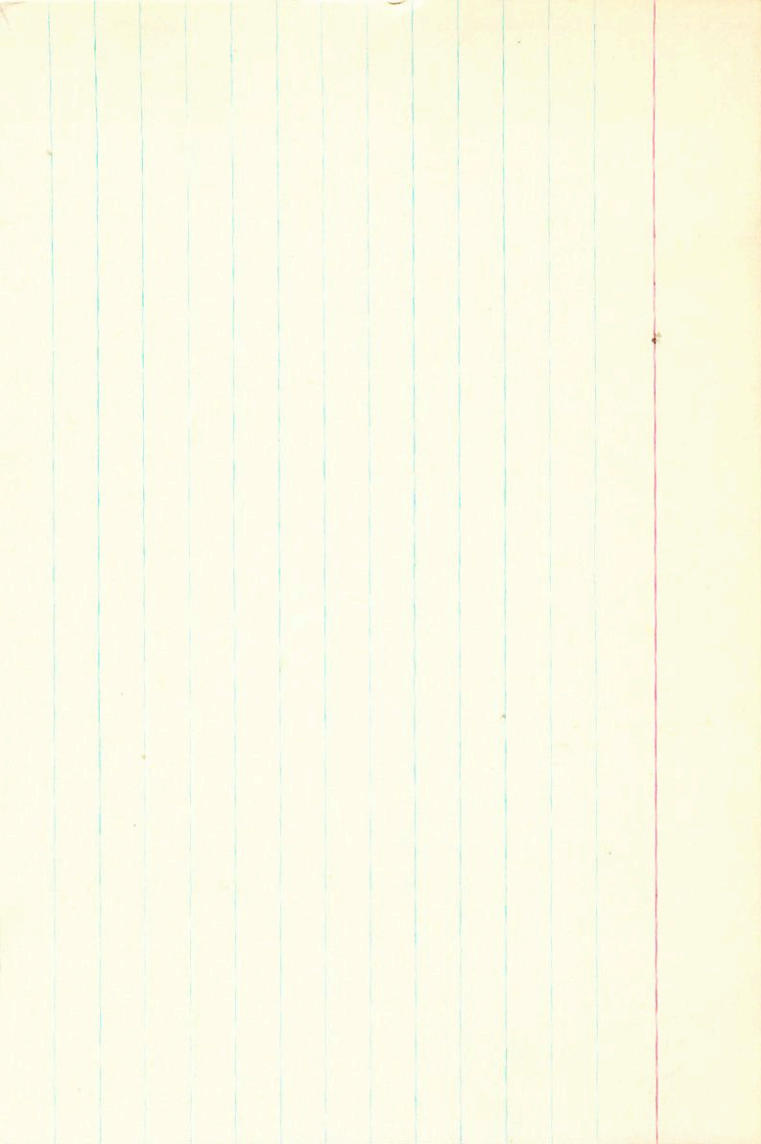
+0038<sup>13</sup> -013<sup>12</sup> N30

+0039 ± 3.9 -013 ± 3.1

426

143

266



+0025 = 3.1  
+029 ± 2.5  
+020

202403 21 12.4 +40 56 7.2 Ag 65 -11.76

29710

13349 23.663 1898.4 +40 56 19.08 1892.2

-128  
535

-1.68  
17.40

26.08  
57448  
23.52  
16  
544  
3  
541

5.8 1928.5

11.568

17.697

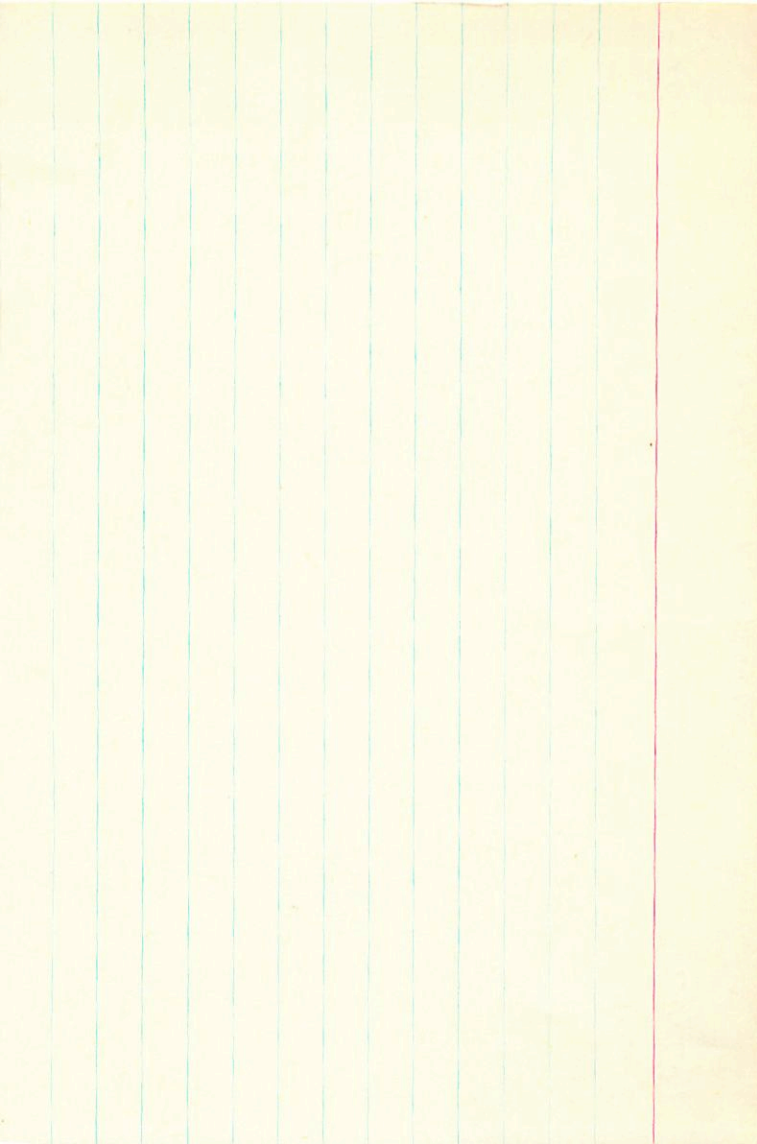
18.08

18.45  
75

ADSM778

7.98.1  
13

+606



RR Apr  
202306

21 12.4 -3.06 8.6 gm<sup>2</sup> -1828

1809

13352

-007 - 022

length

+022 +047

202519  
24721

21 12.7 +58 05 7.0 42 -4.46

-0003 ± 5.7  
-0010

13356  
APS14784  
7.8-7.8  
" "

42.870 1905.1 +58 5- 22.30 1893.5  
013  
883

1.82  
41.070  
890  
42.895  
887  
892

9.7  
12.45  
14263  
22.15  
63  
22.17

22.82 1946.80 7310  
22.56 36.0  
19 19 42.5  
22.37  
22.60

30.9

42.904  
0  
848  
035  
-035

-132

H 5

P = .44

SW Apr

21

12.7

-00 08

-5 du(2)

10.37 ± 0.2

11.4 m

11.69 ± 0.33

11 vi

 $\Delta S = 5$ 

-048 ± 3 -064 ± 3

-055 ± 10 -064 ± 10 B Δ

-051 ± 6 -045 ± 6

-049 ± 3 -060 ± 3

-667 745 0 1 -049 -060 0 0 0 -284

-033 0 -036 0 -156 -171 0 0 0

001

-156 -171 -284

-297 -212 +31

-142 -155 -258 017

1268 -194 +24

-164 -114 -190

015

-198 -142 +20

-90 -128 -221

-233 -168 +24



flap  
202320

29722

13359

47.280 1901.3 -20 51 37.54 1896.9

-039  
1241

21933  
25.410  
47.343  
-13  
330  
-45  
285

47.291  
-15  
1266  
274  
+033

+0008 ± 2.0  
+0010

+002 ± 1.7  
+004

21 12.8 -20 52 5.4 g10 -5.2a

4.2 (14)

32.9

-11  
37.65  
50.15  
11.48 1928.40

38.67  
102  
37.65  
+32  
38  
37.

37.76 1939.96  
+19

37.57  
37.45  
+20

6836  
34.2

37.3

21123

2204511022

22

13.1

2207

8.848

-000?

+0394-026

R=710

R=329

+040 -010

650

-785

9746

-222

042

-800

-0.55

M<sub>2</sub> 410

M<sub>2</sub> 410

0006

542

P<sub>2</sub> -226

P<sub>0</sub> -225

d'égale  
20 2447

21 13.3 +05 02 4.1 dff6 -16.2

29735-

13363

+0037 92 -083 82 N30

+0037 ± 0.9 -085 ± 0.9 CC → N30

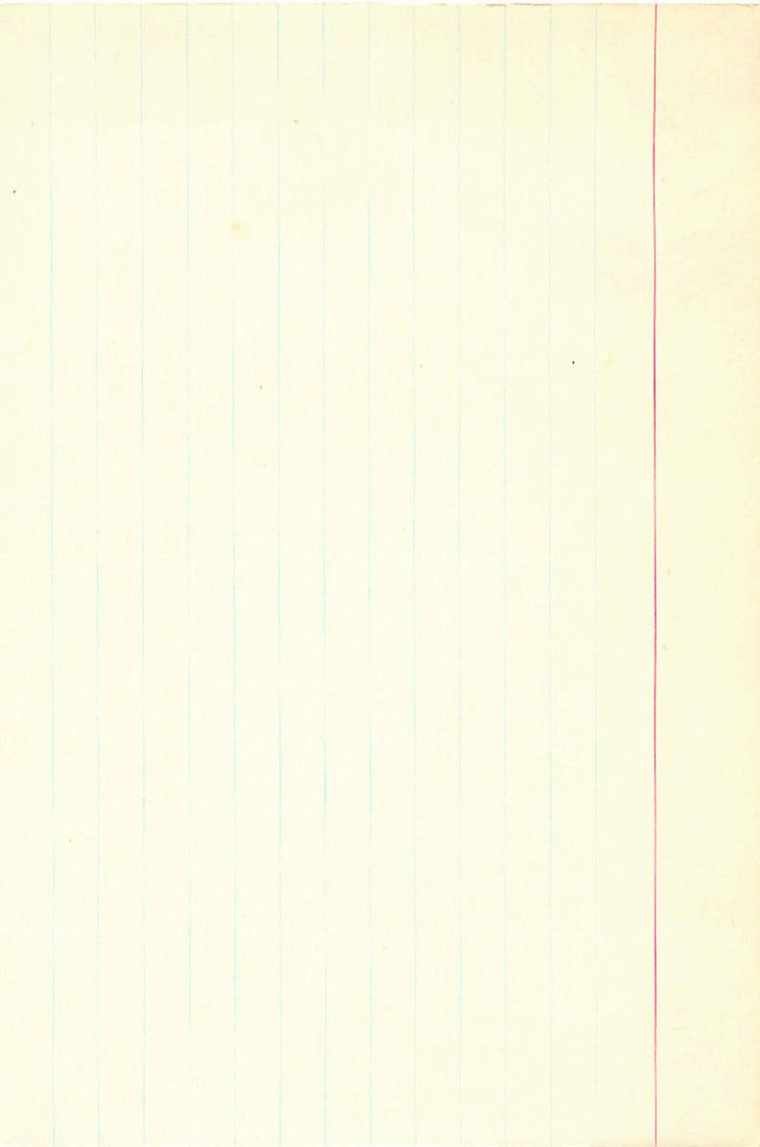
-18.5 Oct 23

+0586 -1875  
FIRE

6056 7575

5925 6525

S.P., P = *Revised*



14 Apr  
202466

24742

13365

36.757 1902.0 ~ 9 25

$\frac{043}{800}$

26.64 1898.4

$\frac{-31}{95}$

16.241

20.568

36.1809

$\frac{781}{-13}$

768

34.796

$\frac{-026}{760}$

34.7

40.70 1929.90

$\frac{12.70}{27.90}$

$\frac{96}{94}$

$\frac{26.61}{+1.34}$

26.132

26.6

26.78

$\frac{+28}{26.60}$

1940.33

7023

35.1

36.7

-0009 ± 2.6

-0007

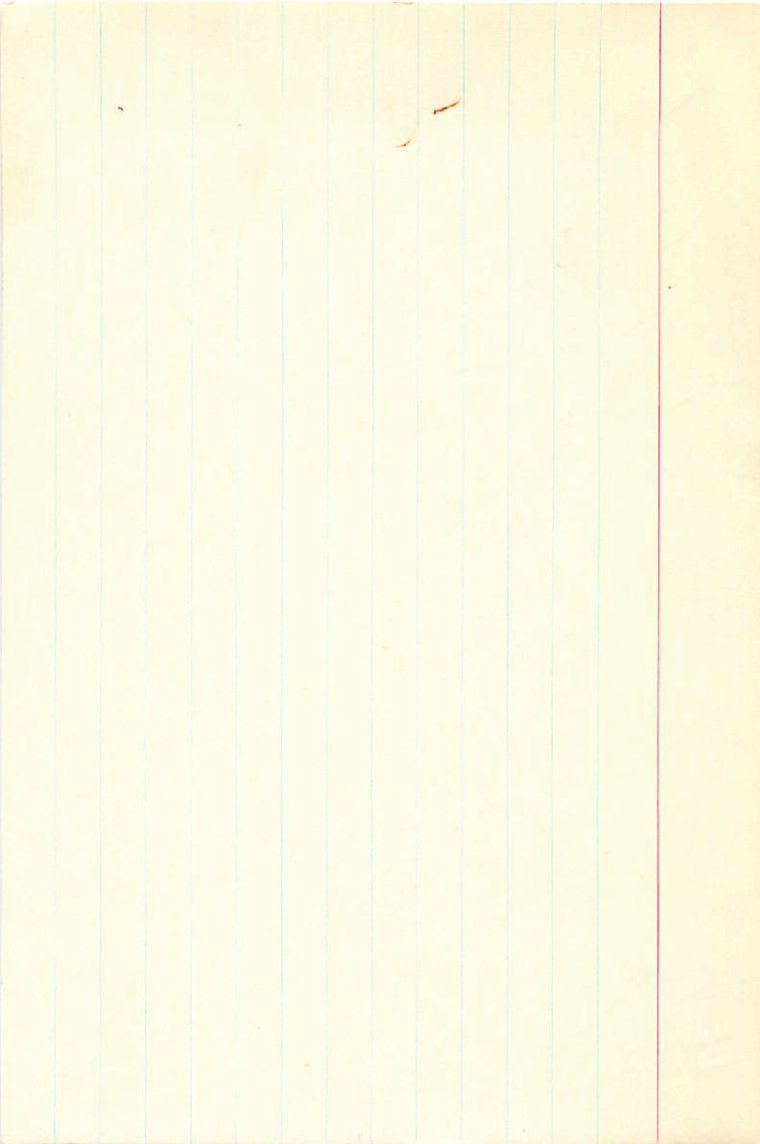
21 13.6 -0.9 25

6.8 g M4 + 8.0 b

+0006 ± 2.3

+009

6.8 g M4 + 8.0 b



202574

21 1400

+10 57

Moody  
3

+13.465

(110)

021 - 034

+028 - 035 A.G.M.3

0295 - 037

(Smoking)

+022 - 023

+032 - 033

+025 - 021 Y

8.19 1.24

(3M)

1266 690 334

1252 108

+33

-23

630

464

- 7

+2

+08

-014

2/25

D(A-2) = 100

(032 - 040)

+13.55

33

-40

(038)

406

2

435

8.18 0.782 - 634 384 (2.1.3)

1.248 1.078 321

7

7.57 439 ± 601

A = 1

(379) (L.M.)

464

0020 -092

4.33

~~44~~

447

~~3978~~

~~44~~

11.33

~~11.34~~

491

~~497~~

18.15

10.29

~~23~~

10.52

0023

-0387

||



VEL. : -46.400  
DULUS : 182  
STANCE :  
DEC. : 4.300  
R.A. : -33.000  
DEC. : 33.000  
R.A. : 13.220  
DEC. : 21.220

U : 22.742  
DU : 41.226  
C (U) : -0.323  
C (U) : 0.296  
C (U) : 0.208

U : -42.202  
DU : -23.251  
C (U) : 0.827  
C (U) : 0.762  
C (U) : -0.814

C (U) : 0.254  
C (U) : -0.214

R.A. : 21.250  
DEC. : 13.950  
R.A. : 33.000  
DEC. : -23.000  
DISTANCE : 6.300  
MODULUS : 182  
VEL. : -46.400

U1 (U) : 0.700  
U2 (U) : 0.596  
U3 (U) : -0.393  
dU : 41.356  
U : 25.762

V1 (V) : -0.014  
V2 (V) : 0.562  
V3 (V) : 0.827  
dV : -63.321  
V : -49.905

W1 (W) : -0.714  
W2 (W) : 0.574  
W3 (W) : 0.402

30 Cap

202671 21 15.2 -18 12 5.4 08 -11.1 a

24781

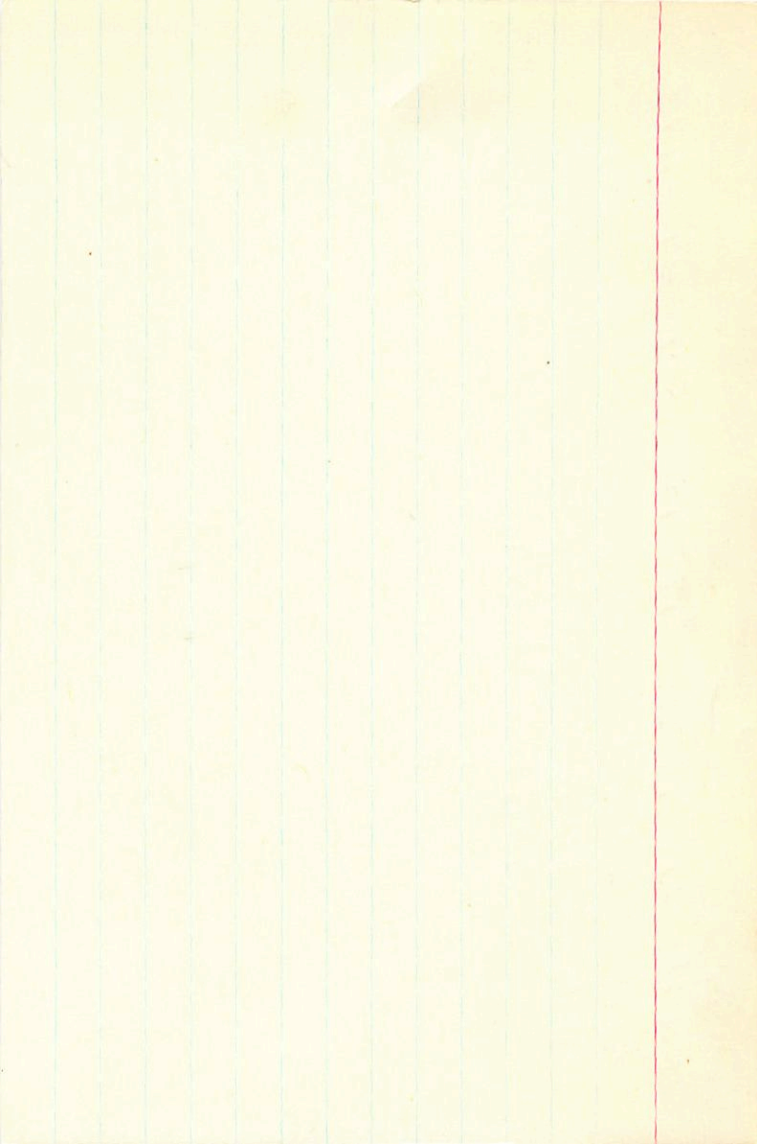
13374

+0012<sup>35</sup> +004<sup>34</sup> N30

+0013 ± 2.0 · 000 ± 2.1

-11.2 (3)

-13.1 (17)



202773      21   15.9   -28   54    $\overline{6812}$    +37.64C

F01272

6.40 +0.96 (2.02)

6624805

-0140±69 -057±5.6

57.286 18970 -0132 -095      3409 1895.4

742  
58,028

-0152

3.13  
30.96

-0136 -028

-180

50.70      1934.72

33.27

25.423  
29.1025  
54.523

57.480

475

16.0270  
34.47

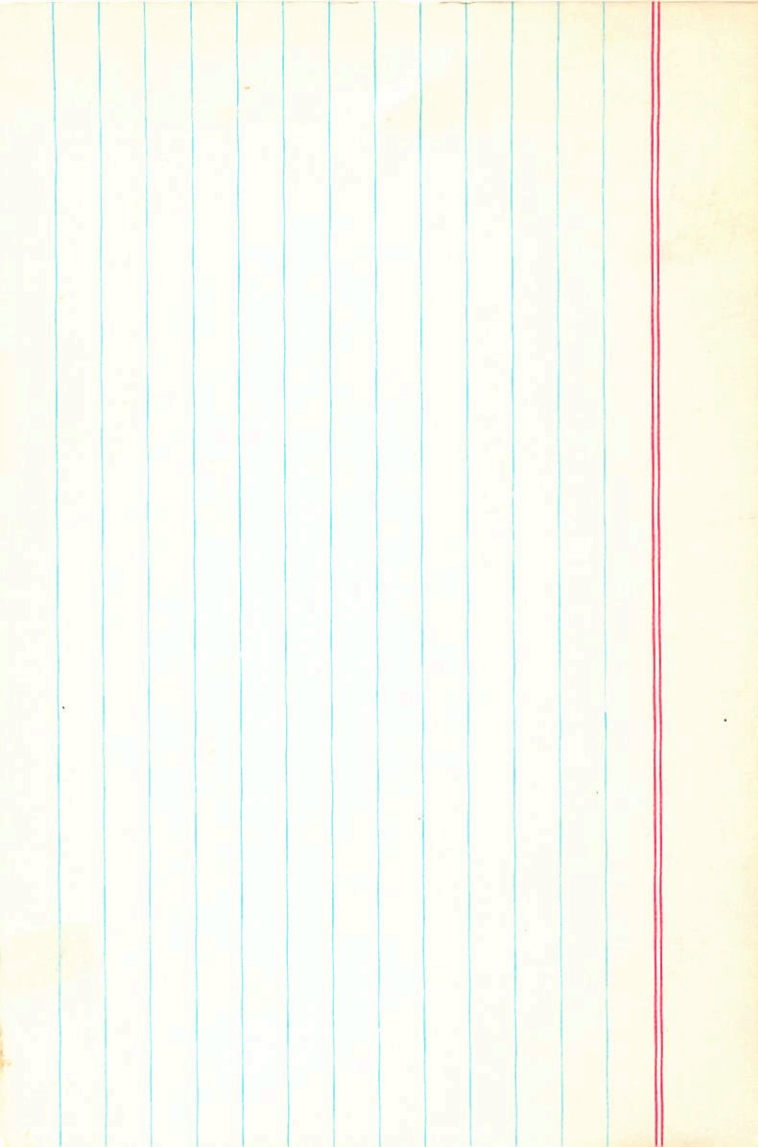
34.64

5471

522

+ 1/5822

5471



7.1-9.0

40514839 29 16.2

-0006±7.3  
+0020  
+11 22

-038±4.3  
-053  
+6.28

Exp. B. P =

202908  
29812  
13386

+5007  
-5013

-045 Van Neck  
-061 0262

+015 -061 H

9.690 1893.0  
034  
724

+11 21 30.67 1889.4  
2.30  
32.97

9.802  
13  
815

30.71 19343  
15  
30.86

43.0

9.800  
808  
+084

30.16 1937.8 1937.8  
102  
30.51 721  
36.0  
46.6

-2,46

-656 785 157 580 +015 -061 +6.2 -012 +1<sup>.2</sup> -384  
012 -008 014 -009 099<sup>✓</sup> 028<sup>✓</sup> +6.1 +5<sup>10</sup> -4.0 0262

+9 -3 -10  
-7 -3 -12

+9.6 -2.6 -13

02



74.2  
-0016 ±6.9  
-0009 -026

202926 21 16.2 +17 47 7.2 dF3 +9.08

-30 176

13387 12.240 1897.5 +17 46 3259 18948

084  
329  
1.88

7.34 +405 -0.07

39.47  
38.48 1933.7

12.283  
289  
-0025 -030  
-0005 -027

1274  
4123  
1.55

38.60  
37.89 1939.78

12.283  
+4

287  
288

38.7  
-0186 8620 -067  
-9906

348

35.12  
38.39

-010 -034  
-011 -030

36.2  
41.5

-1.08

8394 5435 -1665 -9960 0314 -0058 +6.8 +9.0 0099 (5.0)

1

— —

2

8149

20251

09281

+6  
+16

425 21 16.4 +10 59

+0017 +018 6.4 ±2.5

+00195 +021

+0287  
+031 +018  $\lambda - M = 6.6$

$E = +03$  +41-

6.16 14

R. P. A. ...  
 R. P. A. ...  
 DEC. ...  
 RANCE ...  
 TULUS ...  
 IEL ...

R.A. : 21.250  
DEC. : 17.800  
R.A. : 11.400  
DEC. : 117

000.000  
-0.435  
020.000  
-17.326

0.797  
0.061  
43.419

1 (V)  
2 (V)  
3 (V)  
VP  
V

1 (W) :  
2 (W) :  
3 (W) :  
MP :  
M :

0.140  
-0.419  
000.000  
-37.000  
199.526  
6.500\*  
0.022\*  
0.024\*  
59.000\*  
10.000\*  
16.400\*  
21.000\*

208  
9.9

13

000.000

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

3

10

8149.000\*

21.000\*

16.400\*

10.000\*

59.000\*

0.031\*

0.018\*

6.600\*

208.930

-37.000

0.152

-0.419

47.337

0.049

0.797

-19.269

-0.057

-0.435

4.146

13

Y Z Corp 21 16.8 -15 20

H0358431 11.25 -000015

SS=1 (minimum) -000-000 406 -878.0

~~Phase 0.4~~ -015-013 ~~1415~~ ~~11~~

Phase 0.4 2.745 0.222 0.090 1.130 2125  
0.5 2.732 0.240 0.100 1.060 15135  
2000 6411  
-149

11.20 { 0.190 0.115 1.180 2.754 } 10 -90

10.26  
~~10.21~~

1002

598 219  
446 110  
+ 111.1 4008

1002

- 42.6

- 1100

+ 912

90521

M





147

21.250  
-15.350  
-19.000  
-13.000  
10.000  
1000  
-88.000

1745

0.700  
0.327  
-0.634  
-80.991  
-25.168

61

-0.014  
0.095  
0.446  
-53.941

-107

-93.230

M

1118

-0.714  
0.304  
-0.631  
43.249  
98.784

RAD. VEL. : -30.000  
 MODULUS : 1000  
 DISTANCE : 10.000  
 PM. DEC. : -14.900  
 PM. R.A. : -20.200  
 DEC. : -12.350  
 R.A. : 21.250

d1 (U) : 0.700  
 d2 (U) : 0.327  
 d3 (U) : -0.634  
 b1 : -07.780  
 b : -00.888

d1 (V) : -0.014  
 d2 (V) : 0.892  
 d3 (V) : 0.446  
 b1 : -01.923  
 b : -00.100

d1 (W) : -0.714  
 d2 (W) : 0.304  
 d3 (W) : -0.231  
 b1 : 04.426  
 b : 00.101

*M*

R.A.	:	21.250
DEC.	:	-15.350
PM. R.A.	:	-20.200
PM. DEC.	:	-14.900
DISTANCE	:	10.000
MODULUS	:	1000
RAD. VEL.	:	<del>90.000</del>

*700.5*

q1 (U)	:	0.700
q2 (U)	:	0.327
q3 (U)	:	-0.634
dU	:	-87.780
U	:	<del>-30.688</del>

*-20.22*

q1 (V)	:	-0.014
q2 (V)	:	0.895
q3 (V)	:	0.446
dV	:	-61.923
V	:	<del>-102.106</del>

*M*

*10445*

q1 (W)	:	-0.714
q2 (W)	:	0.304
q3 (W)	:	-0.631
dW	:	44.426
W	:	<del>101.223</del>

Telmad

21 16.9 -45 14

N

+23

③

402

4.64

9.6

3.1

+21.9

-001 +15 60

+3 +2

+002 +017

700 -029 -713

-014 998 -055

-714 -048 -694

115  
300

115  
349

+0066 -0023

+0804

-0068 -0039

+0043

+0804

-0107 -2.6 -1.6 -4

+13 -1.6 = 0

+4.7 0 = +20

2.5



T chud

202874

29831

13401

52.180 1900.7 -45 14 3.80 1897.9

$\frac{0.20}{2.00}$

$\frac{+52}{3.28}$

13.250

39085

52.338

$\frac{.207}{1.82}$

$\frac{172}{-0.28}$

$\frac{172}{-0.28}$

21.15 1928.76

$\frac{1708}{4.07}$

$\frac{117}{2.86}$

$\frac{294}{+34}$

$\frac{284}{0.2.93}$

$\frac{1956.14}{-12}$

$\frac{3.05}{-10}$

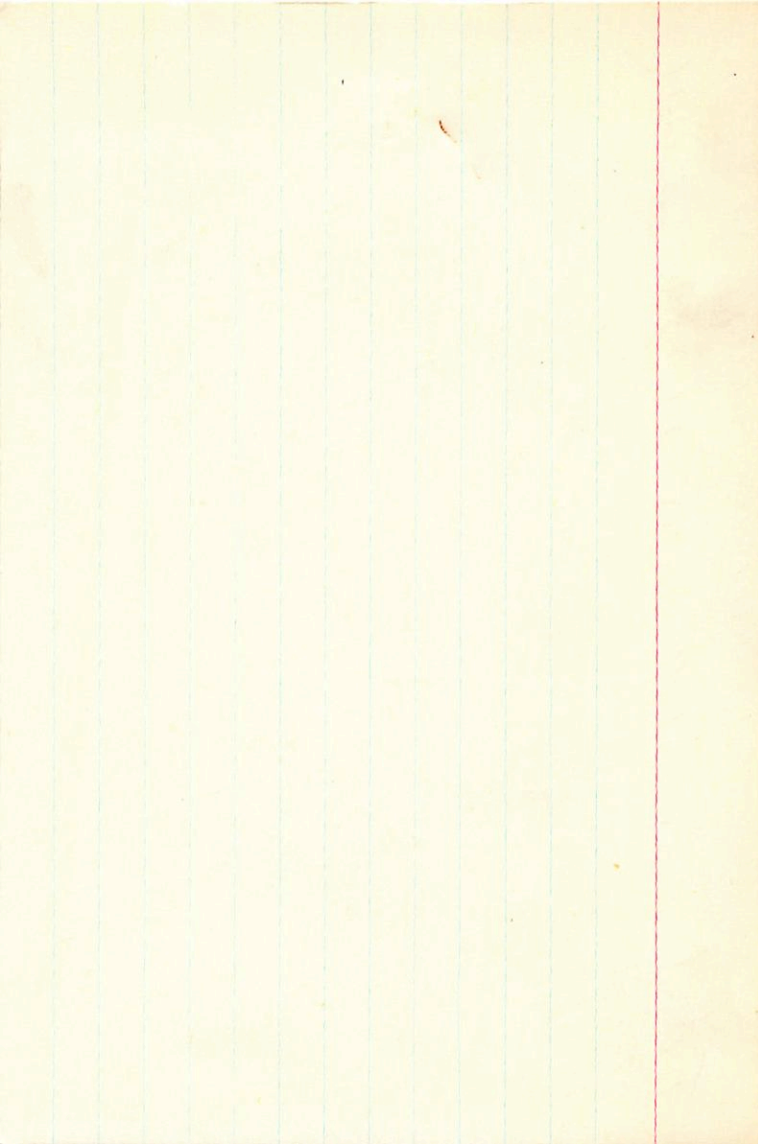
52.157

$\frac{-26}{10}$

$\frac{10}{10}$

-0004 ± 106 -010 ± 8.7 SR 320d

21 16.9 -45 14 S. Van N +2.30





AD. VELL. : 0.400  
 MODULUS : 158  
 DISTANCE : 2.200  
 M. DEC. : -11.000  
 M. R.A. : 88.000  
 DEC. : -88.000  
 R.A. : 21.150

U : 19.008  
 UB : 123.282  
 P1 (U) : 0.282  
 P2 (U) : 0.004  
 P3 (U) : -0.724

U : 0.004  
 UB : 0.992  
 P1 (V) : 0.992  
 P2 (V) : 1.000  
 P3 (V) : -21.682

U : -8.322  
 UB : 21.682  
 P1 (W) : -0.724  
 P2 (W) : 0.004  
 P3 (W) : -0.282  
 WM : -19.343  
 W : -21.292

*P*

R.A. : 21.150  
DEC. : -36.650  
PM. R.A. : 60.000  
PM. DEC. : -11.000  
DISTANCE : 5.500  
MODULUS : 126  
RAD. VEL. : 0.400

q1 (U) : 0.686  
q2 (U) : 0.064  
q3 (U) : -0.724  
NP : 153.289  
U : 19.008

q1 (V) : 0.004  
q2 (V) : 0.996  
q3 (V) : 0.091  
VP : -51.062  
V : -6.392

q1 (W) : -0.727  
q2 (W) : 0.065  
q3 (W) : -0.683  
MP : -169.343  
M : -21.592

9

202017

+1404556

13337

20 10.5 +15 23 8.1 dF7-68.88

+03

+03545

+03544

~~-5~~

+82

8.08 +0.52 +007

~~040~~

043

030

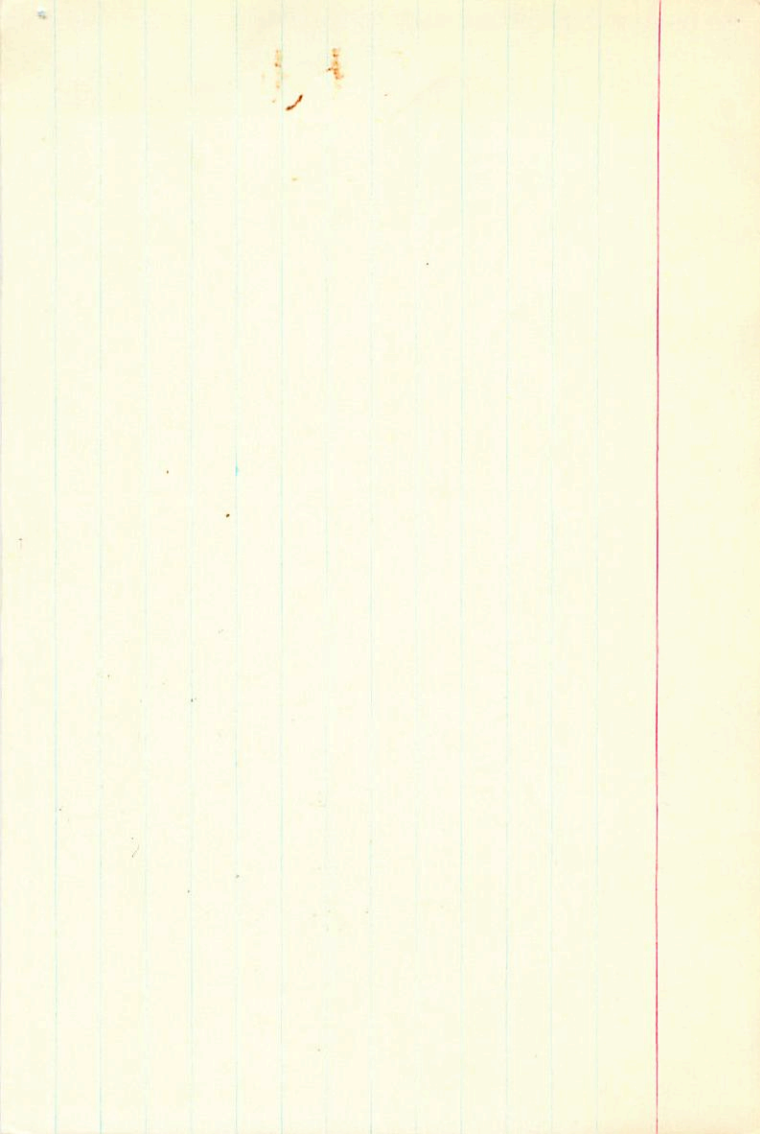
0

+3

+030

+046

→



+6  
+18

8149

+25 21 16.4 +10 59

202951

+0017 +018<sup>+3</sup> Get +2.5

6.16 115

29281

+0195 +021<sup>-3</sup>

+0287  
+031 +016  $n-m = 6.6$

E = +03

+45 -16.8 +11

+140 +61 -23

~~+029~~

~~+022~~

~~-37.0 8~~

~~16-25.7~~

6.01 +1.69 +2.02 11<sup>≡</sup>

4.94 +0.76 2<sup>≡</sup>

4.98 +0.74<sup>9</sup>

4.50  
4.98  
5.48

13

8149.000\*

21.000\*

16.400\*

10.000\*

59.000\*

0.024\*

0.022\*

6.500\*

199.526

-37.000

✓

6.6  
208

0.140

-0.419

+45

43.418

0.061

0.797

-16.8

-17.326

023





12

000.0  
000.0  
298.0  
000.0-  
0.714  
000.0  
000.0  
000.0  
0.853  
005.0  
0.914  
000.0  
000.0  
298.0

M  
MP  
CM  
CM  
CM

321

11 11.4



This page contains faint, handwritten text that appears to be bleed-through from the reverse side of the paper. The text is mostly illegible due to fading and the texture of the paper. Some discernible characters include:

- 0.000
- 0.000
- 0.000
- 0.000
- 0.000

There are also some other faint markings and symbols scattered across the page.