

0180 #23  
-0115

1.7  
+0092  
+021

48.543 89.5

7.24 89.2  
-89

787  
41.330

699  
-89

48.152

48.541 89.5

7036  
48.658

202  
45.15

1000 + 107  
-0125 + 10077

642

-0619  
-063 + 1007

+105 1595

1 578 +20 40

-572

-46

23.580  
2. 75

-0.8 +009 GC → 1130 - 0286

911 -0604 +009 GC

+728 -302 +615  
-633 +045 +772  
+261 +952 +154

-2243 -0129  
+1550 +0019  
-0804 +0406

-2372 -5.6 -0.9  
+1969 +4.6 408

-9.4 -158

-3.0  
-3.5  
-0.5

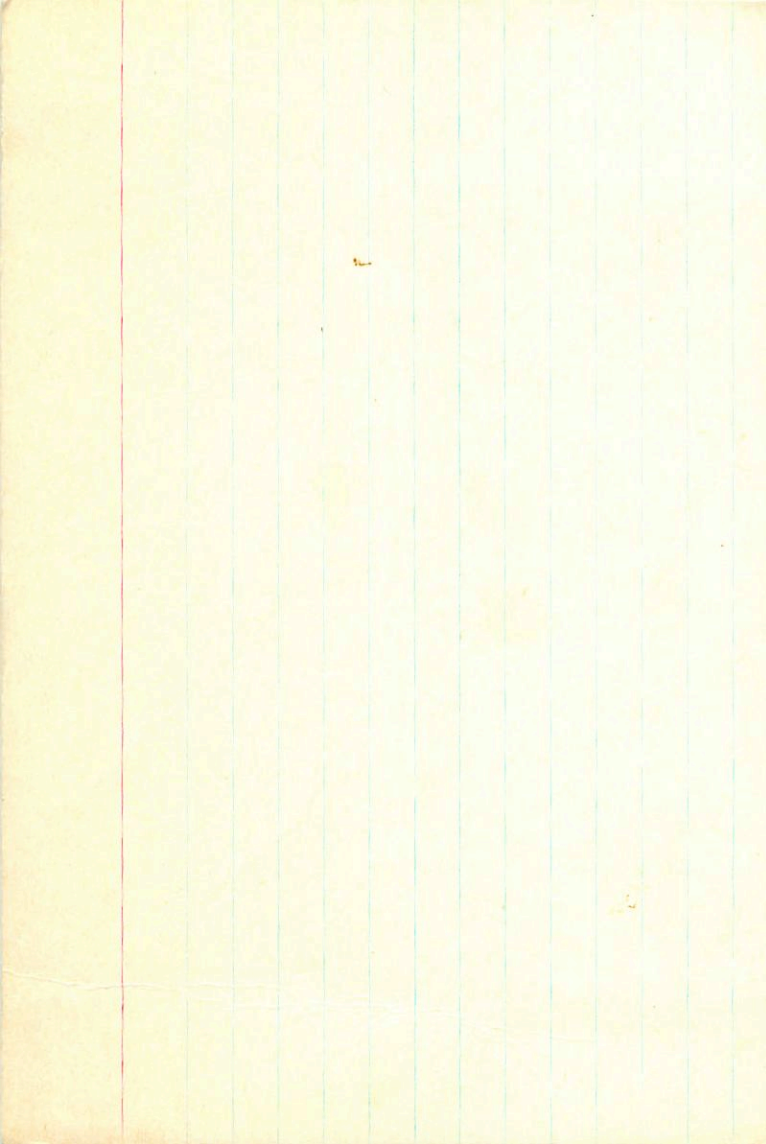
3860

2

10

-30  
-3.5  
-0.5

-8.9 -12  
+3  
-10



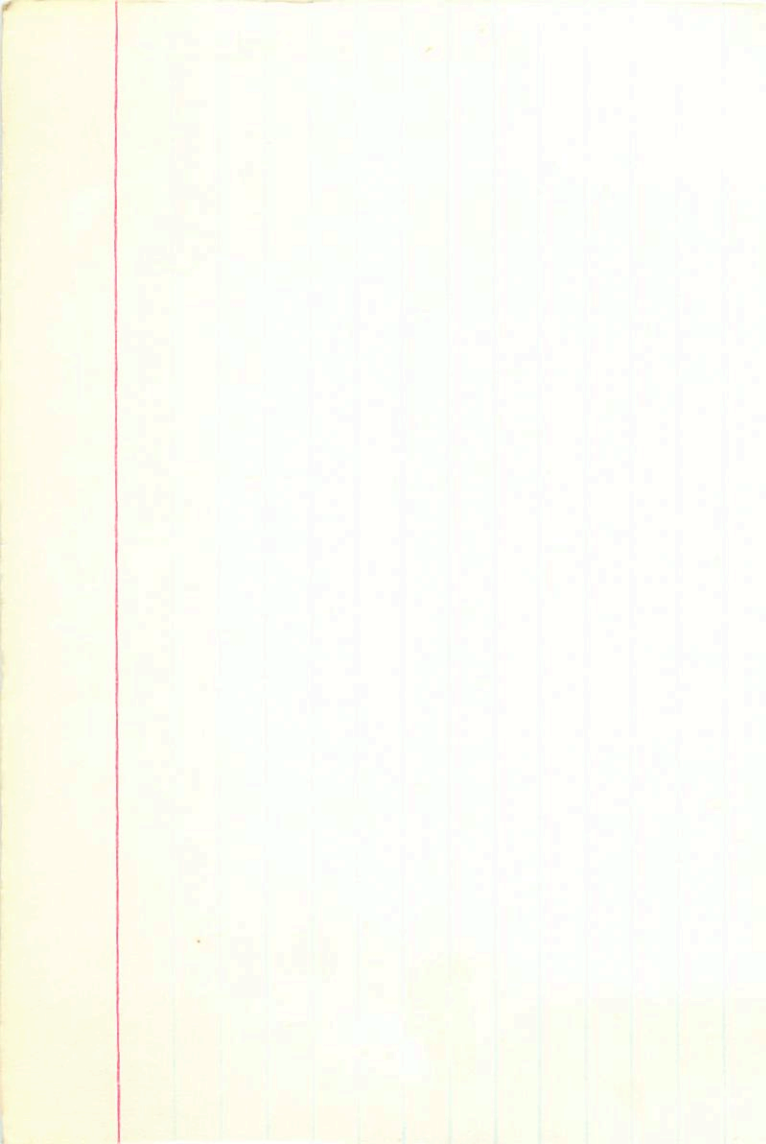
X Tri Pur <sup>46</sup> 385 / 57.7 +27 38 -5.0 b  
 Pd <sup>480</sup> 32

$R_1$  1.55  $m_1$  1.4  
 $R_2$  1.5  $m_2$  0.9

orbit

-0.002	-0.006	Y
- 9	- 3	
0	- 2	
-0.011	-0.011	→

728	204	654	-0379	-0106	-0485	<sup>225</sup> -18.8	-14.1	-3.3
-634	563	529	+0330	-0293	+0037	+08	-2.8	-2.6
261	800	-540	-0136	-0417	-0553	-2.5	-9.8	+2.7



213

L1159-16      1 52.5 +  $\overset{0}{12.50}$ ' + 1.07 - 1.79

G-3-33

728	362	583	+3.6923	-3.0714	+1.6209	-12.9
-634	678	370	-3.2155	-5.7526	-8.9681	-42.1
261	639	-723	+1.3237	-5.4216	-4.0979	-19

10.10  
177  
833  
1647  
997

4<sup>2</sup> ... 0

492870 944 329 -064009 -5.008 -80.014  $\sqrt{\quad}$   
145.5 -4.7

031004056007 1124 -276 -7.2 -14 -0.8 02  
-1.6 +4.3 -13.1 -4.0

$$\boxed{-13.0 + 6.0 - 3.5}$$

+6.2 -17.2 -3.7 015

$$\boxed{+7 - 17 - 4}$$
$$\boxed{-16 + 7 - 5}$$

-16.3 + 7.9 - 4.3

$$+2.4 - 9.0 - 4.2$$
$$\boxed{+3 - 10 - 60}$$

+2.8 - 9.9 - 4.2 27

$$\boxed{-9.8 + 0 - 2.6}$$

-10.5 + 2.4 - 2.8

$$+3.2 - 12.8 - 4.1$$

$$-11.0 + 3.3 - 2.9$$

015

03

025

25 578

40 680

1 57.5 + 20 = 40

-5.2

148575

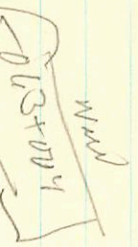
4.50 + 0.18

44E

-064 40092-

AD5158

4.2:20 63pm



2 (95) / 20.2

|

WWD

W110V  
25A(20)

22M(10)

306(10)

48.299



57.10

321

+21  
57.31



0.168  
0.353

77.183

-0.043  
0.022

-16.426

0.062  
-0.936

-2.287

30

12204

1 571

-14

07

+295

5.50 1.05

5.12

1.41

3.5

6.0

num 80

1.35

6.70 + 1.64 + 1.82

(1)

5.50 + 1.05

(3)

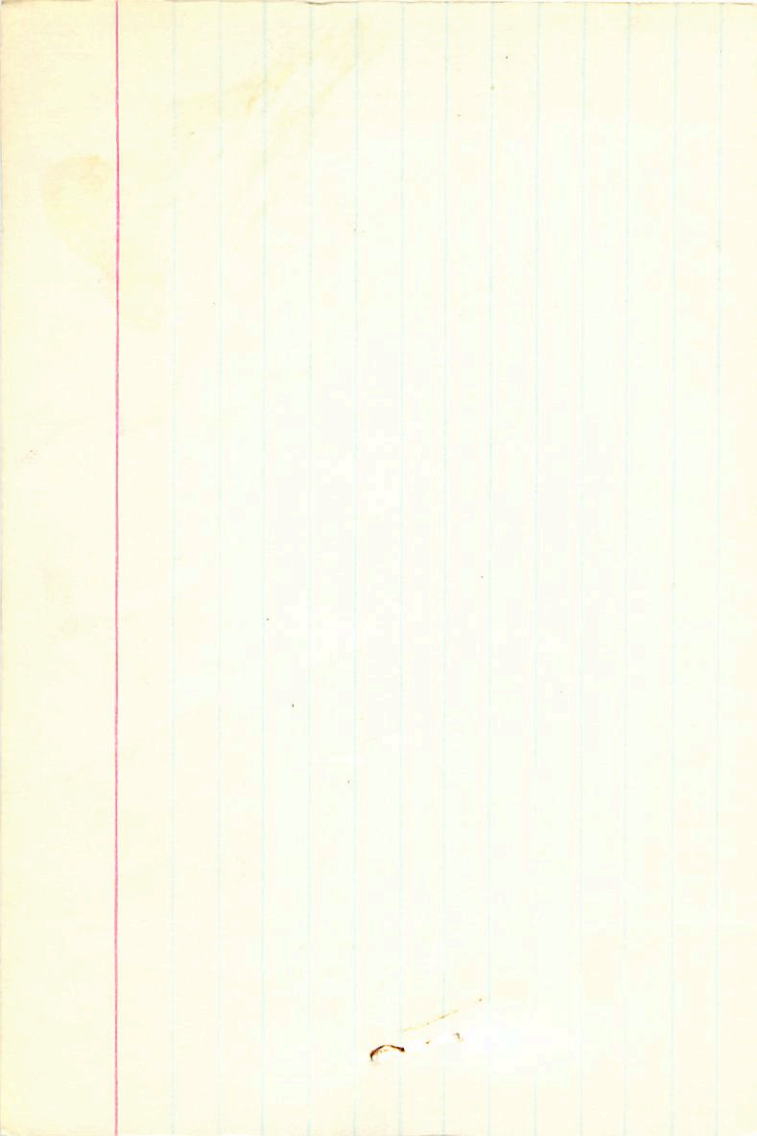
2

+0004 +0000 = 4.4

+ 1 - 3

+0025 +017

↓



-4, 902

-0, 936

0, 955

69

-29, 991

0, 022

-0, 075

71, 077

0, 353

0, 149

29, 000

407, 380

\*0, 050\*

\*0, 009\*

\*0, 036\*

-7, 000\*

-14, 000\*

57, 100\*

1, 000\*

12204, 000\*

B



4384

32

224

5370

81031

53521897.1

+0017 ± 10  
+0029  
+0030

+010 ± 10  
+016

82

-50  
54.02

5.28

+0025 + 015 mm

52260

12.715

5375

5375

5370

5386

+036 ± 00

-2 -2

+034 ± 013

+2 -4

+031 ± 009

-114

+0MM

711.24

18.40

53.84

69

53.15

52.72

1048.45

55.05

53.40

36.341  
24.055  
542.9

20

403

153464

69

1941.32

53.25 / 53.31  
20

12204

1 57.1

14 07 21 gms

6.80 + 1.64 + 1.82 (1)

5.50 + 1.08 (3)

5.12 13.5

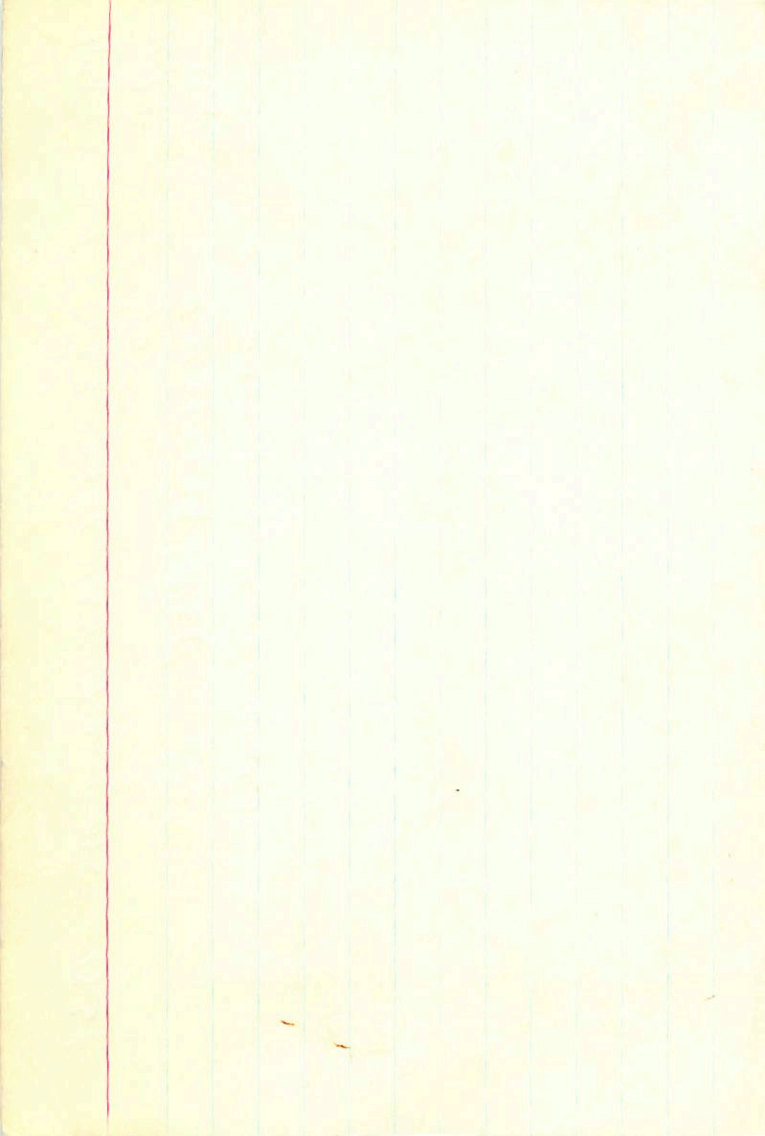
1.41

424.0

3.9  
4.2  
5.1  
8.1

4036 4009 Friday





11961 1 55.2 +30 54 7.2 gm5 -4536

1084

2368

-0031-048 N3D

-0026+6.7-035-6.0 G-C work W30

-0126

626

636

17/0

2

1 5-5.1 +23 21

1563 A 4.80 +0.29 +0.08 4 20 FOIV (0.00) +2.3

B 7.40 +0.58 +0.07 2 100 dG1 37 +0.05 +4.9

B 7.40 +0.58 +0.05 1 200

n v w  
-12 +6 -4 Bul 5-1

HR 511

+3.3 (1)

2 Ari

Sp. Type of H

a sketchbook Ap. J. 121 653, 1955

A very little above main sequence and probably shows anomalies

n-13 for F star

21252

4 07.2 + 3 11

12033

1 55.1 -37 44 121 121

+0011 +012

(early)

+013 +012

1.223 1018 209  
2013 1010 206

- 5.083

- 0.599

- 0.156

7.822

0.493

0.224

89



98



11573

1 55.1 +23 21

FOTW

HR569

480 + 29 + 06 299

02E

2366c

91Mi

.175 .179 1817 ③ SR 2.762 ④ CT

[m] 210 +12

<sup>5</sup>  
180

+14.5  
-1.46

10 130  
-00655 = 0105 #10  
-0084  
-00415  
+9

[c] 752-104

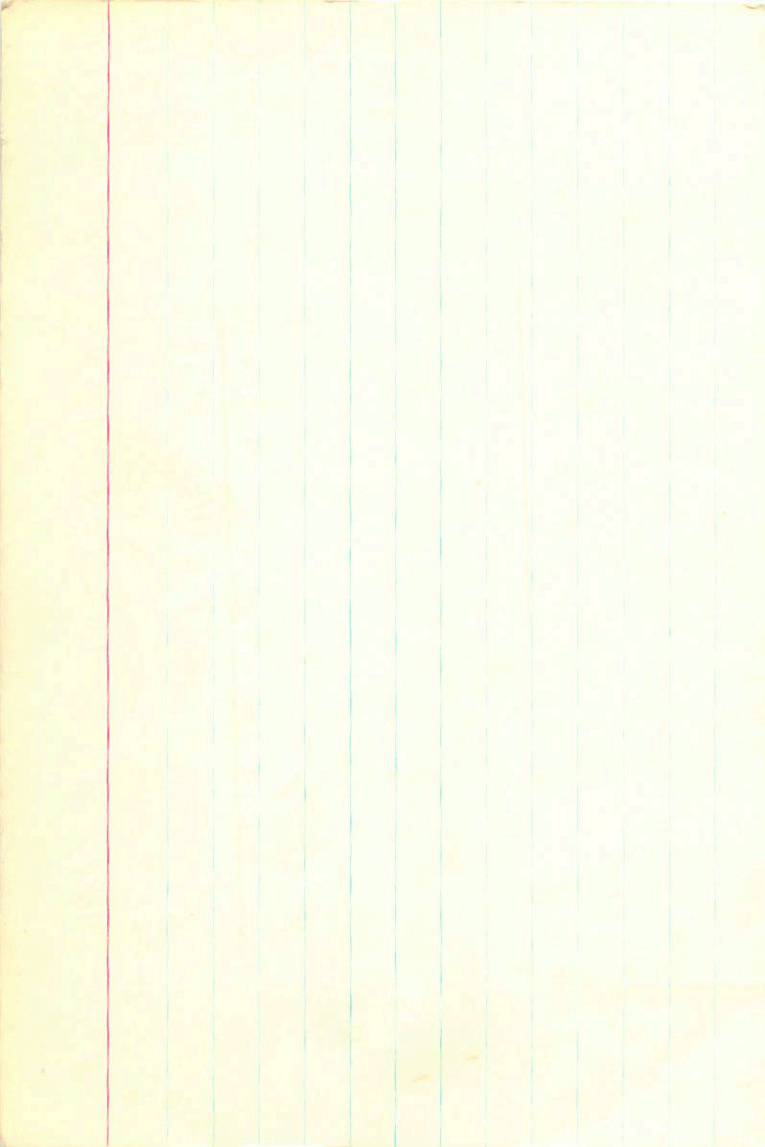
7.40 + 58 + 06 599

118  
949

+1.9

+2.9

0885  
1108-014



A061563

+33 [B]

11973 / 55.1 +23 21 4.8 d61 -1.48

1082 HR SW

d61 +80

236 -0065 -011 N30

2AVI -0066 ± 1.5 -010 ± 1.2 G.C. W. N30

4.9 } 35"  
7.7 }

00010±84 -012±40

52.80 15020

492 15001

862 ✓ HC (000007)

1 54g 441 27

-44

490404

HC

138 IV

-24 (3)

11905

-108 (1)

|

R.A. : 1.900  
DEC. : 37.450  
PM. R.A. : 10.000  
PM. DEC. : -18.000  
DISTANCE : 7.250  
MODULUS : 287.83  
RAD. VEL. : 9.000

8.0  
398.11

q1 (U) : 0.735  
q2 (U) : 0.095  
q3 (U) : 0.671  
dU : 19.567  
U : 11.557

13.8

q1 (V) : -0.631  
q2 (V) : 0.458  
q3 (V) : 0.626  
dV : -62.857  
V : -12.082

-14.4

q1 (W) : 0.248  
q2 (W) : 0.884  
q3 (W) : -0.397  
dW : -66.043  
W : -22.185

67

-29.8

GA

752

1 54.8

+37 26

p2+9

5055

+0078 -0140

2  
+006 -018

1.9  
+37.45

+10  
-10

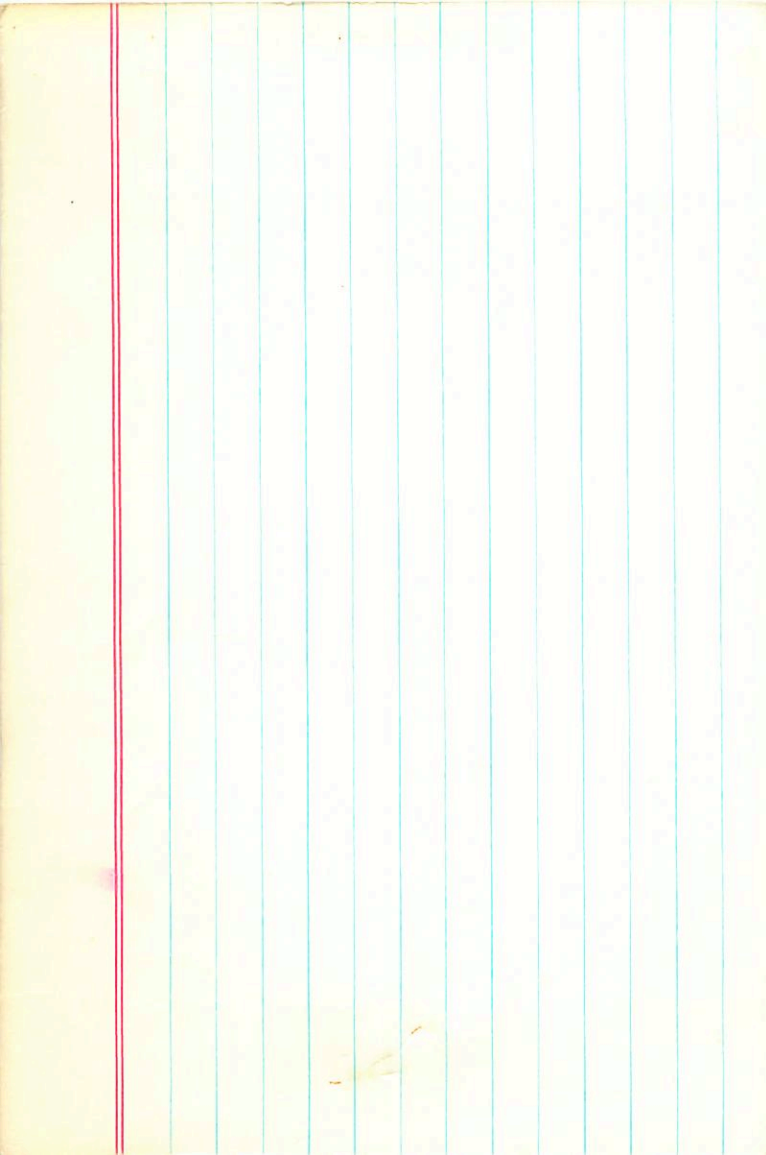
7.25

$$E(B-r) = 0.04$$

+9

$R_m$	$R_{it}$	$E_t$	$[E_t]$	$m$	$v_0$
208	664	330	552	419	+0.85 9.59, 6.8
213	622	243	563	439	+1.1 8.9 7.8
245	597	245	559	439	+1.1 9.2 8.1
241	641	244	548	460	+1.1 8.4 7.8

24





50  
880

1947.04  
580

100 + 010  
2

11.5  
100  
50

500  
40.42  
10  
40.42

80  
63

7.51 1844.2

100 + 010  
2

41.13  
100

1848.9

40.43

1003383 + 0167.5

7.10 + 0.41 (1.5)

642244

20110=1

12087

6511

88

78

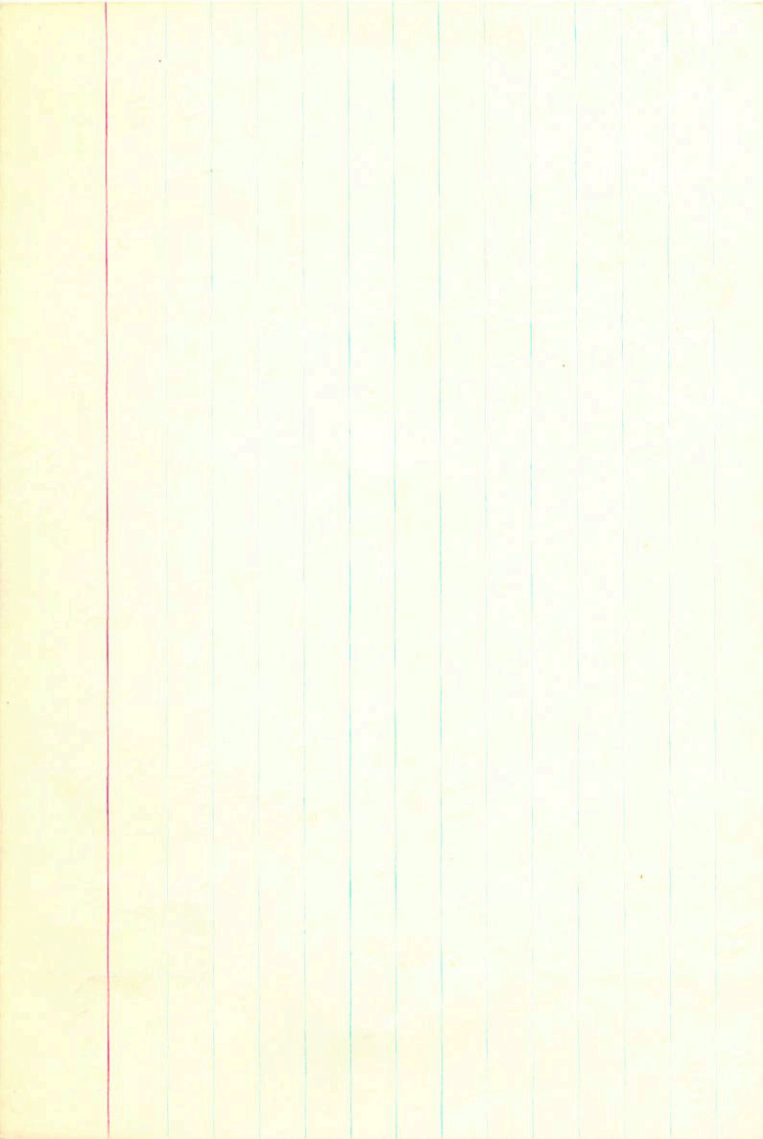
547

1

+14.3 524

2002

10025 + 015



+0125 ± 3.2    +079 ± 2.8  
+0132            +073

11977    1    53.7    -67    54    4.7    65    -16.2

1074

2331    53    39.865    1907.5    -67    5-3    34.17    1905.2

$$\begin{array}{r} -528 \\ \hline 1,240 \end{array}$$

$$\begin{array}{r} -3,04 \\ \hline 37,171 \end{array}$$

$$\begin{array}{r} 39.839 \\ -064 \\ \hline .770 \\ \hline 1.862 \end{array}$$

$$\begin{array}{r} 35.72 \\ +15 \\ \hline 35.57 \end{array}$$

39.3

1.86  
93

$$\begin{array}{r} 34.64 \\ +3.07 \\ \hline \end{array}$$

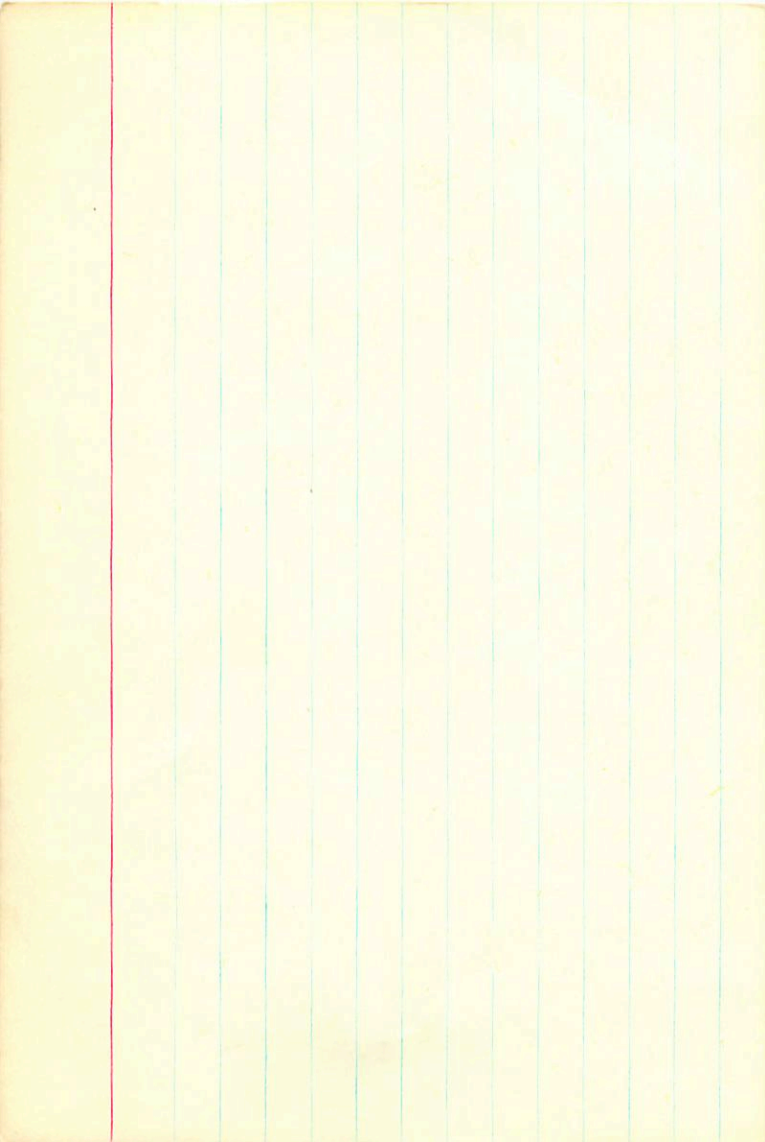
1.655  
4.27

$$\begin{array}{r} 39.962 \\ -10 \\ \hline 952 \end{array}$$

$$\begin{array}{r} .861 \\ +.521 \\ \hline \end{array}$$

$$\begin{array}{r} 33.76 \\ +5 \\ \hline 33.71 \end{array}$$

$$\begin{array}{r} 1955.37 \\ 47.1 \\ \hline 41.9 \end{array}$$



P4

MTM 1 52.6 T33 32

-600

+020-5-049-15 B+8

5.000\*  
100.000  
3.900

0.342  
0.671

36.803

-0.325  
0.721

-29.659

-0.026  
-0.172

-3.312

99



g g



$-0.06$   
 $+1$   
 $11658$   
 $+1$   
 $52.5$   
 $+1010354.7$   
 $+10102$   
 $+51$   
 $27$   
 $-0.29$   
 $7.2$   
 $120$   
 $490$   
 $10$

231F

$1065$   
 $32.401$   
 $1897.5$   
 $+51$   
 $26$   
 $38.42$   
 $1893.5$

+35 @ 1000

$-5.41$   
 $9.20$   
 $31.$   
 $0.02$   
 $0$   
 $-0.29$   
 $-4.3$   
 $1.63$   
 $40.05$

$32.425$   
 $4052$   
 $4045-030$

46.9

$38.70$   
 $1946.96$   
 $38.48$

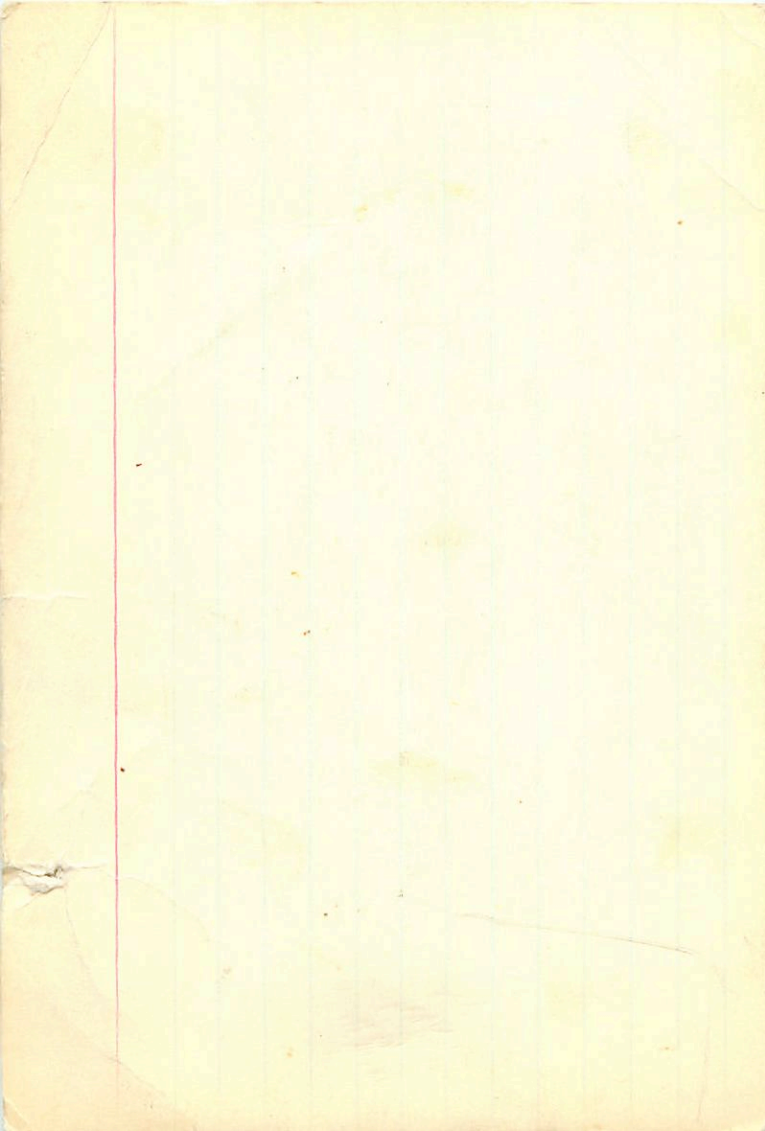
Sky  
 turn  
 $32.421$   
 $418$   
 $4198$

$38.79$   
 $1945.95$   
 $42.81$   
 $46.4$

$-24$   
 $35.55$   
 $34.52$

52.4

1.53



4210255

1 52 33

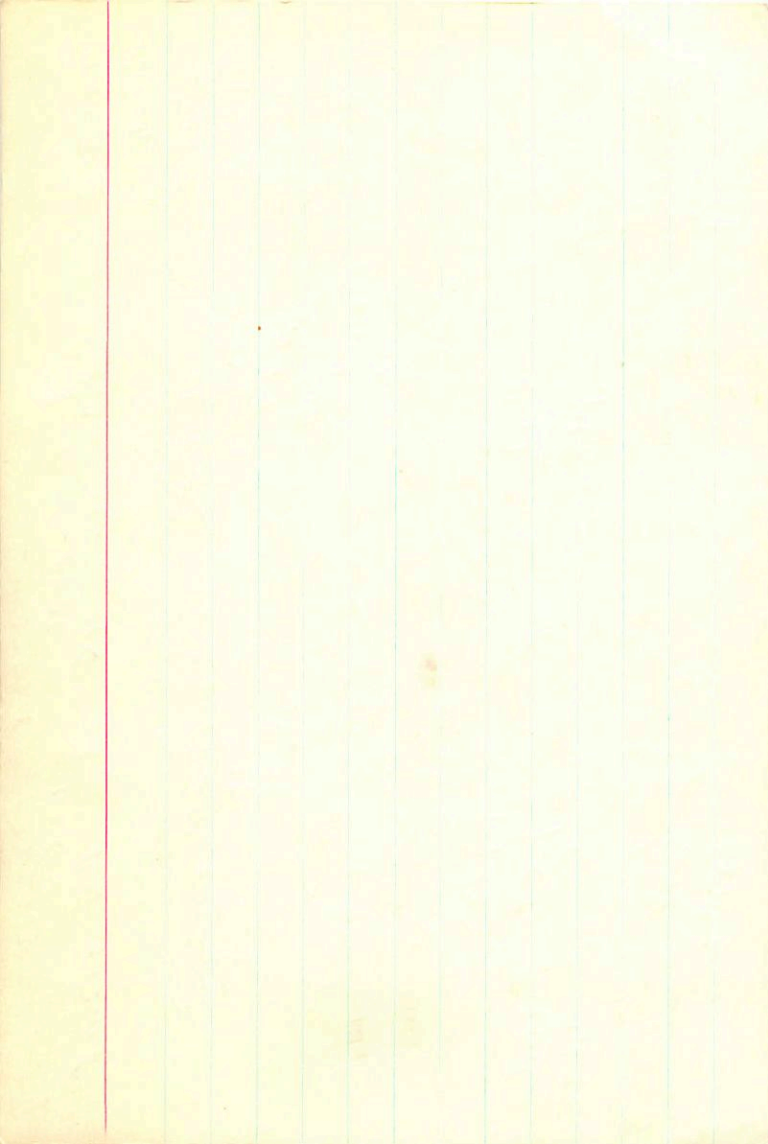
421445

10.6 1g

A 594 +115 +100 54g74

' A  
' B  
↓

B 905 4170 +204 54g74



11753

1 52.3

-42

45

5.0

89

+12.08

1063

23.15  
dpe

52

17.581

1407.3

-42

44

30.29

1903.2

$$\begin{array}{r} 158 \\ \hline 1739 \end{array}$$

$$\begin{array}{r} +1.50 \\ \hline 28.79 \end{array}$$

$$\begin{array}{r} 17.648 \\ -23 \\ \hline 1625 \end{array}$$

11.94

$$\begin{array}{r} 597 \\ \hline -142 \end{array}$$

39.3

30.42

1938.41

+16

$$\begin{array}{r} 30.26 \end{array}$$

$$\begin{array}{r} 30.33 \\ \hline -1.54 \end{array}$$

16.57

8.25

$$\begin{array}{r} 46.6 \\ \hline 43.4 \end{array}$$

$$\begin{array}{r} 17.603 \\ -34 \\ \hline 569 \end{array}$$

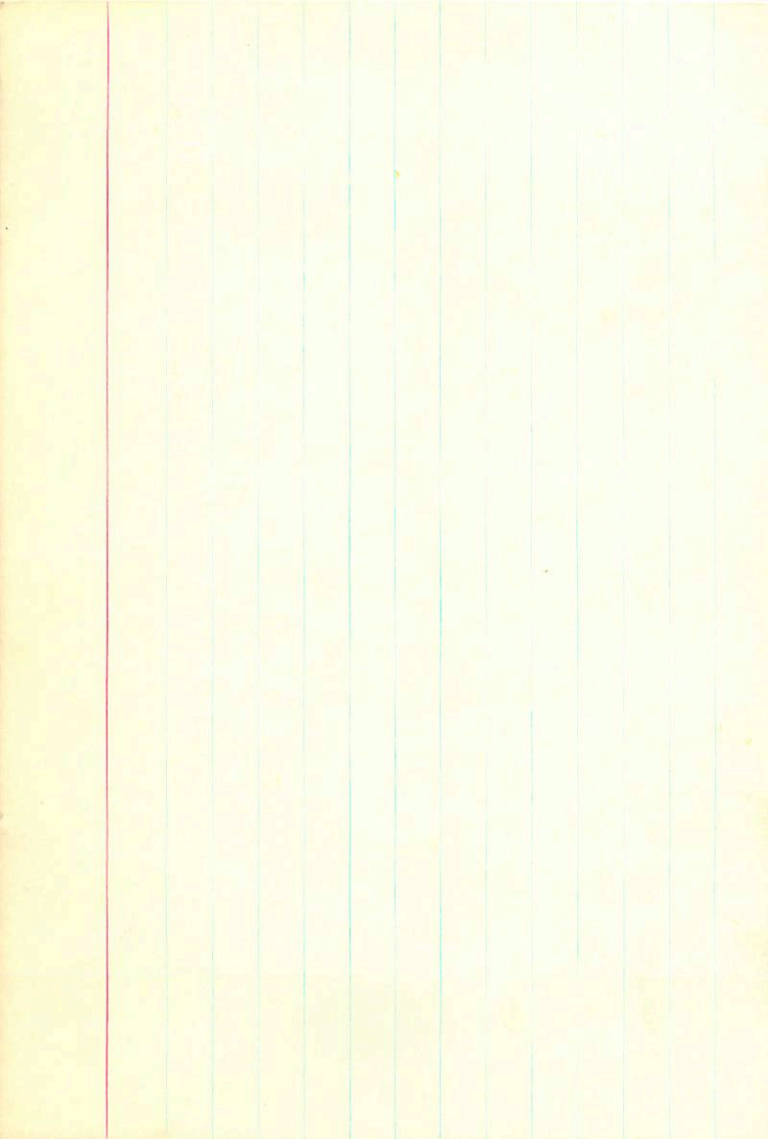
30.34

$$\begin{array}{r} -6 \\ \hline 30.40 \end{array}$$

1954.98

-0037 52.8 -032 ± 2.3  
-0036 -035

Om



11529 1 5-2.1 +68 26 5.0 85 -23.5a

Sp. B, P=69.9

1062

2313

W/len

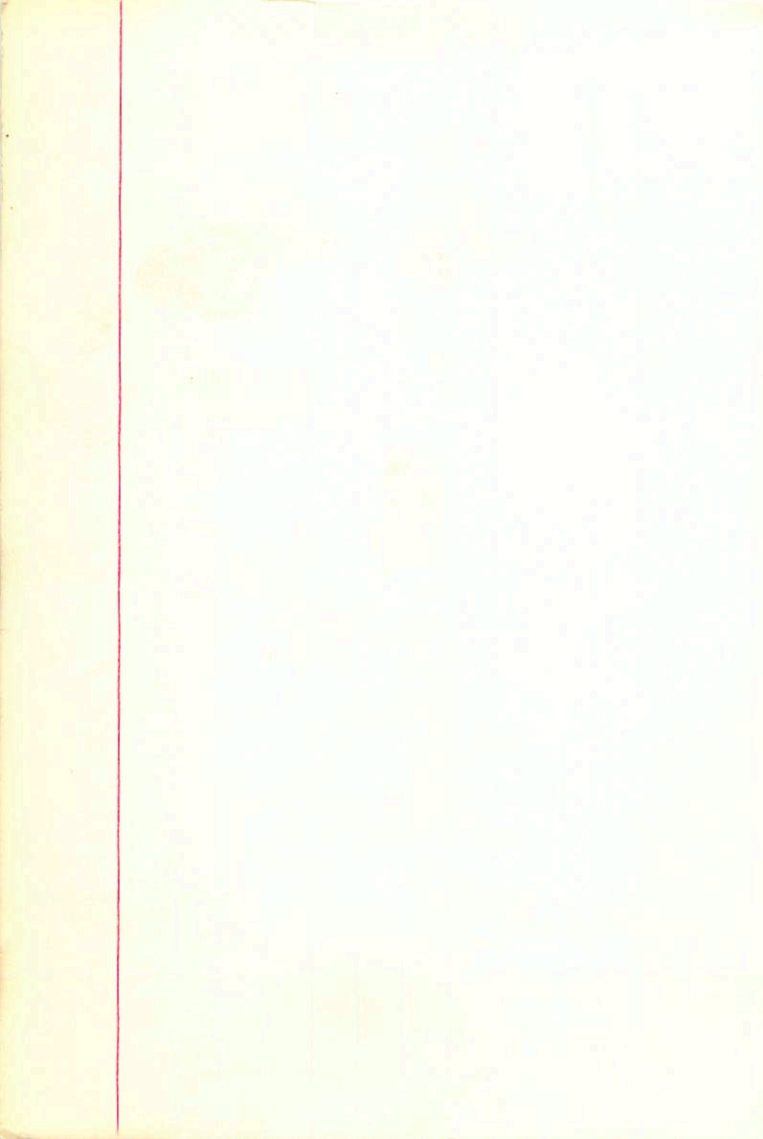
+0024

-006 130

+0018

-008 ± 1.4

42.1





11413    HRS 51    1    51.4    440    27    6.5    152    2319    ~~2668~~    23168

2310    729434

W1059

52.648    18943+0044    40041±38    -064±2.9  
 -208    18943    -064    28.860    18943

$$\frac{-208}{440}$$

$$0 \quad +1 \quad \frac{3.56}{32} \quad 42$$

52.647    40046    -063    28.72    1952.70

$$\begin{array}{r} 76 \\ \frac{45}{30} \\ \frac{49}{59} \\ \frac{3}{37} \end{array}$$

$$+4 \quad \frac{701}{701}$$

$$+052 \quad \frac{-17}{28.55}$$

468 884 -726 688 -094 -082 -13.0

060 -2-265, 044 -028 -083 053 -043 -526

+2.1 +2 +1

-4-68 -37

.0075

-77 0 ~3



$\psi$  Phe 11695

1 516 -46 33

$M_3 \sqrt{6}$   
 $M_4 \sqrt{11}$

$\frac{+4.06}{\underline{\quad}} +5.0 \pm 0.4$   
 $\frac{+1.2}{\quad}$

HR 555 1057

4.4 +1.58

-085 -079 A13

4.404m +1.60 Cope

-095 -087 G2

+5.2 (3)

-091 -077 N30

+7.3 (1)

-090 -080

+6.0 (2)

-45 +1 -1 .013

-73 +1 -1 .008

462 887 174 985 -177 -285 -21 -050 -4 -1.340 ✓

082 023 -156 -044 597 -630 -18 -10 028

0 -28 -24  
1 14 -34  
-2 ✓ -24

0 -24 -20  
0 13 -32  
1 5 -20

+3 -27 -32 -52

-52 -24 -21

-1 -28 -42

-44 -19 -14

028 ✓

H011592

43.7

1 51.3

410

22

05

-21 R

4928

6.75

+0.46

-0.05

F5E

1628 (11)

S=04

-177-255 ac

30 x  
200  
6000

752 has the low velocity,

with respect to the Sun of  $(U, V) = (4 \pm, -10 \pm)$ and the small excess of  $\xi = +0.03$ . It

is therefore similar to Coma Berenice

cluster  $(U, V) = (+5, -6)$  and the Serim Group $(U, V) = (-15, 0)$  which also have smallexcess's of  $+0.03$ . All three of these

clusters have probably never been

more than 2000 parsecs or so from the

Sun, which study shows a small

excess and among the stars now in

the solar neighborhood are perhaps

by their excess from such stars as the

as the Hyades and Praesepe and Pleiades

clusters which show no excess from the

Sun but against what the excess

is measured and what were formed near

the 12,000 parsecs from the Sun

NGC 752

1 51 +37 20

App

$$+0.005 \quad -0.010 \quad \text{E88.} \quad \rho = -4.4 \pm 2.5$$

$$+0.005 \quad -0.005 \quad \text{A3075}$$

370

-7  
-3  
-4

+781	+148	+607	+0197	-0056	+0131	+5.0	-2.7	+3.3	+3
-605	+424	+674	-0145	-0161	-0.306	-11.6	-3.0	-14.6	-12
+158	+493	-421	+0038	-0339	-0301	-11.4	-1.8	-13.2	-13



R.A. : 1.850  
DEC. : 63.400  
. R.A. : 0.000  
. DEC. : 0.000  
STANCE : 0.000  
MODULUS : 10  
. VEL. : 0.000

q1 (U) : 0.741  
q2 (U) : -0.200  
q3 (U) : 0.641  
dU : 0.000  
U : 0.000

q1 (V) : -0.628  
q2 (V) : 0.131  
q3 (V) : 0.767  
dV : 0.000  
V : 0.000

q1 (W) : 0.237  
q2 (W) : 0.971  
q3 (W) : 0.028  
dW : 0.000  
W : 0.000

65

1,870	:	R.A.
23,400	:	DEC.
0,000	:	R.A.
0,000	:	DEC.
0,000	:	STAVEL
0	:	INDU
0,000	:	0,000

0,741	:	(U)
0,500	:	(U)
1,241	:	(U)
0,000	:	UB
0,000	:	U

0,230	:	(U)
0,131	:	(U)
0,787	:	(U)
0,000	:	0
0,000	:	0

0,237	:	(W)
0,271	:	(W)
0,020	:	(W)
0,000	:	WB
0,000	:	W

*PO*

99

6000 / 50.5 + 63 25.5

1418

PAR

10318-0200

9670 57780  
2550 - 6283

2448.6000  
1377  
1377



462 887 -595 804 -048-013 +7.5 009-4.5 -047  
022-004-043 007 071-2<sub>3</sub> +6.0 +5.3 +2.8 006  
+17.1

17D1149D

1 50.0 -36 29

+2.541.7 Y  
~~19.333~~ A

9.22 +0.29 41.53 -045 -013 CP

FOR

462887 -542 841 -038 -016 +18.4 009 -10.5 -066

047-004-032 043 -248 +16.3 +14.4 +7.5 007

<sup>24</sup>  
-17.1  
+23.7 -23.6 -19.9  
-25.0 +6.2 -26.1

+20.9 -16.9 -19.9

-22.4 +2.6 -24.3

006

+21.5 -21.0 -21.5

-26.6 +3.7 -25.3



14011481

1 50.0 - 32 47

~~ASTB~~ 4

+247 (2)

+15.4 ± 2.6

~~23180~~

2.56 ± 0.10 ± 1.54 ASTB

~~-037~~ -016 C/D



CC131 1 49.5 +17 41 10.5 dmo +30c 2w  
1042

+0330 -080 Gu

69

1 1 1 1 1  
1 1 1 1 1  
1 1 1 1 1  
1 1 1 1 1  
1 1 1 1 1

1

1 1 1 1 1  
1 1 1 1 1  
1 1 1 1 1  
1 1 1 1 1  
1 1 1 1 1

10

+000 ± 9.5

0720 ± 10.0

2461 1501.4

387 1502.7

64

AD11255 - 241

48.4  
49.2  
48.24

+20 16  
18

C.7

145 58

+20 24.5

145 58  
+ 20 24.5  
-----  
165 82.5

+24 - 4 1-2  
4020 - 009 AG18

1023-010

←

0250  
000

0013  
685

R.A. : 1.800  
 DEC. : 66.200  
 R.A. : 233.000  
 DEC. : -34.000  
 STANCE : 4.400  
 DBLUS : 76  
 .VEL. : 0.000

q1 (U) : 0.747  
 q2 (U) : -0.222  
 q3 (U) : 0.626  
 DU : 368.804  
 U : 27.977

q1 (V) : -0.625  
 q2 (V) : 0.086  
 q3 (V) : 0.776  
 DV : -292.366  
 V : -22.178

q1 (M) : 0.226  
 q2 (M) : 0.971  
 q3 (M) : 0.075  
 MP : -55.788  
 M : -4.232



52



+0465 ± 6.7 -034 ± 12.2 3W

(899174)  
11161

1 48.4

+66 12 8.9 dGO -2.51

2236

281

+0.2 (3)

1035

23.933

1904.0

+66 12

13.02

1409.6

+65 0209

-2.139

1.37

1471

21, 794

094-034

14.39

G-244-38

22.91  
42  
1,952

13.1

~~1929.8~~

233

-34

44

00

1600

8482

883.06

-019

-5296

+470

+0215

-01

GP

R.A. : 1.800  
 DEC. : -5.100  
 R.A. : 25.000  
 DEC. : -26.000  
 STANCE : 9.550  
 DDPLUS : 813  
 VEL. : 0.000

q1 (U) : 0.747  
 q2 (U) : 0.522  
 q3 (U) : 0.411  
 DU : 23.845  
 U : 19.382

q1 (V) : -0.625  
 q2 (V) : 0.762  
 q3 (V) : 0.167  
 DV : -167.733  
 V : -136.339

q1 (M) : 0.226  
 q2 (M) : 0.382  
 q3 (M) : -0.896  
 DM : -20.406  
 M : -16.586

62



2/9

11193

1 4726 -5 08

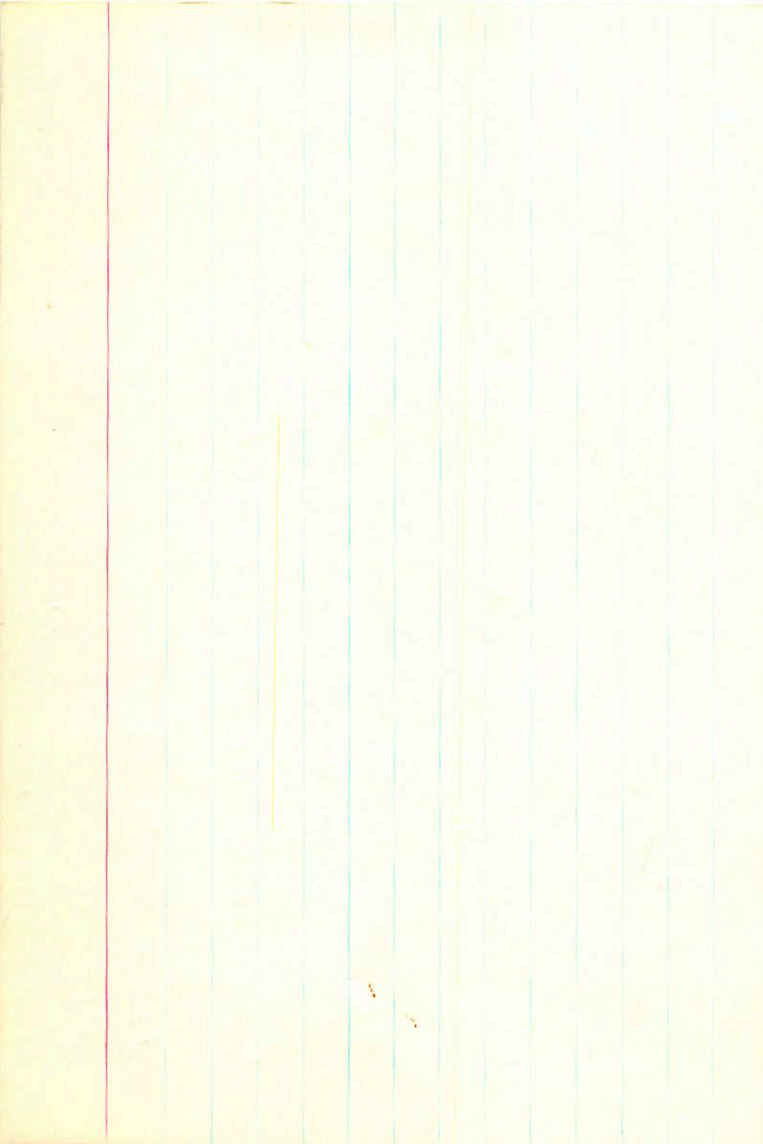
tas-26

tas

-26

9.55

-



100i

11155/4

1 47.4 + 22

02

6.2 A2

+ 10d

622216

1026/5

-0013 ± 3.0 -007 ± 2.5  
-0011 ✓ -007 ✓

481(6)

7.4964 + 1.38

AD51457

47 22.454

1883.8

+ 22

140.19

1875.9

086

.510

49

40.68

6.3 } 3"  
7.4

22.456

40.14 + 16

1933.4

94

~~455~~

~~22.456~~

22.450

52.4

40.30

40.29

1934.03

36.2

~~452~~

~~0~~

-058

40.31

40.31

56.3

-37

451 892 375 927 -018 -010 +6.3 -004 0.5 -044

008 002 -016 004 057 -069 +1.1 +1.0 0.5 005

+12.4 -12.7 9.3

$\boxed{-19.7 + 9.5 + 12.5}$

006

+10 -11 -7  
 $\boxed{+12 + 6 - 11}$

0045

+14 -15 -10  
 $\boxed{+1 - 5 - 15}$



1 Ave 17 Feb

1 47.4 +22 02- 42 +1 d

HR 530

8 59 +1.3 d

AD 51457

AB 5.86 +0.73 +0.50 60 III +A

W 102816

-018 -007 6c

DM=1.06

-010 6ct





450 893 -190 982 -187 -085 -2.5 017<sup>-0.5</sup> 0 -40.9

062 -008 -122 015 223<sub>3</sub> -6.16<sub>2</sub> -2.5 -2.2 -1.1 0435

+3 -15 -9

-17 +1 -5

+2.3 -13.4 -9.0

05

-15.8 +0.3 -4.0

+1.5 -11.4 -7.3

06

+13.3 +0.3 -2.5

10

393 208 293 2.595

(+4.1)w

11131

1 46.9 -10 57 dB-1 -2.5-6w(6)

GC2210

6.79 +0.63 +1.79 egg(2) me Len

W1019

6.79 390 191 414 2.598

-110351

0Y2 A(25)

(308) (336)

6.7435 208.301 2.595

401 312 350 +4.81

+5.21

-25 <sup>0</sup> ~~14~~ -8 .030

plet

-34 +2 -11 .020

See HA (3)

-129 ± 9 -087 ± 0 X

-141 ± 3 -085 ± 3

-137 -055

178428

171627

61606

W

(suppl)

+5 to -3' Feb/6)

+9 to -11 Mar/6)

11.20

table

11.21

1171 501 25 464 107 122 1.003  
1 427 -10 56 4.8 4.1 -0.97  
+2.90  
206L  
+2.96  
-4.4

1021 1021 2200 - 209187 448235 -2.5

2-2-12 -0102 -091 1130 391  
-2.0  
-43

-0104 -0875.14 353 308 243 2553  
1.98

1100 25 2 46 2 46  
0.12 (125)

-00994 -0532  
-0413 1-148  
-2.0

-152  
-01018 -0877  
-0546

~~-14620332~~

1.9

-1504

~~-148 -091~~

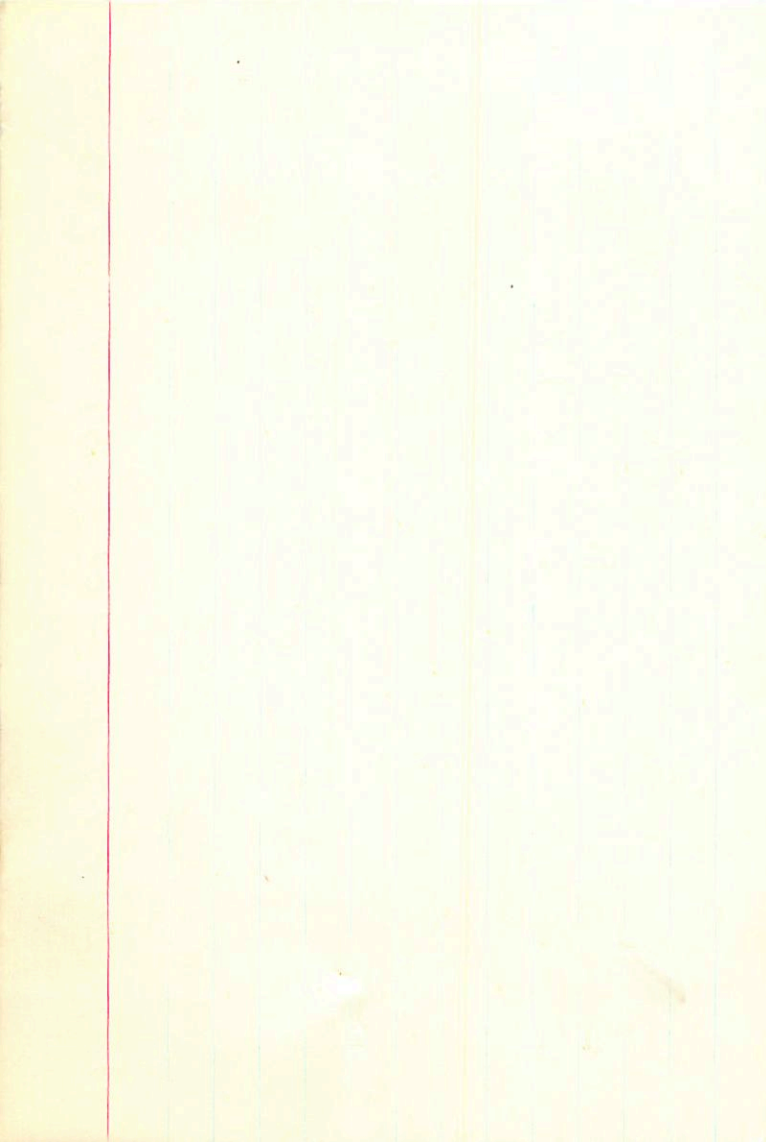
9634 -8911  
2674 8986  
1721  
1721  
1721

-144  
-43

181

9606 2780 1974 -6034 1219 -0148 +5 -7 0485 1.7

+7.8 1824 1.71 41.6





+270287

1 46.7

+28 27

8.4  $\text{P}_{1111}$

-63.06

40

1018

-061 -001 Y

$\frac{1}{-060}$  +k  
000

-0046

000

-

+1

-

+1

-47

+1

41.675

44.14 19 27.95

- 36

+ 25  $\text{P}_{1111}$

$\frac{1}{676}$

$\frac{2}{4412}$

$\frac{2}{27.95}$

41.67

44.1 1925.8

$\text{P}_{1111}$

034

-7.5 -6.498

-0.622

0.322

0.714

56.819

1.711

0.215

0.947

-0.240

-54.728

-2.721

q1 (U)

q2 (U)

q3 (U)

q1 (U)

q2 (U)

q3 (U)

q1 (M)

q2 (M)

q3 (M)

MP

M

q1

q2

q3

q1

q2

q3





65 2

99

+77.508

NO3

Handwritten scribbles

1 44

-0022444

44

39

-102±3~

-24

Handwritten scribbles

0024 003

5548 88.6

Handwritten scribbles

-0021 004

57.09

8.522

6508

5589

554

-0035 -006

-0023 -003~

8.544

6242

5544

10

-0032

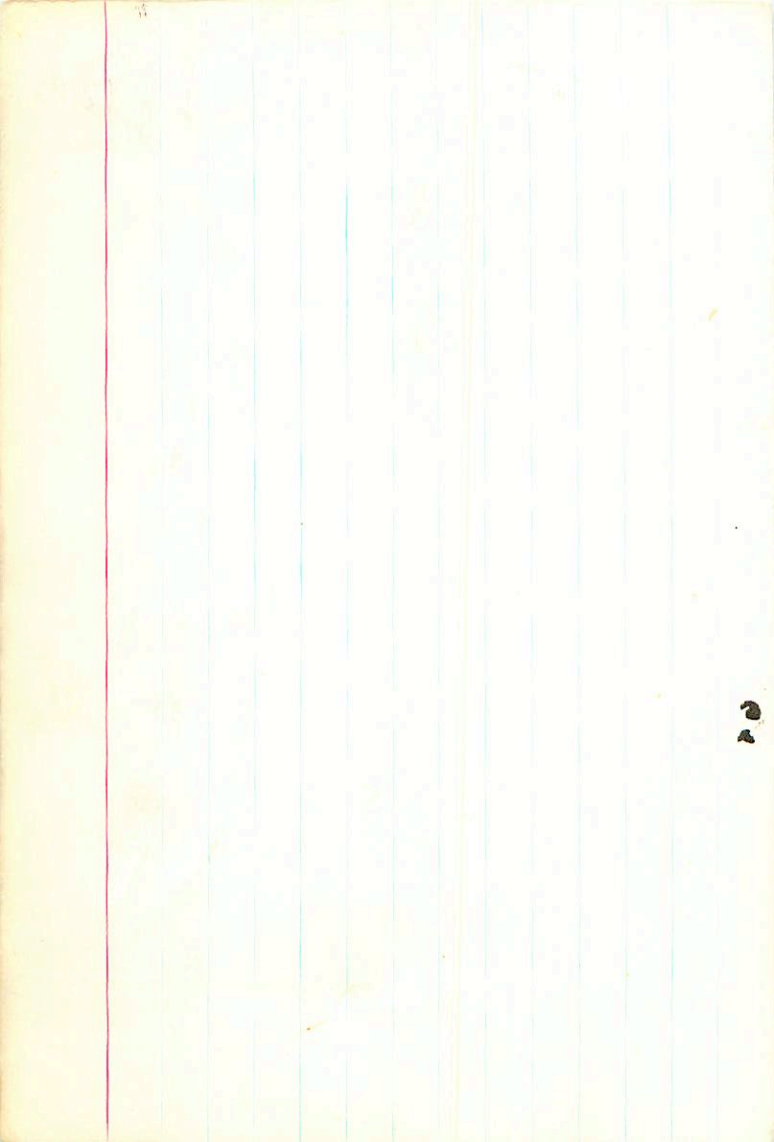
544

5544

-103-007

24 29

24



11074

C.O. CD

-220249 602

1 46.1 -22 28

7.94

+0.96

+0.63

1 18M

7.93

+0.865  
Brown

+1.95

2 mL

S=0.13

DCS - 2.16W(3)

+5 -9 +4 .050

+1085(2) -0485(2) M

+5 -1 +3 .060

-1 +8

+2 -1

+104 -041

11074

1 46.1 -22 28

dcs

no tale

7.98 +0.96 +0.59 (2)

7.66 +0.34 (3)

 $n(\pm)$ 

+5.85

7.32

1.47

 $\pi(\text{nt})$ 

0.051

u

v

w

+5

-9

+4

0

+2

-2

$$\Delta(B-v) = 0.00$$

$$\Delta(u-B) = 0.16$$

probably not plotted  
sq28  
693

-2.1 +0.109 -0.041



612 781

+0094 ± 2.1  
+0091

41.299 1903.8

-437  
865

40.

12.86

2811.2

40.972

40.105

41.075

41.162

5.929

35.294

41.717  
736

+37

42 17.22 1894.8

1.49

18.71

48.2

30.20

18.00

17.72

28

17.26

54

17.57

-27

0

17.19

81.2

996

1426.1

35.0

40.2

72

17.36

-1.35

17.57

1943.86

10975  
Gc2193  
W1009

1 45.7 +37 42 967 +36.56

5.94 +0.97 +0.71

NOII R

W(+0.7)  
009

+35.9 W(6)  
+37.2 W(3)

S=07

S.92 +99 +74 1A

+112 -027 ac

+63 -14 -14 .010  
+67 -18 -16 .009

also 140 91132

Handwritten signature or initials.

1 6.534  
1 29.924  
1 8.693  
8.688  
8.215

1 18.232  
1 63.254  
8.446  
8.643  
1 8.622

11 16.927  
17 8.957  
8.556  
8.335  
8.252

014 8.000  
79  
4.500  
1 28.000  
63.000  
16.200  
1.750

RW

69



DAD 1207 +6, +3, +4, +11, +20, -2  
RDR

(11) -14 143 250 258  
143 286

522 1 45.5 716 42

10585

2192

(5.717) -003 -0.12 Champion

(170)

New IS

well

Sta ?

11533-0261

FRY

0312

-017  
-019  
-016

139 592 2871 56  
144 880 2887 201  
144 896 2879  
139 850

+12

Ms sd

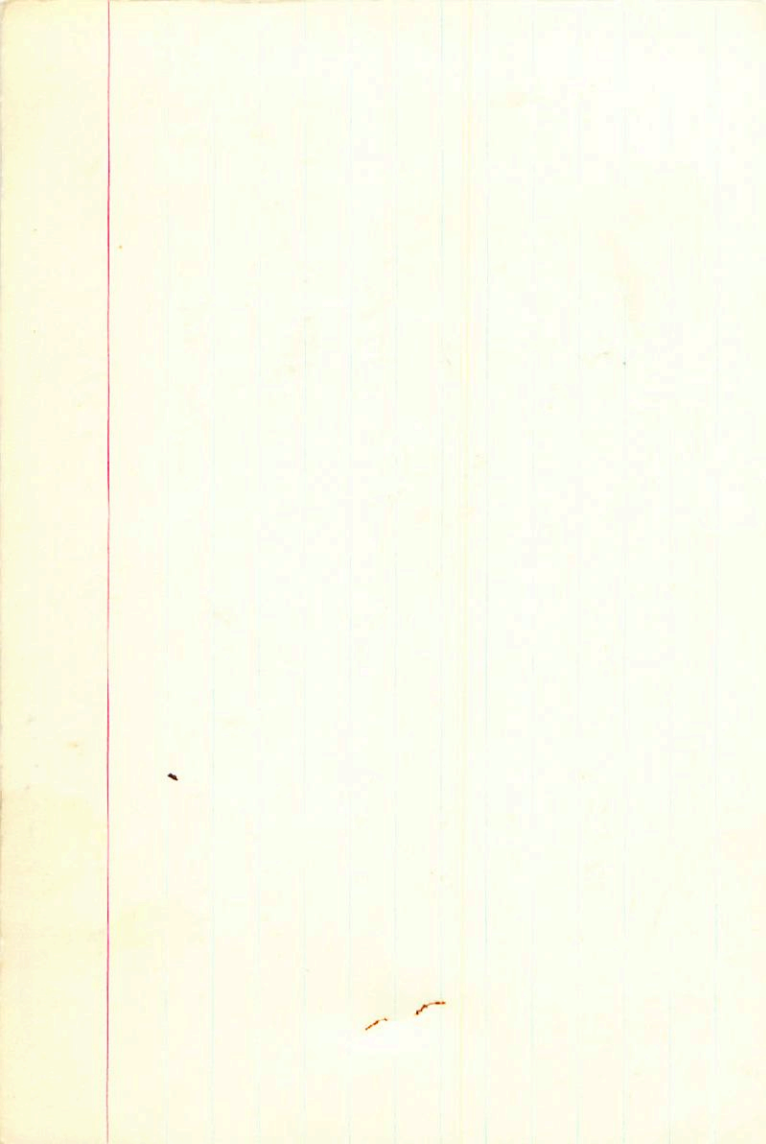
+6: Vaud

10044-0231  
10040-0234  
10586  
1060-026

178 1179  
+167  
+62  
-24  
1.236

413

57  
4.3



10995 1 45.6 -0025+3.1 +0485+2.7  
 -0021 file 46 for 2960 file 2 4W

2192

1008 37.970 1902.6 file 46 2448 1866.5

~~6221~~

6387

38.020  
~~118~~  
~~888~~

-2.57  
 21.91

23.34 19324.0

38.020

018

34.0

23.41

8887 23.99

025

-070

23.82 1939.30

1137 078 38.010

-009

23.91 133

23.91

365

9206

9782

23.61

40.1

3905

3720

+1.70



0.215  
-0.423  
-0.881  
9.252  
-7.767

58

-0.622  
0.636  
-0.457  
-202.210  
-17.397

-0.126  
667.755  
41.915

88

-0010 ± 2.9 -027 ± 2.3

-0008 -025

10824

1 43.5 -05 59 5.5 g N4 +10.86

993

2148

43 28.545 1895.6 -5 58 58.03 1894.6

054  
599

1.50  
56.53

13.275

1 15.278

43 28 553  
013  
566

28.577  
-10  
567

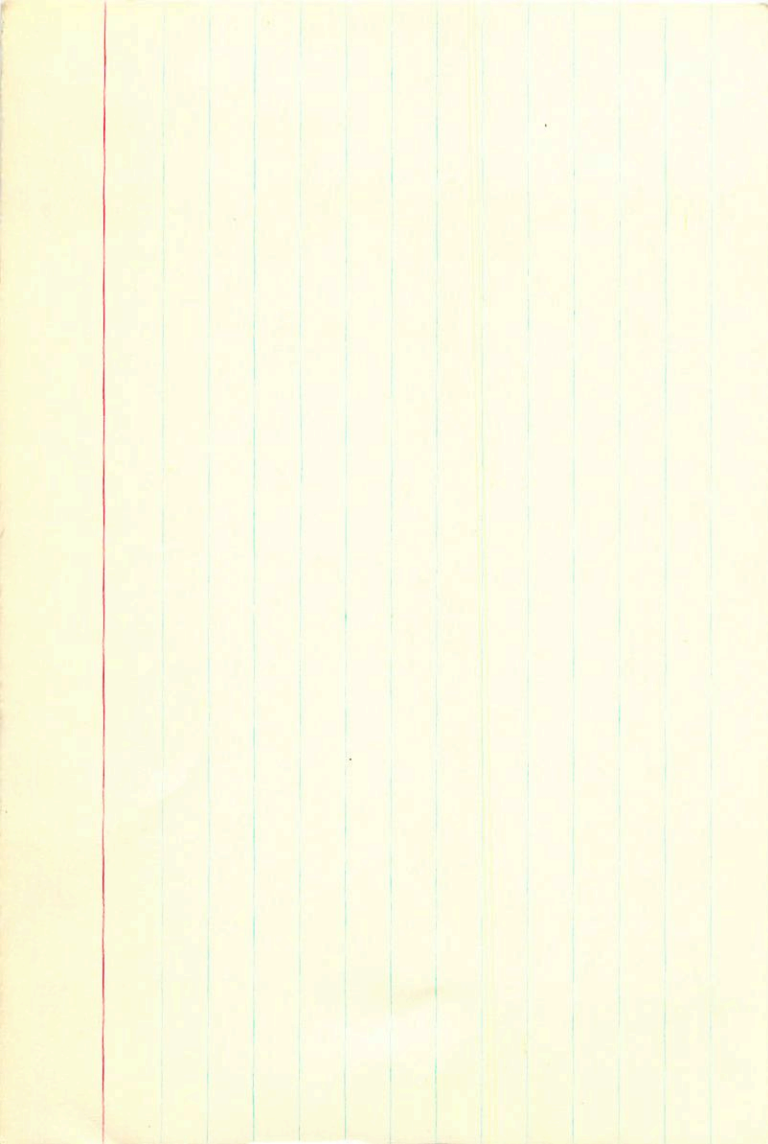
566  
-023

-5 65 84.20  
7 32.12 1933.90  
58 57.08  
62  
57.70 1944.76

57.75 1938.61

+34  
57.4  
57.57  
-1.04  
36.36  
41.7

40.7



989 1 43.1 +8 19 66 4p +14c

GC2141

+0011 -015 1st Gen 50 3 plants heavy

(28)

14D10783

101c

+00.2a 1000g/ly

Boats

+0006 -026 landing

(210)

788 418 501

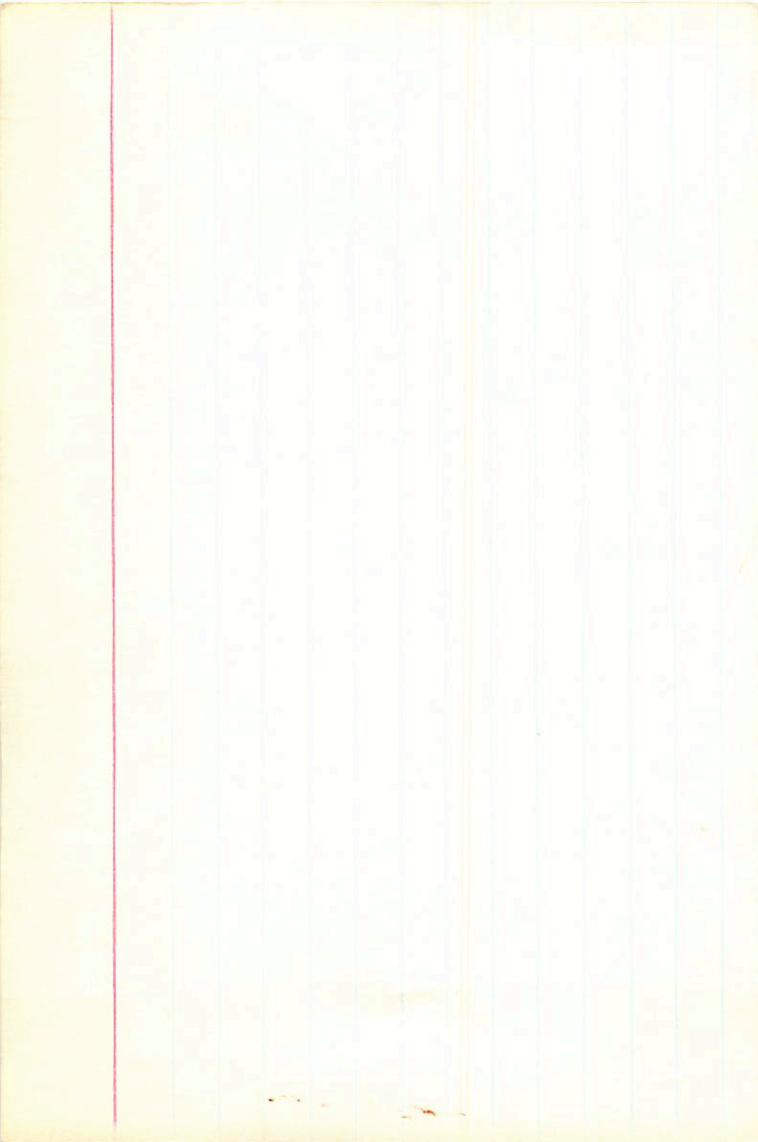
+0572 = 0297 +0275 15.8 +5.0 +153

-618 702 350

-0469 -0499 -0968 -203 +6.7 -13.6

205 576 -791

+0155 -0410 -0255 = 53 -15.0 -203



10845  
515

1 43.9 417 05

Wynalus

9156

+158 +173 +979 000 SPL

0000

+00353 +0123

+00357 +0130

+00357 +0131

(ND)

-1E SpB

+0512  
050.5 +005.5

9354 999  
3586 0219  
+0057

R.A. DEC. : 192.000  
 PM. R.A. : 82.000  
 PM. DEC. : 6.000  
 DISTANCE : 158  
 MODULUS : 3.400  
 RAD. VEL. : 0.753  
 q1 (U) : 0.624  
 q2 (U) : 0.208  
 q3 (U) : 867.498  
 DU : 138.197  
 U : 107

q1 (V) : -0.622  
 q2 (V) : 0.779  
 q3 (V) : -0.084  
 DU : -213.357  
 V : -34.102  
 168

q1 (M) : 0.066  
 q2 (M) : -0.974  
 q3 (M) : 203.784  
 DM : 28.985  
 M : 424





M : 289.882  
 d3 (M) : 287.805  
 d5 (M) : 479.0-  
 d1 (M) : 289.0  
 U : 215.0

U : 301.48-  
 d3 (U) : 723.815-  
 d5 (U) : 480.0-  
 d1 (U) : 977.0  
 U : 359.0-

U : 138.181  
 d3 (U) : 894.788  
 d5 (U) : 893.0  
 d1 (U) : 459.0  
 U : 327.0

LEG : 084.8  
 MODULUS : 128  
 DISTANCE : 000.0  
 MW DEC : 000.58  
 MW : 127  
 DEC :

57

—

10909

1 420 24 30

140 #  
+13.1 @  
+3.4 debit

-24.11

1 44.3 -24.16

-24.21

+172 +024.146  
0 +7

9.13d

172 056

P-I 346

173 086

175 082

1.75  
-24.21

142

072

6.0

+3.4