

no

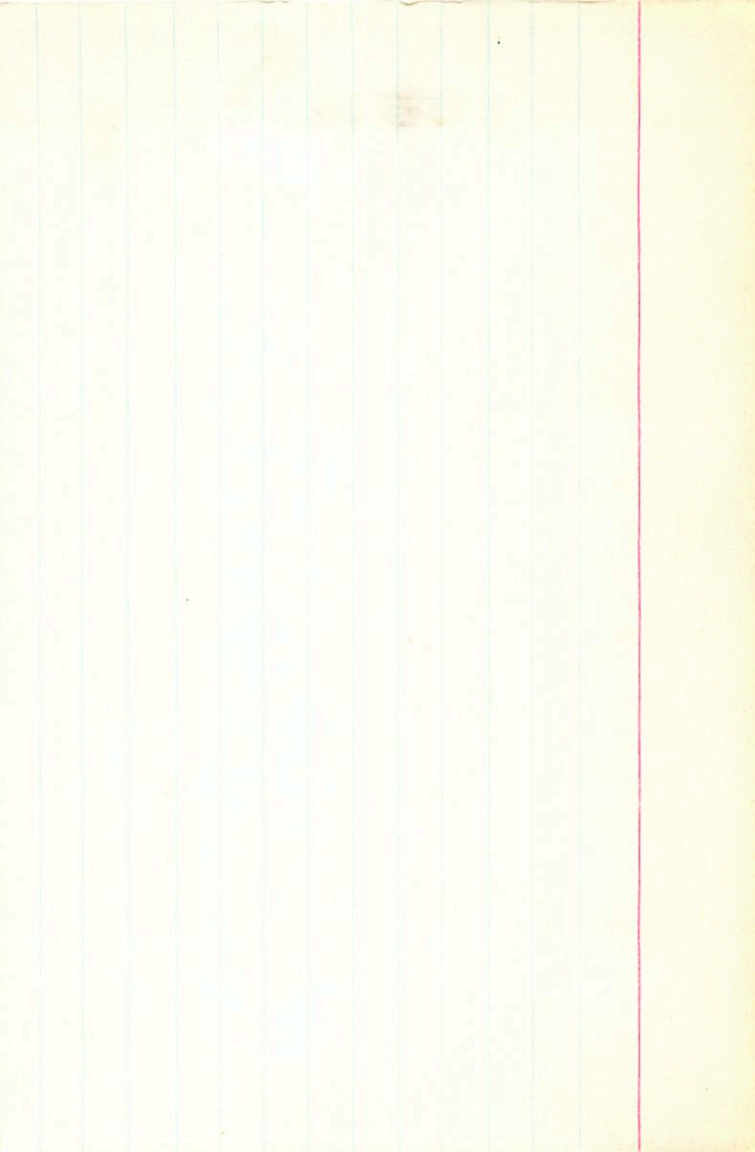
45- 5e 1st 941 / 43241

-055 +004 G-L

0 +1
-055 +005

-18.5
-22.6
+17.4

4500	-2044	5500	-2054	545	405	232	505
+1635	5500	4500	+1525	614	585	46	585
-0500	0110	2000	-0201	515	101	583	101



7471

(5505)

1 17.7 28 38

(510+ +015 -004) 47

40.545
358
903

54576

940

145 4900

6400

52.19 9/8

23
52.42

40.566
491

509

53.16 4464

+4
53.20

$$R = 0.72$$

RS

XX And 1 14.7 t.37 41

-252(10)

Max 10.20 t.13

Min 11.12 t.47

$$DS = 9$$

10

$$+059 \pm 12$$

$$-062 \pm 12 \quad 45$$

-1

$$+059 - 037$$

320 947 625 750 +059 -062 -25 -039 -16 -227
-019 012 056 -037 085 322 -~~49.5~~ -18 -6 001
+67 +21

0.000*
1.000*
14.700*
38.000*
41.000*
0.059*
-0.037*
10.000*
1000.000
-1.000

0.197
0.570
196.048

-0.230
0.717
-230.727
-0.132
-0.401
-131.527



0.000*

1.000*

14.700*

38.000*

41.000*

0.060*

-0.031*

10.000*

1000.000

-1.000

0.205

0.570

204.504

-0.222

0.717

-222.701

-0.106

-0.401

-105.157

21

176°39

-0068 ± 130 000 ± 15.0
-0172 +007

7623 1 15.1 +76 3 2 7.6 g/KO -77.78 34
1562

744 5.489 1910.0 +76 3 2 1.80 1910.5

1259/006 912
(347)

272
5.761

0
2.09 1945.09
-4
2.05

Carlsberg

5204 1850

5.083
74
5.157

-0172 - "060 -007 GP
0000

671 1003

Buy
to
-77.7

v.v

22

643

01^m 15.9

- 33° 24'

HD 7909

+ 7.67 + 1.01 + 2.06 KO IV

1000 1006 500

+ 1000

+ 1006

+ 1000

- 0.1

+ 1006 + 1000

5

+ 804 + 595 + 024

- 586 + 798 - 143

+ 104 - 101 - 989

-0.020 ± 0.03 $+0.07 \pm 0.03$ 1.0 ± 0.1 -0.1 ± 0.9 $C_3(4)$
 $+0.003$ $+0.05$ 1.0 $+0.06$ $+2.0$
 7909 1 15.4 -33 24 7.67 +1.01 $(+2.06)$

1577

- 55.690 19001 -33 24 1.51 1898.2

$$\frac{100}{790}$$

$$\begin{array}{r} 46.120 \\ 9.725 \\ \hline 55.845 \\ 815 \\ \hline 800 \end{array}$$

40.7

$$\frac{802}{112}$$

$$\frac{-88}{39}$$

$$\frac{56.68}{54.65} = 1.037$$

$$\frac{2.00}{2.43} = 0.823$$

$$\frac{216}{1.23}$$

$$\frac{81.54}{408} = 0.2$$

$$\frac{55.823}{1.6} = 34.89$$

$$\frac{2.89}{1.30} = 2.22$$

$$1.984.39$$

23

7909.000*

1.000*

15.900*

-33.000*

-24.000*

0.006*

0.002*

5.000*

100.000

-0.100

0.028

0.024

2.847

-0.009

-0.143

-0.896

0.002

-0.989

0.299

2

7853

1578

750

1 15.9

+37

07

6.3 g Ag + 5.0 g

|

HR375
7732 1 16-1 +77 18

Q511 -720 (5)
964 73.56

FC1580

W753 6.38

+76040

HR375

W(41.3)010

-57 -59 +15 070

-015 +091 6-6

-022 +074 GAZ
-020 +080

326 545 976 220 -020 +050 -73.5 078-72.0 85

007-025-019 074-317-205-16.2 -15-5

-47-26-64 01

-57-59 +15

90.5 Pnc

1 16.7 + 27 00

48 c

140383

A2E

0.2276
10.30
14

+021 -0005 6c

+021 -002430

+021 -0095123

+021 -008

822

1 16.2

-29 00

+8.6 (4) C₅

1457431

+28(2)

7.89 +1.03 + (2.12) 110 10 - 10

-29041

24136

0062 006 ~~10000~~

081 006

+057	+015	X
0	+8	↓
<hr/>		
+057	+023	

~~199~~

7608 5.40

93

6

9.01 0.94

9.0

57

6/16

10

24

20 20 20 20 20
20 20 20 20 20
20 20 20 20 20
20 20 20 20 20
20 20 20 20 20

20 20 20
20 20 20
20 20 20

R.A.
DEC.
P.A.

..
..
..

1.250
-29.000
23.000
6.000

Z Z M no 20 58 00
 RS km (100) 21 41 08
 HD 7908 ✓ 1 17 00 - 23 00 7.22.43

7908 7.25 +0.075 10.110 +0.558 2.724 13 Nov 70
 7.24 +0.184 +0.159 +0.624 2.713 15 Nov 70
 1.82 135 6.11 2.718
 1.7 am, C1 B

(RS km 827 +0.169 +0.148 +0.927 2.759 43 Nov 1970 8:30 PM)

Z Z Aug →
 BS Apr 196
 Alval .115 } Cycle -

HIC
 5491
 1/2

203 S...
 10 V... 187 796

CY Aggr - 12.0 9.53 +0.250 +15.2 406 2.710 3:35 AM 16 Nov 70
 D + C 4

AD C mi 07 57 10 +01 176 9.0-9.4 6.122

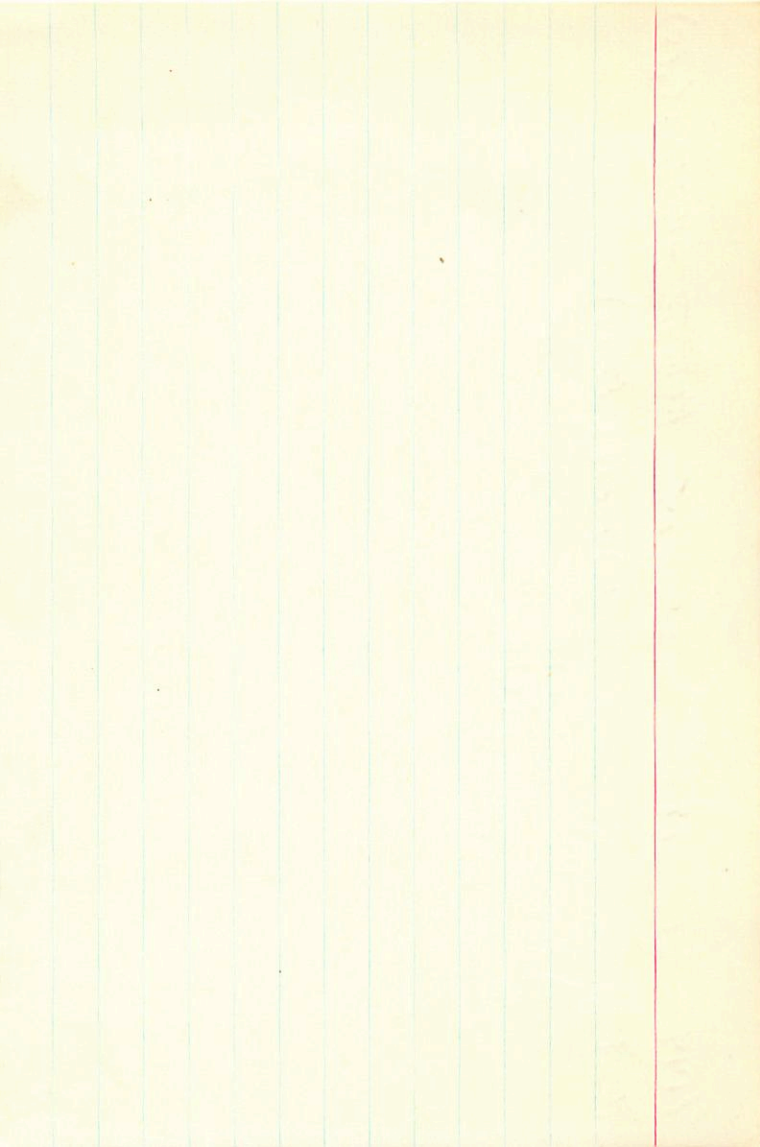
CC96 1 17.6 +57 04 10.3 d116 +22c^{2w}
764

-39 +.44 C2056

8144 1 18.0 -29 15 N0III-IR +16.3±0.3 C₃(5)

1621 " 7.37 +1.08 (2.14)

+0023 " -001 N30
+0022±7.6 -013±8.06±7N30



+0036 ± 9.0 +023 ± 7.5
+0036 +014

409142 1 18.2 -14 09 2.0 964 +8.1 ±

770
1626

+05-1 +02366
+020664

18 12.446 1904.6 -14 09 6.42 1900.7

163
283
-1.13
7.53

+0036 +018

+1 -3
+0037

97 37
699 16 58.388
1 14.018

291/8 18 12.406
-104
+410
392
109

1060.17 1934.59

7 5312
9 9.05
-46 +40
7.51 + 40
+ 43
7.04

392
109

34.31
1933.74

724
+ 31
7.40

12.381
374

33.6

334 542 - 244 570 + 051 + 020 + 8.1 - 005 = 2.090

-017 002 - 048 - 005 - 057 237 + 8.5 + 7 + 3

-3 + 42 + 13

006

143 - 9 + 1

01

~~+0020~~

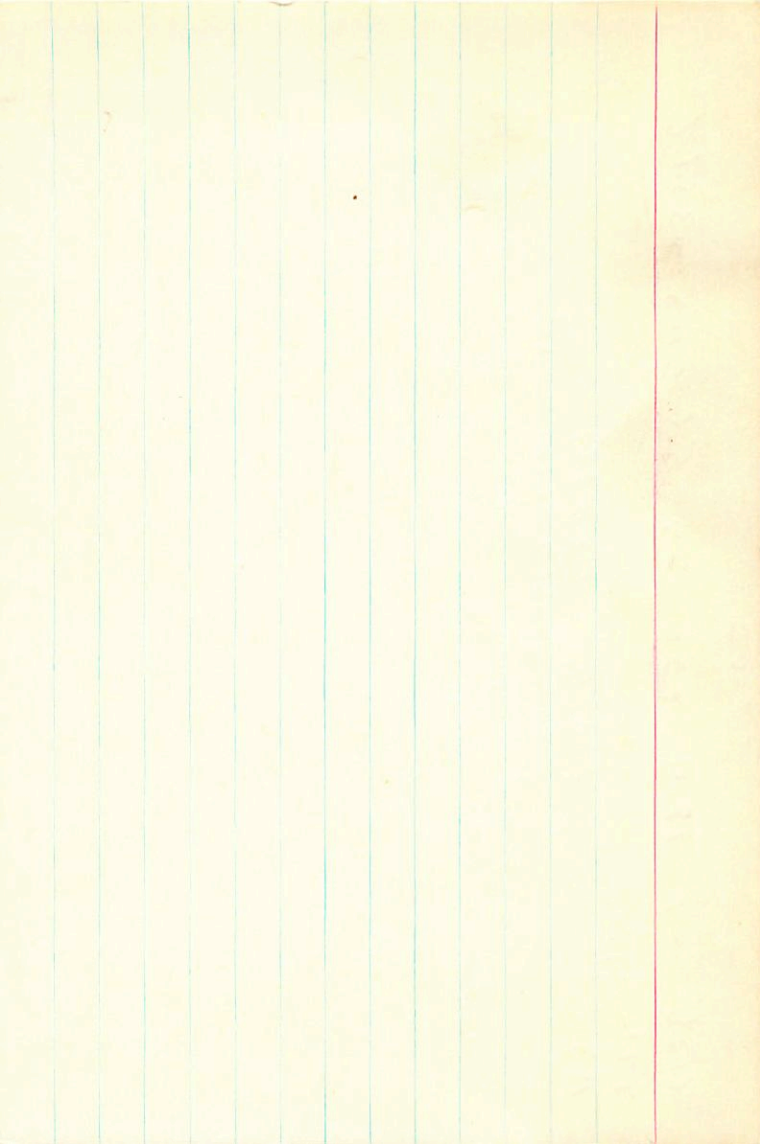
8126 1 18.4 +28 29 5.6 g 145 -35.68

771 918cc

1630

+0020 -068 N30

+0020 21-0676cc on EN10
21.9



+0195±7.5
+0207

+072±5.9
+070

82224 1 18.5 -57 36 -20.1±0.5C, (4)

1632 $\rho_a = 0.19$

7.01 +52 F7E

7.2-10.2 2.6

28.579 1905.9 -57 36 6.65 18589

-860
27.719

-3.68
10.33

PPM
0244 090

5

17640

0.91 192886

29.016
54224

52.75
8.116

32.0

9916 9665
0249 2866

28.562
2.346
1.8

8.58
8.58

1521

743
372

7576
37.9

28.61
1.5

8.50

1946.9

7653
328
90
32

39.0

28.61
1.5

6.1
-6.1
6.1

7.60

7.73

-20.1

25

1.500
128.888
60.000
3.500
-20.100

1.200
8.500
1.210
204.000
100

1.200
1.200
1.200
1.200
1.200

1.200
1.200
1.200
1.200
1.200

PM. DEC.
PM. DEC.
PM. DEC.
DISTANCE
MODULUS
RAD. VEL.

1.200
1.200
1.200
1.200
1.200

1.200
1.200
1.200
1.200
1.200

1.200
1.200
1.200
1.200
1.200

R.A. : 1.300
DEC. : -57.600
PM. R.A. : 328.000
PM. DEC. : 90.000
DISTANCE : 3.200
MODULUS : 44
RAD. VEL. : -20.100

q1 (U) : 0.800
q2 (U) : 0.558
q3 (U) : -0.218
dU : 904.940
U : 43.890

q1 (V) : -0.589
q2 (V) : 0.664
q3 (V) : -0.460
dV : -207.309
V : 0.204

25
q1 (W) : 0.112
q2 (W) : -0.497
q3 (W) : -0.860
dW : -118.699
W : 12.114

+300200

CC97 1 18.6 +31.05 8.8 div4 +20.2834

772 664-65

N2I

+25.1

+49 -08 cin

13.5 m
" "
" "

77.5 m

+540

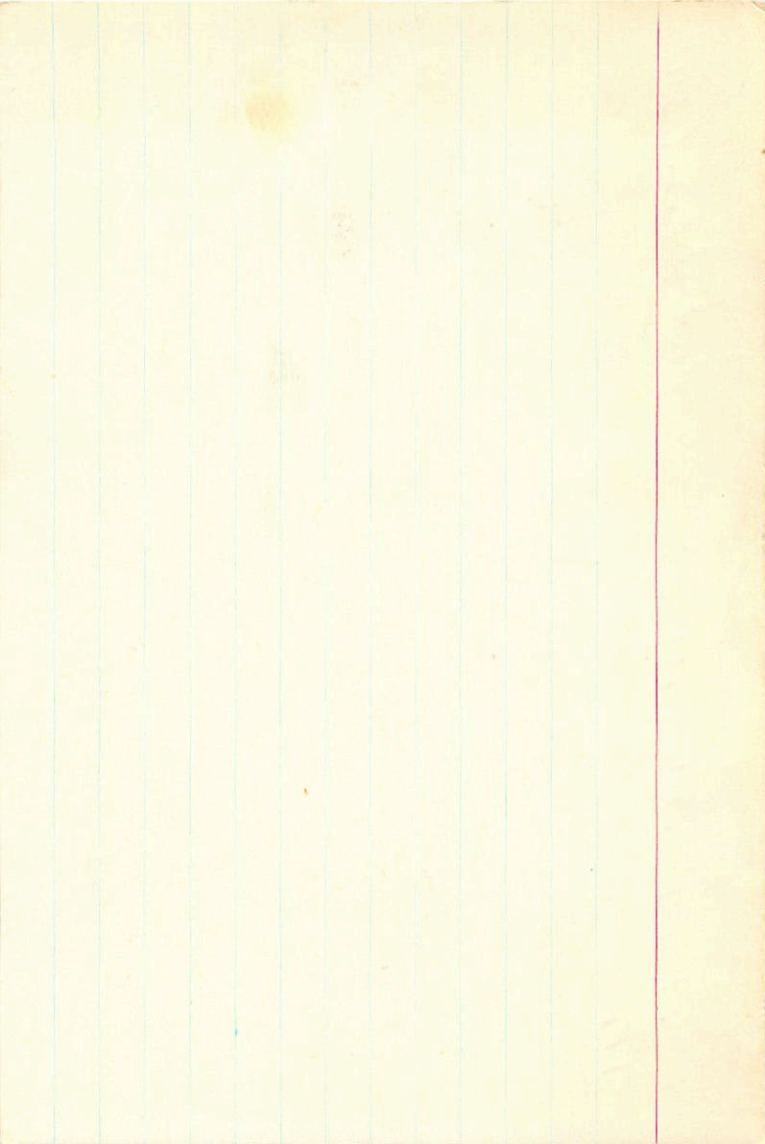
Gulf
+92 +66

40 P 94
54
12

146
109.0
71.3
11.9

+749 +230 +555
-550 +476 +652
+1109 +949 -516

+2045 | -0872 | 1.9579 97.8 +11.2
-1.5101 -1805 | -1.6906 -84.5 +13.2
+ 2518 -3219 | -0.301 -1.5 -10.4



+30° 20'

G(64-65)

1 18.6 t31 05 d44 +20.28w(13)

w(+6.2)040

w772

8,2

+25.1 (2)

4278

+49 -08 in

13.5 11''

.9312 m(7)

$$\begin{array}{r}
 336 \ 542 \ 517 \ 856 \ +450 \ -050 \ +20.2 \ -071 \ +10 \ -322 \\
 -165 \ 014 \ 462 \ -039 \ -602 \ 2.255 \ +17.3 \ +16 \ +6 \\
 \\

 \end{array}$$

$$\boxed{+55 \ -26 \ -10}$$

$$+4 \ +51 \ +4 $$

$$\boxed{+47 \ -20 \ -9}$$

$$+6 \ +44 \ 45 $$

$$\boxed{+43 \ -13 \ -10}$$

+100210

8249 1 19.3 +14 55 8.3 d6-2 +10.463W

2175
775

+288⁵⁵ +015 = 4 Rinty

193

9m-p1 = 4.45

+28577.700675 y

1000

+910 +1111

-539 -773

+776 +154

282
-3
285

282
+2
284

?
Phy 19

8245

776

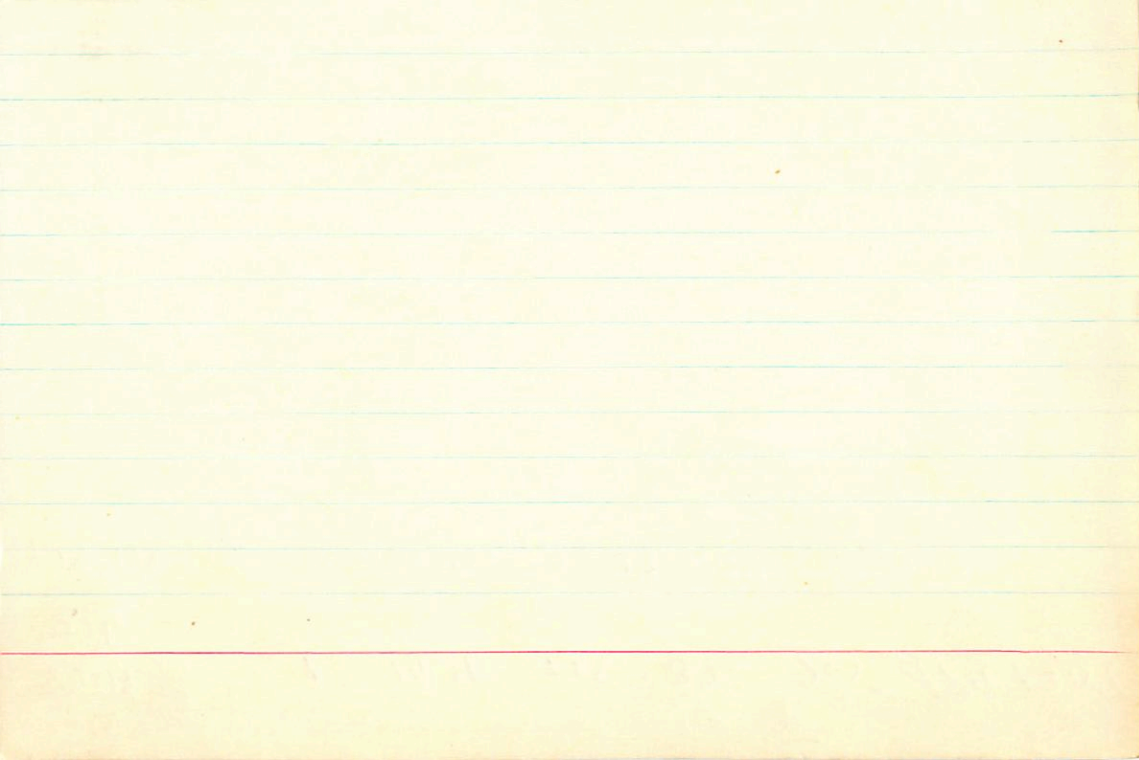
1 19.4 +15 32 2.5 dF4 t3.56

+15°196

+0042 -033 N30(Nm, 50)

94
122

194
30
4



8274

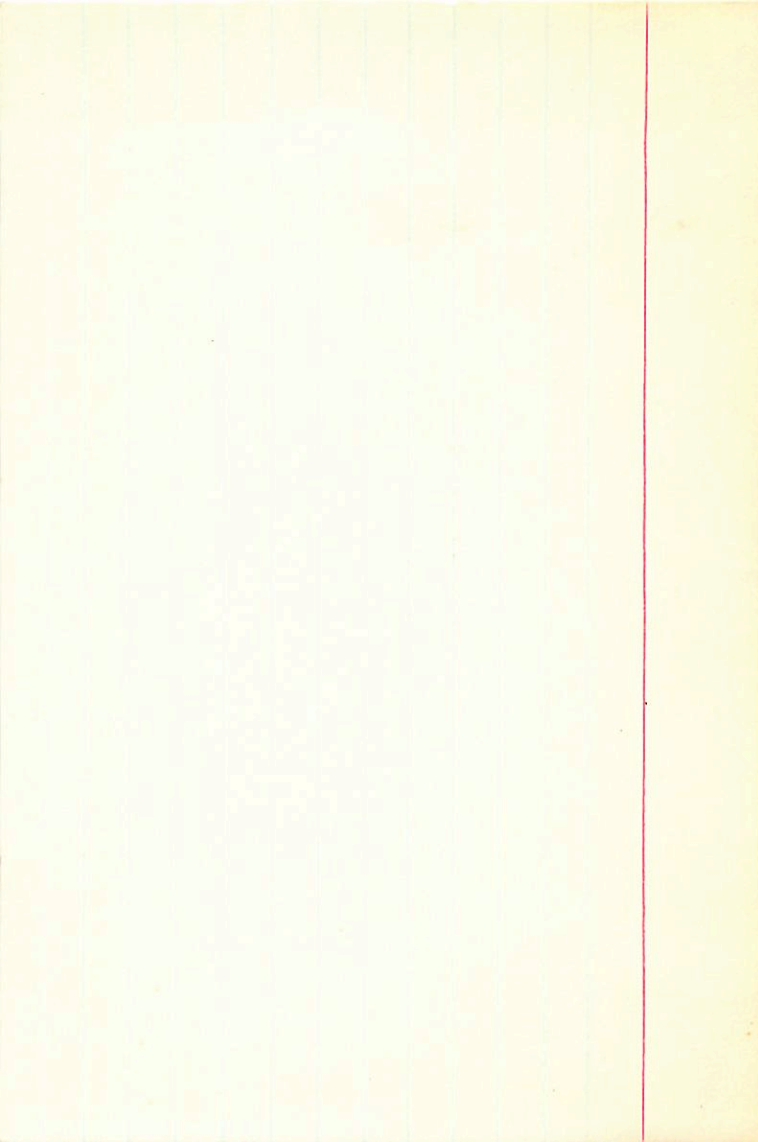
+210182

w779.

1 19.7 +21 50 7.2 F8

$$\begin{array}{r} -030 \quad -021 \quad \text{Ritz} \\ -1 \quad +3 \\ \hline -031 \quad -018 \quad 96c \\ 0 \quad +2 \\ \hline -016 \end{array}$$

-472 35



CC99 1 18.9 +12 29 113 +10 2

120168

8.2

W781

+406 +020 X

-3

+403

+2

+22

1113

22

2

110

342 540 216 576 +406 +020 +10, 004 +2 095

-139 -001 352.004 -625 $\frac{1.505}{3}$ +95 +10 +4

-7 +49 +4 04

$\boxed{+44 -210}$

045

-5 +44 +4

$\boxed{+41 -15 -1}$

05-

-4 +40 +4

$\boxed{+37 -16 -2}$

26

8394

-580285

11284

1 20.0 -58 14 10.8 G-5

+13.4 ± 3.5

1st cleaning

9.67 ± 84

Am 20 7.34 ± 34

+259 ± 7 +250 ± 4 CR

+285

+1309 BPM

517

300

460

+34

27

VEL. : 13.400
DUELS : 4.850
TANCE : 360.000
DEP. : 217.000
R.A. : 150.200
DEL. : 1.250

01 (U) : 0.000
02 (U) : 2.000
03 (U) : 4.000
04 (U) : 6.000
05 (U) : 8.000
06 (U) : 10.000
07 (U) : 12.000
08 (U) : 14.000
09 (U) : 16.000
10 (U) : 18.000

11 (U) : 20.000
12 (U) : 22.000
13 (U) : 24.000
14 (U) : 26.000
15 (U) : 28.000
16 (U) : 30.000
17 (U) : 32.000
18 (U) : 34.000
19 (U) : 36.000
20 (U) : 38.000

21 (U) : 40.000
22 (U) : 42.000
23 (U) : 44.000
24 (U) : 46.000
25 (U) : 48.000
26 (U) : 50.000
27 (U) : 52.000
28 (U) : 54.000
29 (U) : 56.000
30 (U) : 58.000

R.A. :
DEC. : 1.350
R.A. : -58.250
DEC. : 517.000
DISTANCE : 300.000
RADIAL VELOCITY : 4.000
PROPER MOTION : 63
PARALLAX : 13.400

q1 (U) :
q2 (U) : 0.796
q3 (U) : 0.565
dU : -0.219
U : 1829.079
V : 112.470

q1 (V) :
q2 (V) : -0.593
q3 (V) : 0.652
dV : -0.472
V : 162.912
W : 3.955

q1 (W) :
q2 (W) : 0.124
q3 (W) : -0.505
dW : -0.057

R

0.15

B.D.3 + 0.15

(2)

+ 39 - 41

+ 072 - 037

720 ps.

122
- 22
0

720

250 ps

+ 490 - 67 + 4

316 ps

+ 62
- 125

+ 797	+ 474	+ 374	+ 2210	- 0921	+ 1289	410.7	- 5.6	= + 35.1
- 592	+ 736	+ 328	- 1642	- 1430	- 3072	- 97.1	- 4.9	- 102.0
+ 120	+ 483	- 868	+ 0333	- 0938	- 0605	- 19.1	+ 13.0	- 6.1

+ 2720	- 0831	41979
- 2020	- 1291	- 3311
+ 0410	- 0447	- 0437

5.29 615
46 22
425 5 695

441
- 80

8334 | 200 + 1 28

gmo

HR092

6.18 + 1.50 + 1.87 (2)
5.33 + 0.63 (2)

(-15)

498 65
1100 80
205
69

-15 Vander

10036-045/G-6 + 0038-040 ±2
+ 10042-038 number + 0037 - 040

6.95

10562

1058-045

28

1

394HR

1

20.1

15

203

-20 (5)

8380

-26 (3)

m

AM=2.2

54

4.5 (2) Van

6.5 (2)

|

8243

+67°16'

1

30.1

8.8

+67 51

deg +81

+081-086 GAZ

342 940 926 377 +081-086 +5 -08047 -152
-028 027 076-075 223 455 +30 +3 +1

+14 +25 0

02

015

14
6.9
LCT
34
512
133

LCT 34

LCT
34
34

LCT 34
LCT 34
LCT 34

13

LCT 34

LCT 34

LCT 34

LCT 34

133

LCT 34

LCT 34

LCT 34

LCT 34

LCT 34

LCT 34

LCT 34

LCT 34

29



121

19

RS

131

8. 119
8. 271
8. 312
8. 418
8. 432

141

8. 591
8. 698
8. 484
8. 612
8. 656

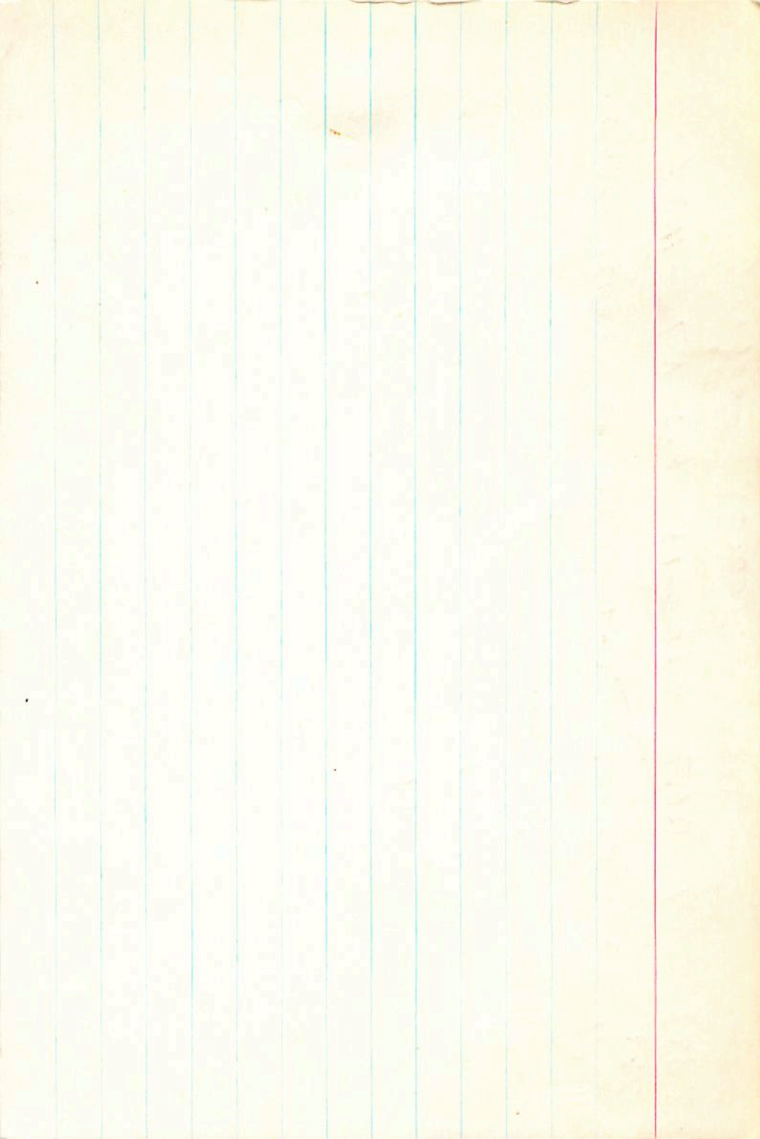
69

8. 798
8. 432
8. 443
8. 538

63

8. 800
8. 800
8. 800
8. 800
8. 800
8. 800
8. 800
8. 800
8. 800
8. 800

29



8447

18222

50 467
147
355

20.9

+0022215

15 12 M3

-024 = 12.2

47.50 1.4

+0.7

141
4109

85.357

68.75

41.14

91.06

382

85.357

64.48

40.87

115

4

393

90.88

1003

121

14

865

+0.7

6000 +0015

+00005 0000

+0006

1002464

1002-004

30

47 And 837
HR355 168
W780 79

48.4
C
0.850

22.73
25.466
48.198
48.198
1/6

+14.30/62
+6.07/12

964 991
2630 0610

0.97
0.91
0.10
0.10

0.850
+0065-079
+0065-010
+080
2.5.5
51.5
17.05
16.54
16.54

6927
2660/964
W20
-04029989

6338
+23.5
-52
530
10
V=0779
2-0184

8

346 938

608 254 +078 -019 +13 -012 +8 -021

-027 004 023 -011 -076 365 +103 +9 +3

0 +46 0

0085

+40 -20 -7

009

+1 +44 0

+39 +9 -5

31

100

100

100

100

100

0' 000

0' 110

0' 101

0' 252

0' 838

0' 408

0' 261

0' 539

0' 228

0' 209

0' 182

0' 322

10' 200

1' 120

2' 200

8' 200

3' 200

5' 120

1' 200

8

0.119
0.300
0.419
-0.468
-11.446

3

-0.591
0.403
0.698
-257.897
-20.181

+21

0.798
0.165
0.580
273.953
39.290

501

154

1.330
37.450
-22.000
5.300
13.500

51

$$\begin{array}{r} +0060 \pm 3.7 \\ +0058 \\ -039 \end{array}$$

$$8442 \quad 1 \quad 21.2 \quad +17 \quad 33 \quad 6.8 \quad F2 \quad -15.2 \quad 6$$

792

$$1686 \quad 21 \quad 9.347 \quad 1890.9 \quad +17 \quad 33 \quad 29.94 \quad 1887.6$$
$$\begin{array}{r} -355 \\ \hline 8.992 \end{array}$$

Calculator

$$857-040$$
$$9.235 \quad 1934.9$$
$$\begin{array}{r} +5 \\ \hline 240 \end{array}$$

$$862-040$$

$$9.275$$
$$\begin{array}{r} +5 \\ \hline 283 \end{array}$$

$$46.3$$

86
40
43
15.2

$$9.262$$
$$\begin{array}{r} +12.90 \end{array}$$

$$3048 \quad 1934.5$$
$$\begin{array}{r} +7 \\ \hline 30.55 \end{array}$$

$$29.90 \quad 1939.93$$

$$+19$$

$$\begin{array}{r} 20.09 \\ \hline 30.32 \end{array}$$

$$37.2$$

$$\begin{array}{r} 49.6 \end{array}$$

$$\begin{array}{r} 30.32 \\ \hline -1.93 \end{array}$$



22

1. 250
2. 250
3. 250
4. 250
5. 250
6. 250
7. 250
8. 250
9. 250
10. 250

AD. VED.
MODULUS
I STANCO
M. DE
M. R. A.
DEC.
B. C.

R.A. :	1.350
DEC. :	17.550
M. R.A. :	86.000
M. DEC. :	-40.000
DISTANCE :	4.300
MODULUS :	72
AD. VEL. :	-15.200

0.796

0.351

HD 8441

1 21.4 +42 53

Varied among

GC1692

n=50 km

(12 plots) mean + 9

-0009
+0006 ± 65
0025

-0043.51
~0.10

121 22.544 1503.8 59 54.76 401.8 9

-0288
516

+44
5520

-0010 -0008

192.88

513 -49

22.86
-08
882

55.0
-17

5493

0.14

460
-064

1953.19

54.43

-22
5471

126

-27

22.865
22.870

-0456

+5.3

-8.0

-0040

-0416

554

107

797

+0113

+6.6

+2.5

-0126

+0309

734

334

-592

-0417

-3.0

-7.3

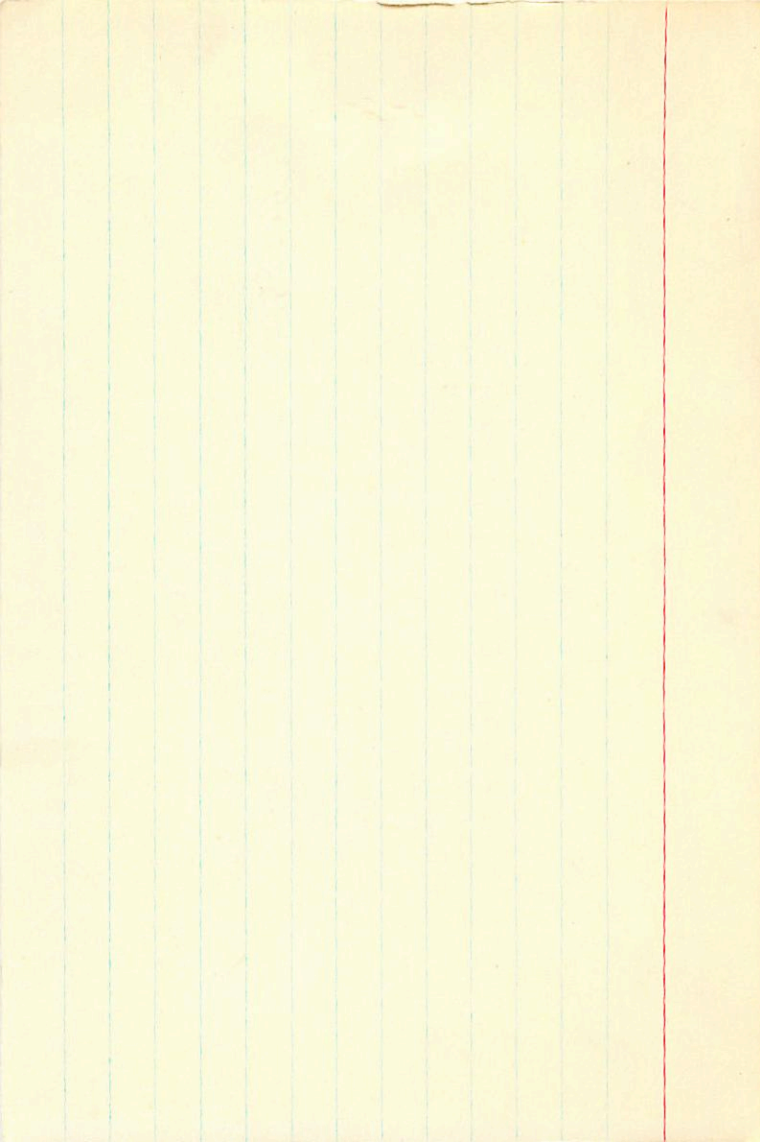
-0355

-0062

-330

936

120



12±6

36 y lens

1 22.4 +67 52 865-11.5 6

14R399

4.76" +1.065" No. II

118 (D)

105 1129

+077 +030 6.4
+075 +033 N30

13" 3"

8491

+0133 +033 N30

801

+0131 ± 1.3 +031 ± 1.2 6.6 6.6 N30

1767

+071 +030 1.4 23
+074 +031

352 536 927 376 +074 +031 -11.5 029 -11.57
-026 -010 049 027 -251 250 -4.3 -4 -1 016

$$-20 + 17 = -7$$

$$+10 - 23 + 11$$

$$-17 + 13 = -4$$

$$+6 - 19 + 9$$

$$+5 - 21 + 10$$

02.

018

33



2.017

-1.000

0.184

-50.456

-37

-0.026

-4.602

46.866

+35

0.016

4.274

0.000

10.965

2.12

0.200*

-0.305

1.290*

-8.000*

-28.000*

56.000*

0.000*

517.000*

33

AD51131

A15p.B.

+0013±5.7
+0012
+007±3.7
+010

8627 1 22.5 -L 12 6.8 dF1 +15.58

804

1712 22 29.330 1848.9 -L 12 22.58 1843.4

-046

-40
22.98

1.264

7 } 7'
1085

13.788

phosphorus

21 15.582

1 15.329

22 29.609

1.329

320

29.295-

293

306
+ .042

34.6

+007±3.7

6.8 dF1 +15.58

12 22.58 1843.4

-40

22.98

28 72.07
49.98

7 22.08

12 22.50

22.59

+1.32

22.2

1533.65

23.14 59 1933.7

33.7

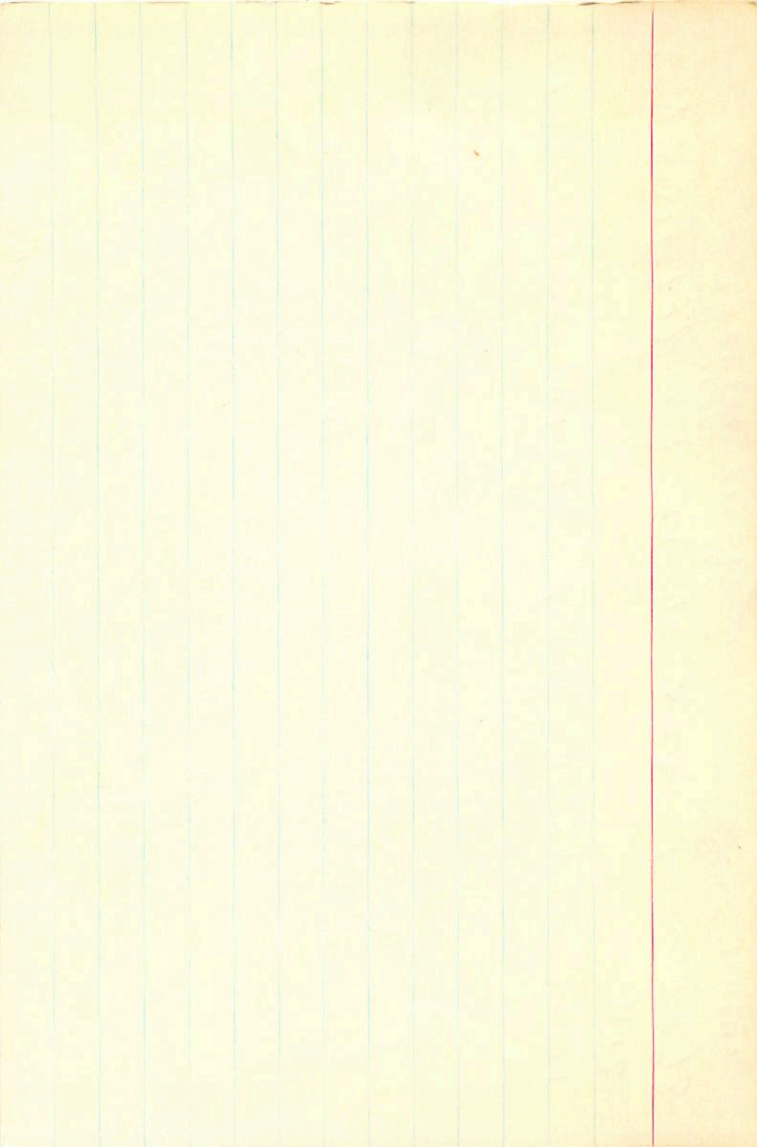
+21

22.85

22.85 22.56

+0.42

40.1



9680

1 226 -43 01

MVTH 49.80

421 43

28.7

43

10.7

49.8

34

R.A. : 1.400
DEC. : -43.000
R.A. : 28.700
DEC. : 13.000
ANCE : 10.700
JLUS : 1380
VEL. : 9.800

(U) : 0.791
(U) : 0.610
(U) : -0.055
dU : 116.240
U : 159.914

(V) : -0.597
(V) : 0.748
(V) : -0.289
dV : -13.292
V : -21.185

(W) : 0.135
(W) : -0.262
(W) : -0.956
dW : -2.700
W : -13.092



-510194

1 22.8 -51 04

11.4 100

LTT 780

+256	+70	Cape
+212	+57	L
<hr/>		
+235	+105	

9480 9601 244

0630 2746 -3

-0.6

0255

247

8634

HR407

GC1722

22.9 +23 15

P5 III -148
Subit

-16

SD

Range(30)

-154

Subit

+032-016

1.9

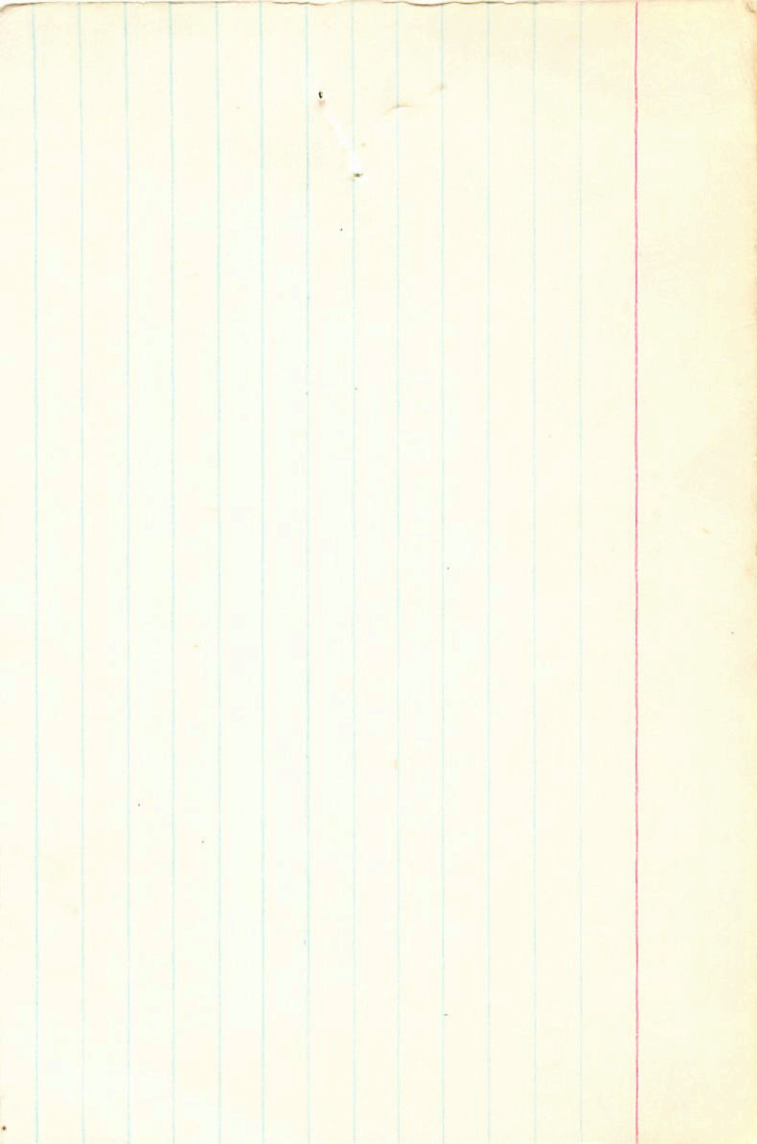
+2325

35

-16

4.0

-154



RS

$$R = 0.72$$

XX A and 1 14.7 +3F 41

-252(201)

max 10.20 +.13

min 11.12 +.47

$\Delta S = 9$

ND

$$+059 \pm 12$$

$$-062 \pm 12 \quad \text{us}$$

-1

$$+059 -037$$

320 947 625-750 +059 -062 -25 -039 -16 -227

-019 012 056-037 085 322 -~~19.5~~ -18-6 021

+67 +316 -243

+170 -292 -223

+39 +219 -164

0015

+117 -205 -145

21

1 (U) : 0.893
2 (U) : 0.879
3 (U) : 0.834

U : -0.573

BU : -1.080

U3 (U) : -0.347

U2 (U) : 0.196

U1 (U) : 0.573

VEL. : 0.796

ADULUS : 0.700

STANCE : 237

DEC. : 0.650

R.A. : -4.000

DEC. : 2.100

R.A. : -18.200

1.350

R.A. : 1.350
DEC. : -18.200
R.A. : 2.100
DEC. : -4.000
DISTANCE : 8.650
MODULUS : 537
VEL. : 0.700

q1 (U) : 0.796
q2 (U) : 0.573
q3 (U) : 0.196
dU : -3.347
U : -1.660

1 (U) : -0.593
2 (U) : 0.803
3 (U) : 0.059
4 (U) : 20.834

346 935 608 794 +078 -019 +13 -012 +5 -071
-027 004 023 -011 -076 365 +103 +9 +3

0 +46 0

+40 -20 -7

+1 +44 0

+39 -19 -5

0085

009

13