

R.A. :
DEC. : 14.000
PM. R.A. : 43.000
PM. DEC. : 43.000
DISTANCE : -43.000
MODULUS : 2.000
RAD. VEL. : 100

p1 (U) : -58.200
p2 (U) :
p3 (U) : -0.228
q1 : 0.228
q2 : 0.013
q3 : -0.013
u : -0.013

p1 (V) :
p2 (V) :
p3 (V) : 0.251
q1 : 0.150
q2 : 0.228
q3 : 17.221
v : -50.128

p1 (M) :
p2 (M) : -8.242
p3 (M) : -8.200
q1 :
q2 :
q3 :



R.A. : 16.600
DEC. : 60.800
PM. R.A. : 43.000
PM. DEC. : -62.000
DISTANCE : 5.000
MODULUS : 100
RAD. VEL. : -28.500

q1 (U) : -0.250
q2 (U) : 0.968
q3 (U) : 0.013
dU : -309.389
U : -31.306

12
q1 (V) : 0.621
q2 (V) : 0.150
q3 (V) : 0.769
dV : 17.591
V : -20.156

q1 (W) : -0.742
q2 (W) : -0.200
q3 (W) : 0.621
dW :
W :

150365 16 38.4 -17 58 6.6 DA8 -2.38

22439

9585 24360 1904.9 -17 57 49.42 1895.5

-117
243

1

57354

26.915

24.272

1.304

314

24.330

1.325

320

+ 077

32.6

52.78 1935.31

52.62

50.40

1.48

48.92

+ 1.22

48.80

49.05 1939.68

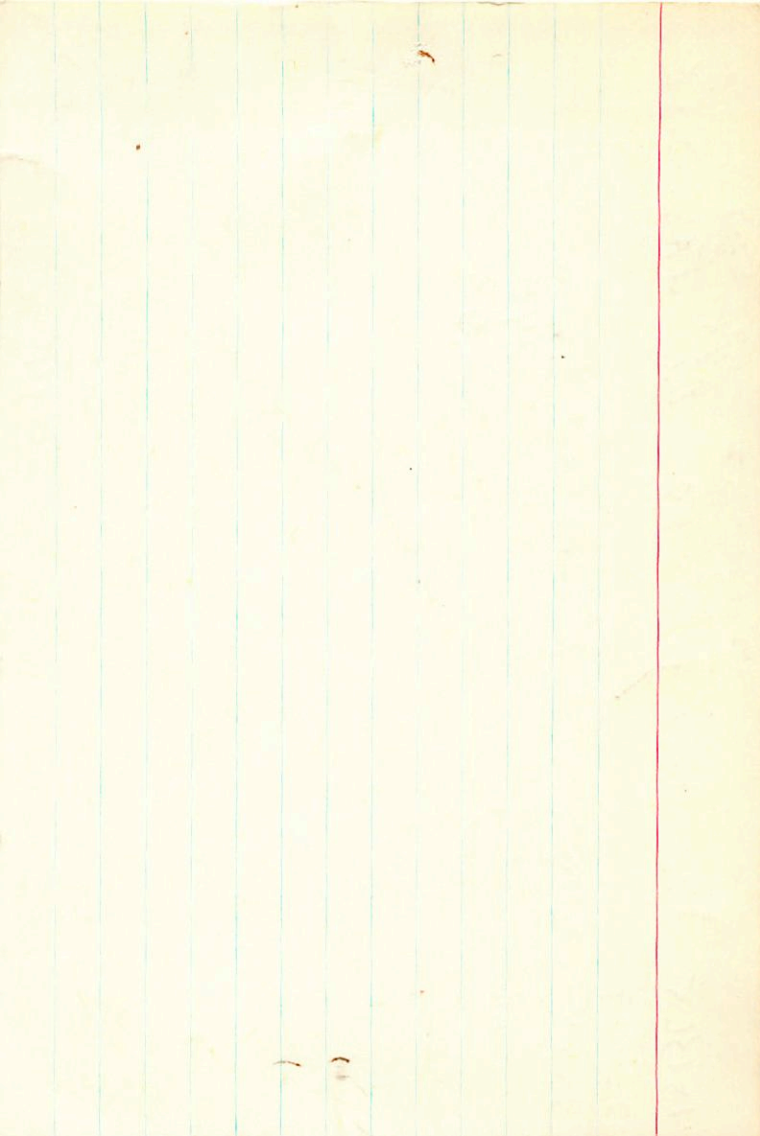
48.92

- 190

499

37.5

42.0



992 16 38.5 -33 03 -7.6 (4) (5)

150331

G022444

5.86 +0.65 (1.74) G-III

30.985
238
1900.5

31 2.33

53.917

37.105

31.5/3

0.74

0.79

-1.54

-604 ± 40 -088 ± 7.5

-6653 -667 1.33 1898.4

-0050 -077 4.54
 +5 36.79

-0015 069 2.78 1929.55

57.75

4.57

0.53
1.64 -2.09

5 (8.2) / 5.86

13



150331.000*

16.000*
38.500*
-33.000*
0000

Blank paper strip with a small blue mark near the bottom center.

Handwritten blue mark resembling the number '37'.

Vertical strip of paper with faint, mirrored text from the reverse side. The text is mostly illegible but appears to be a list of numbers or codes.

820.87	7
829.88	4
838.87	1
850.88	3
858.7	2
868.8	1
878.8	1
888.8	1
898.8	1
908.8	1
918.8	1
928.8	1
938.8	1
948.8	1
958.8	1
968.8	1
978.8	1
988.8	1
998.8	1

A. : 16.650
 S. : -33.050
 A. : -76.000
 S. : -63.000
 SE : 4.860
 IS : 94
 : 4.000
 D : -0.239
 D : -0.054
 D : -0.969
 IU : 88.332
 U : 4.404
 D : 0.618
 D : 0.762
 D : -0.195
 U : -414.056
 U : -39.600
 D : -0.749
 D : 0.646
 D : 0.149
 W : 33.216
 W : 3.710

13

5.000#
 100.000
 -7.600

73
 69
 631
 416
 196
 1.109
 0.010
 0.150
 -2.098

150331 16 38.5 -33 03 G3 III -7.6 4C

1=0992

G72244

7250-066

30.485
338
31.223

5990
-0649
-0649-0649

31.022
37.105
53.917
31.223

31.223
+3
31.223

066
-066

0.62
-26
1.18

057-100
052-050
050-050

024875.0 -117
088775

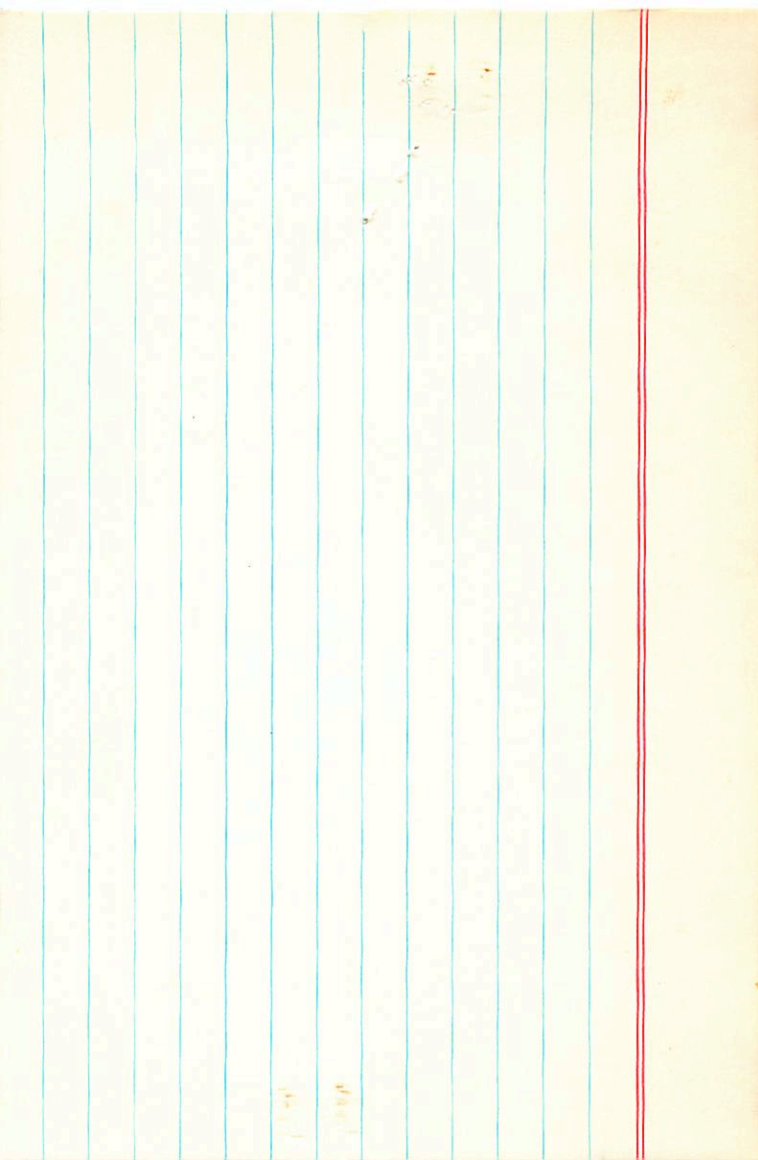
5.86 + 0.65 (1.74)

1.33 1898.4
4.54
64.75

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60.43

1529.55

76
43
47



150366 16 38.6 -24 22 FOE -460 46

FD993

6.07 + 0.22 (1.59)

26 -0042 -011

-2

+4

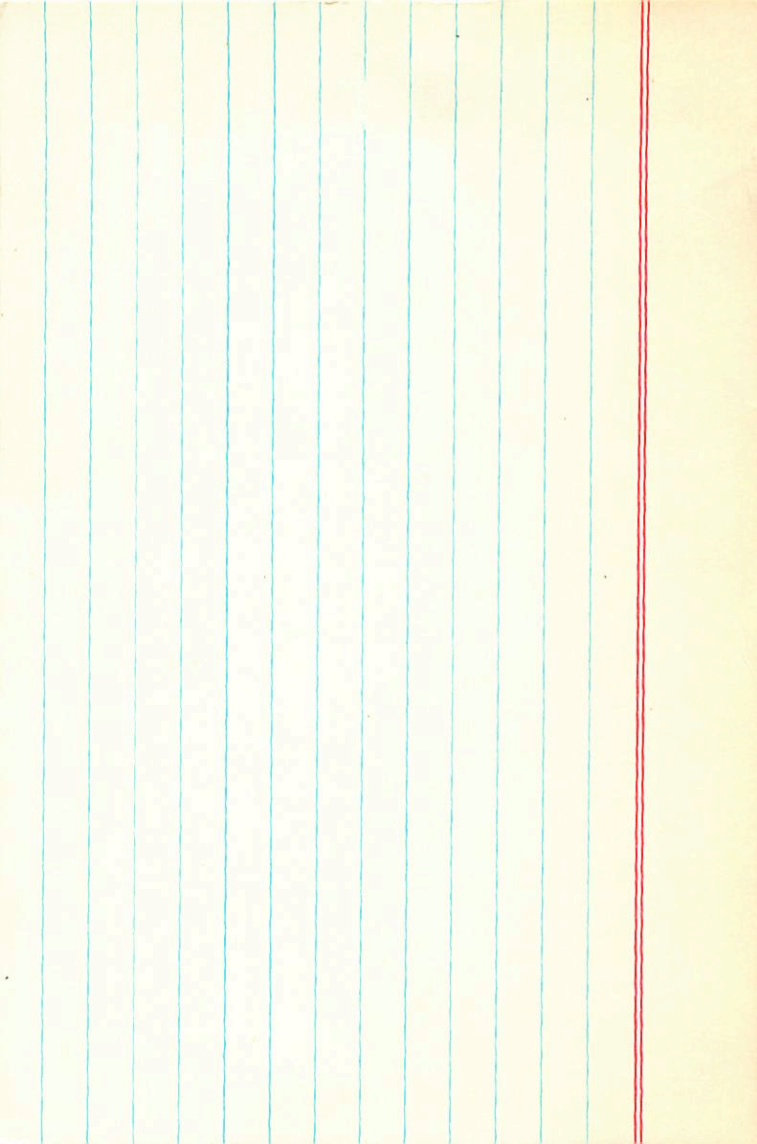
+2

+5

-0042

-002

057



-26011477

AX 500

16 35.7

-27 01

215 -45-C

SMS

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150416

22449

9589

16 38.7 -17 39 5.0

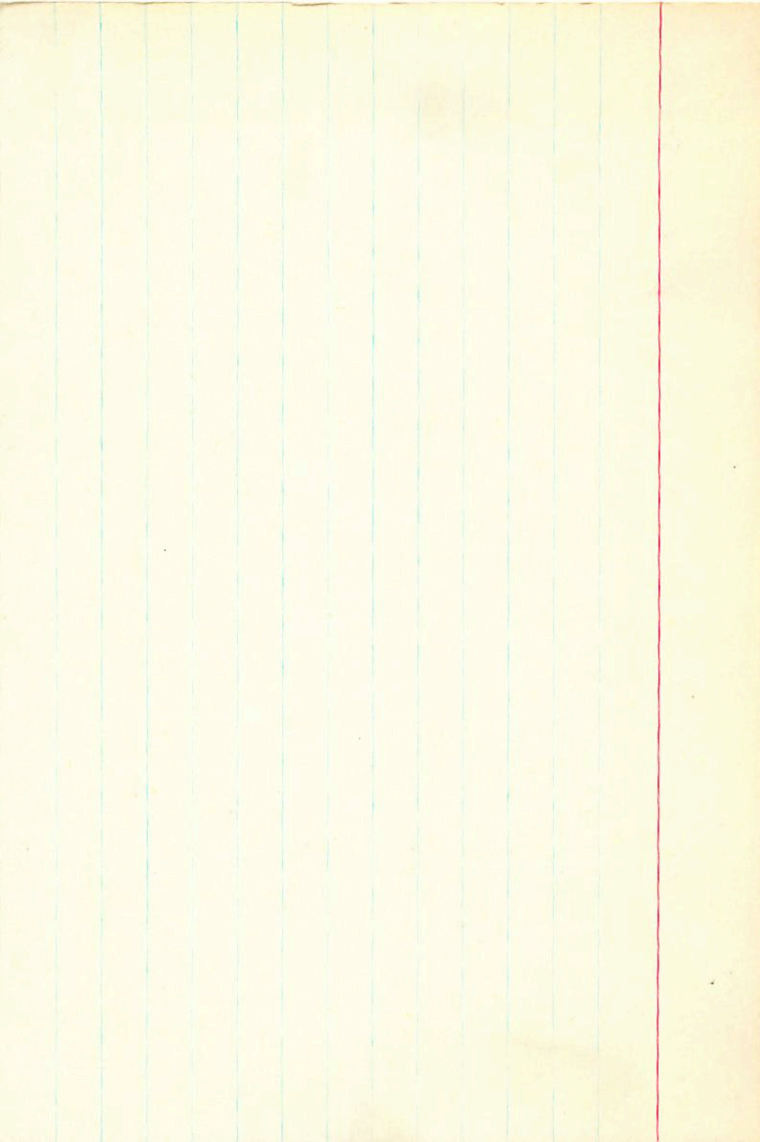
-0014 83 -004 84 N30

-0013 51.7 -002 51.1 BL 57 N34

GEIT

968 -25.2 c

-2210



2.1-	0.8	shift	left	left	right	shift	right
9.6-	5.5	left	left	left	left	right	right
0.10+	1.5	right	right	right	right	right	right

← 57

2.20+ 5.10-
 + +
 5 1
 2.20+ 5.10-
 + +
 5 1
 2.20+ 5.10-

10-
 7-
 38+

← 2.20+ 5.10-

5.52

2.20+ 5.10- 2.20+ 5.10-
 2.20+ 5.10- 2.20+ 5.10-
 2.20+ 5.10- 2.20+ 5.10-

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-935-347 0 / -021+021-37 00 095

-020 0 007 0 -095 033 -37 +13 +35 005

-6 +42 +20

-3 +35 +10 01

$+0034 \pm 7.1$ -104 ± 6.3
 $+0037$ -100
 150437 16 39.0 -29 02 7.86 + 6.8 (1.4)
22157 $6.2 \pm +12.5 \pm 0.5$

58.458 1898.3 -29 1 44.61 1896.0

$\begin{array}{r} 776 \\ \hline .282 \end{array}$

39.3

$\begin{array}{r} 5.62 \\ \hline 38.99 \end{array}$

$\begin{array}{r} 24.232 \\ 34.135 \\ \hline 58.367 \\ 41 \\ \hline .413 \\ 425 \end{array}$

$\begin{array}{r} 428 \\ \hline +146 \end{array}$

$\begin{array}{r} 47.92 \\ 56.70 \\ \hline 44.62 \end{array}$

1934.62

$\begin{array}{r} 44.62 \\ 161 \\ \hline 43.01 \\ 43.02 \\ \hline 43.03 \end{array}$

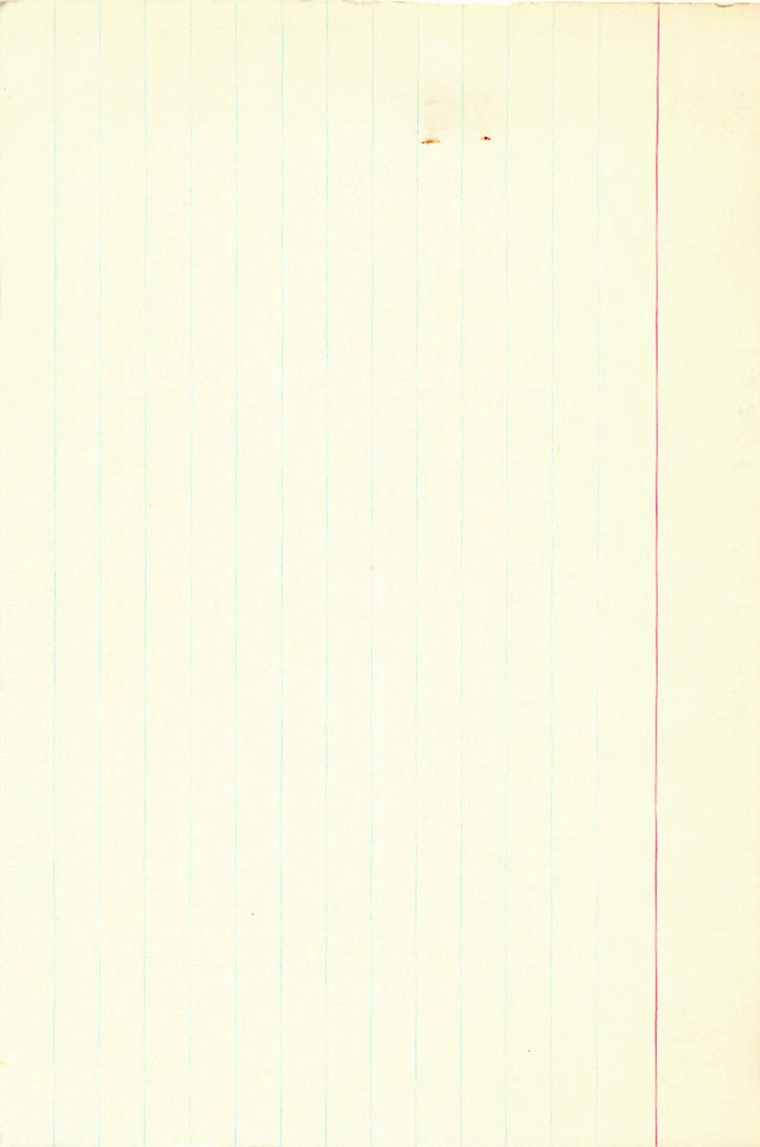
$\begin{array}{r} 750 \\ \hline 37.5 \\ \hline 41.5 \end{array}$

$\begin{array}{r} 43.13 \\ \hline -4.14 \end{array}$

$\begin{array}{r} 20.760 \\ 37.674 \\ \hline 58.434 \\ 27 \\ \hline 430 \end{array}$

$\begin{array}{r} 33.40 \\ 991 \\ \hline 43.31 \\ +248 \\ \hline 43.23 \end{array}$

1940.4

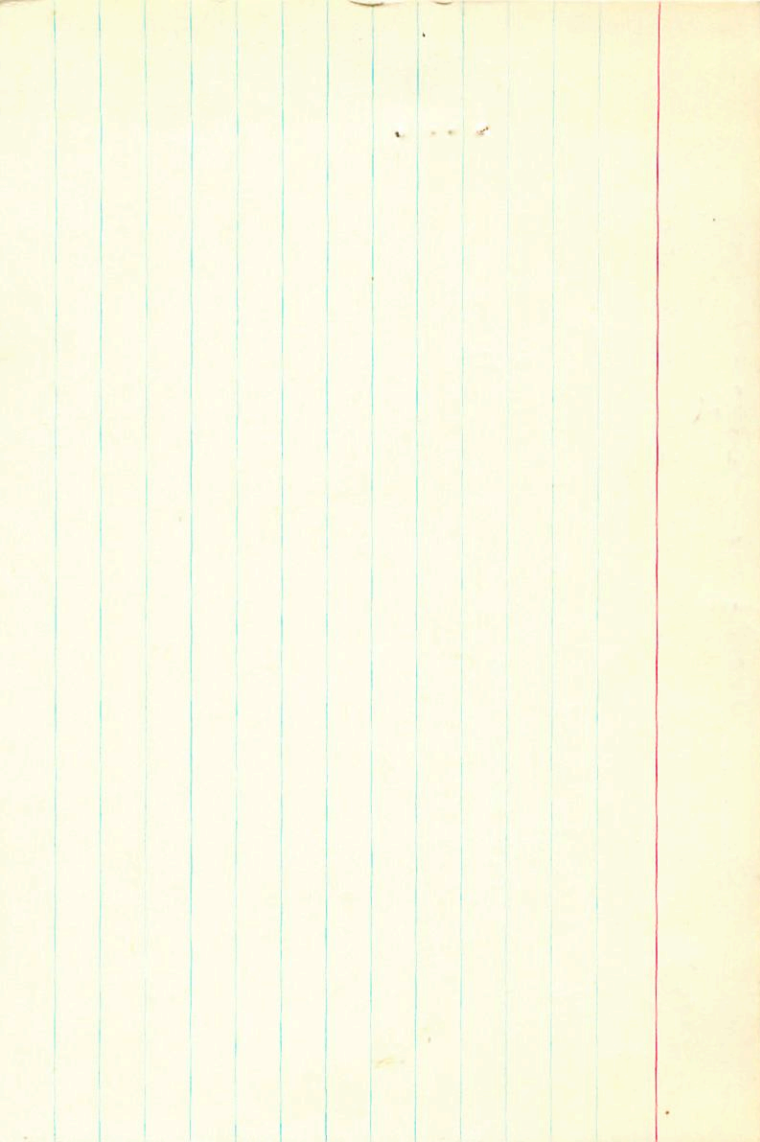


$+0020$
 $+0015 \pm 2.7$
 $+034 \pm 2.7$
 $+040$
 $+0017$
 $+042$
 $+044$
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 dfs
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 $+4.9$

150453
22453

9596
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 57.500

1985.80
 49.52
 346
 34.4
 026.047



150453

16 39.0

-19

⁺¹⁷
¹⁴
50

df6

+4.96

APL202

Q622453

5.57 +0.47 -0.05 1.599

(290)

^{ty}
+00130
³⁴
+0380 alt. ±2.5
^{13.4}
+0188
^{+1.4}
+0414
+019 +043

[m] 200 +21

.281 .149 .527 2.630 (3) 56,16,4

289

[C] 471 ⁺¹⁸²
3

¹⁰
³³
113 2.00

+265

~~+4.5 +5.4 +2.2~~

~~+7 +221 +34~~

M

RAD. VEL. : 4.000
 MODULUS : 42
 DISTANCE : 3.100
 PM. DEC. : 47.000
 PM. R.A. : 28.000
 DEC. : -19.000
 R.A. : 10.000

U : -4.300
 UB : 7.704
 d3 (U) : -0.250
 d2 (U) : 0.100
 d1 (U) : -0.200

U : 10.400
 UB : 300.200
 d3 (V) : -0.010
 d2 (V) : 0.700
 d1 (V) : 0.010

W : 3.000
 WB : 30.000
 d3 (W) : 0.000
 d2 (W) : 0.000
 d1 (W) : -0.000

H
 (Handwritten mark)

R.A. : 16.650
DEC. : -19.850
PM. R.A. : 28.000
PM. DEC. : 47.000
DISTANCE : 3.100
MODULUS : 42
RAD. VEL. : 4.900

q1 (U) : -0.239
q2 (U) : 0.169
q3 (U) : -0.956
dU : 7.764
U : -4.362

q1 (V) : 0.618
q2 (V) : 0.786
q3 (V) : -0.016
dV : 252.250
V : 10.438

q1 (W) : -0.749
q2 (W) : 0.595
q3 (W) : 0.292
dW : 39.045
W : 3.061

3 APR
150680

W 9600

22464

43759

+3102884

A0510157 B6.3

P=3445

+54 -47

+50 -47

+54 -47

.101

.110

.090

16 35.4 +31 42

282 +0.64

-0370 +393 N30

-8370=0.8 +390=0.6

2.03 LN

2.56 +23 212

~~2.59 +205 J~~

95A(25)

108M(8)

104Y(20)

124S(12)

0.34
0.1

-64.92

-71.06 (131)

-70.1 Pk (191)

-72.5 B(54)

-70.0 C6 (5)

-71.4 C6-13

-69.0 W(44)

-69.0 V(24)

CC

-470 +365

-472 +393 N30

-471 +390

-934 -345 525 851 -472 +391 -69.9 +205 -36.7 +1.579
 -443 +192 +163 ^{2.5} 071 -1.762 +1.682 +20.5 +55.9 +2.9 +57.5 -20.9 / 1
 0.3 640 -9.5 643
 1.4 ~~326~~ -15.7 645
 -2.5 -11.9 -9.8
 0.5 61.5 -11.0
 2.8 -31.3 -17.6
 -5.1 -11.4 -11.0

+40.9 -40.0
+54.5 -46.9 -24.1
+5.8 +69.9 -23.5
+51.0 -47.1 -22.5

31hr

+22
+15

6212

16 394

+31 41

60 12

150680

2.81 + 0.65 + 0.31 57

2.48 + 0.205 45
2.56 + 0.23 R3
2.82 + 0.215

61990

-0264 .3889 /hr

³⁷
- .4709

²⁴
¹⁹²

-467 + 390

13

1000.00

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1000.00

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6212.000*

16.000*

39.400*

31.000*

41.000*

-0.467*

0.390*

0.000*

10.000

-69.900

2.105

-0.463

53.406

-0.442

0.606

-46.805

K

1.921

0.647

9602

22468

16 356

+27 01

df2 -12,19

SB orbit

-1360 Orbit

754 -0025 ± 7.8 -016 ± 6.0

150591 16 40.4 -41 01 6.2 B8m -2.38

22481

9610

25.335 1896.7 -41 112.59 1891.3

$\frac{133}{468}$

$\frac{+94}{11.65}$

~~22576~~

~~25107~~

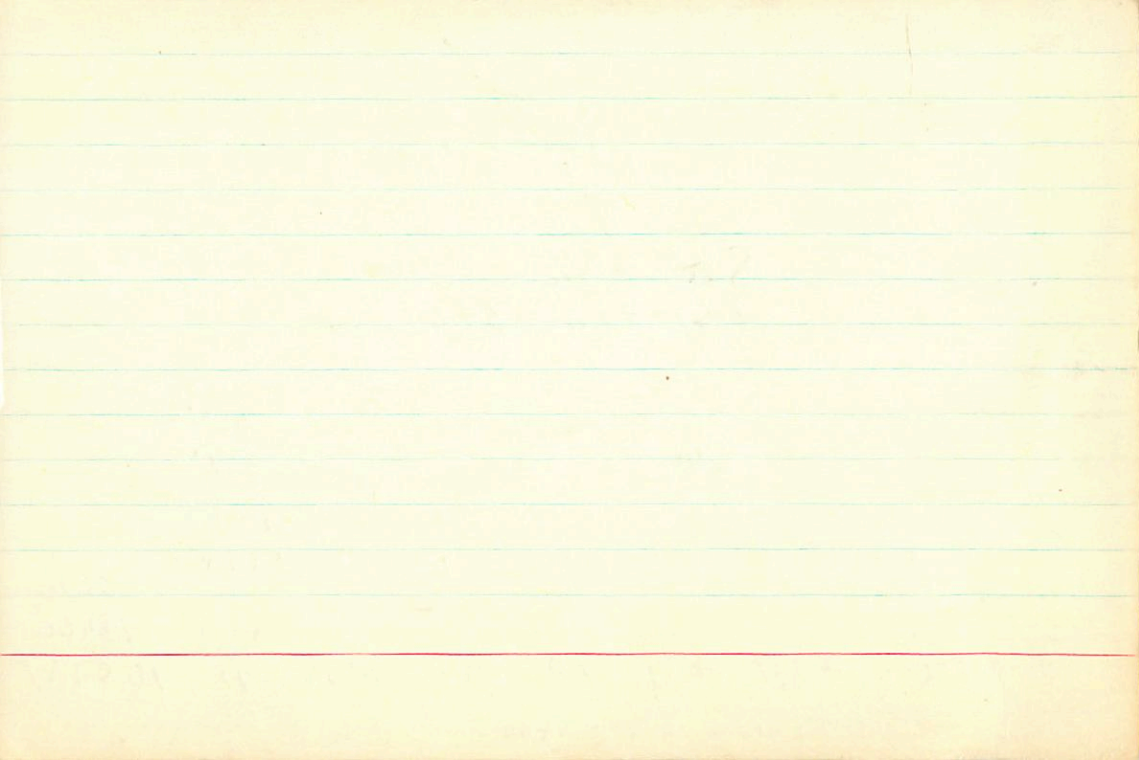
-0023 -022 B }
-0013 -022 A }

-016 -022

-005 -012

-010 -017

59 +10



Pen
.0125(7)

+43 34

42.4

+43 40

40.8

10/88

1/4

$\pi = 0.32$

Egg m A. m. Rev. Asht. Mph. S₁₀₅ 1967

$a^3 / (p \cdot 2 \times 10^6)$
 $m_1 \text{ km}^2$

P	T	E	A	B	F	G	a	L
131.86	189565	0.46	+838	-305	+43	-578	0.97	118 52.77 1.61
121.24	189474	0.43	824	-251	+214	-578	0.965	117 61.57 1.88
138.31	1894.07	0.47	857	-333	+119	-571	0.99	117 50.66 1.54

VH

-0.0060 -0.067 -7.18

8.86

8.36 +104 +0.52 2695

7.80 R-I +0.38 (2)

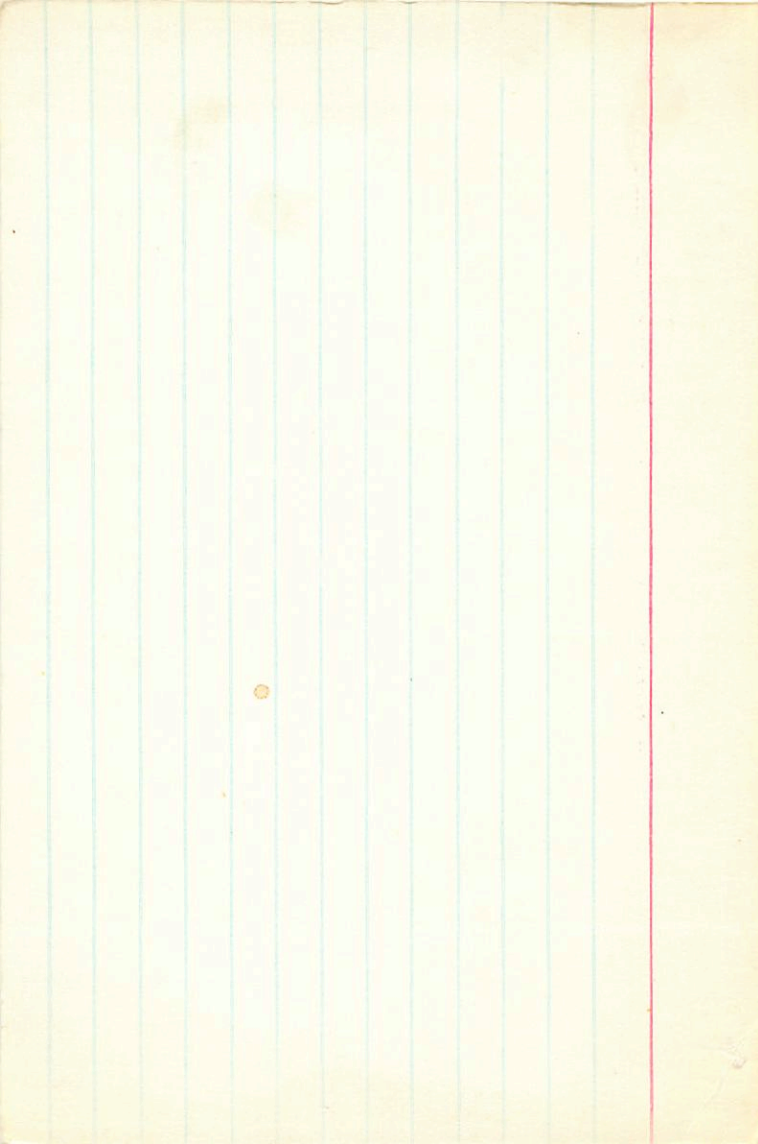
m v w $\pi = 0.32$
-4 -15 +3

9.11
247.4
6.6

$\pi_{\text{net}} = 0.32 \text{ from } R-I$

0.80
0.94
0.77

$\pi_3 = 32.87 \text{ m, } \pi_4 \pi_2 = 0.80$



150997 16 41.2 +39 01 3.6 JCS +8.3a

22502

150997

9613

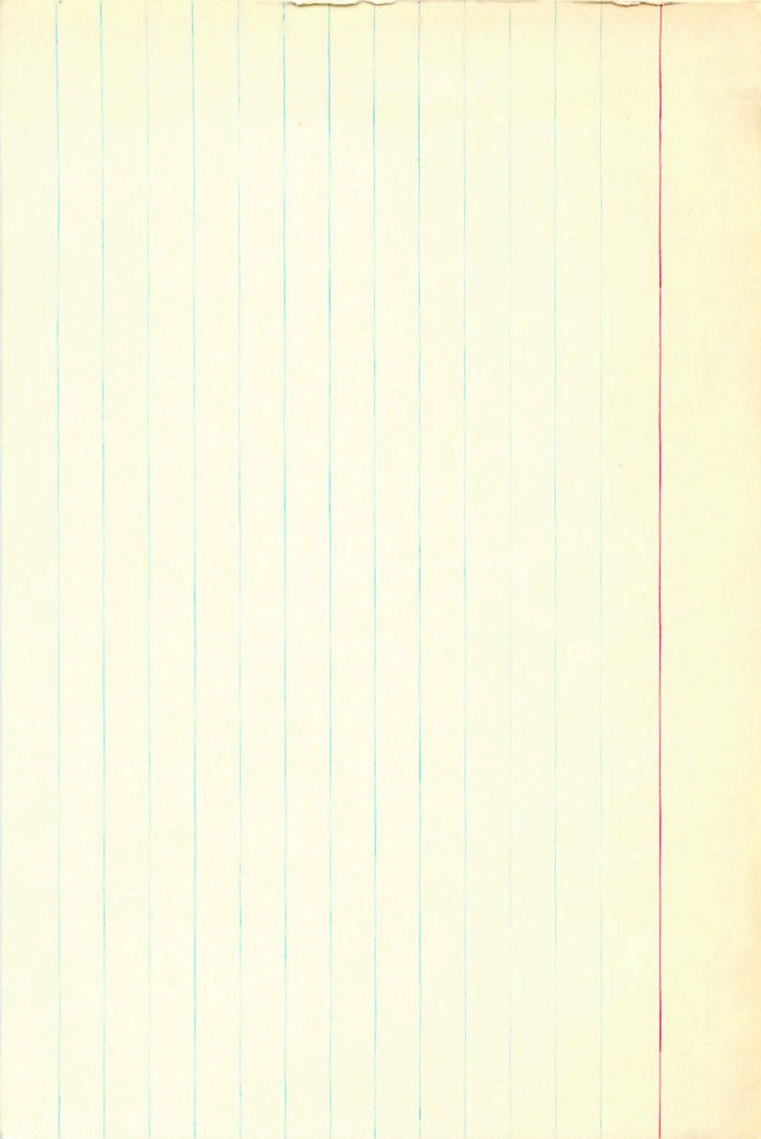
⁷⁶
+0029 -083⁶² N30

+0029 ± 0.5 -085 ± 0.76 L → N30

+8.9①

+8.2②

53²⁶





150331.000*

16.000*

38.500*

-33.000*

-3.000*

-0.057*

-0.069*

5.000*

100.000

-7.600

0.083

-0.969

15.631

-0.416

-0.196

-40.109

-0.010

0.150

-2.093

13