

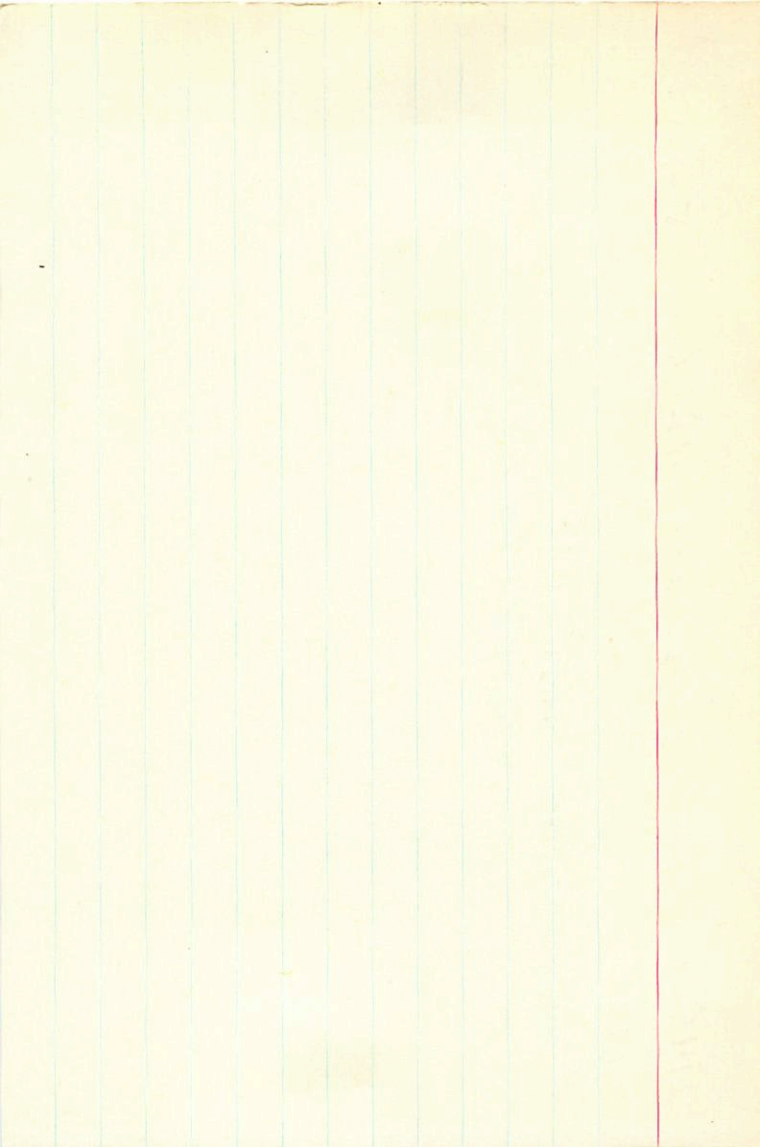
214979 22 39.2 +30 42 6.5 NS-3458

31668

14250

+0033²⁰ +021²² NSD

+004456.0 +00445.6 GC → NSD



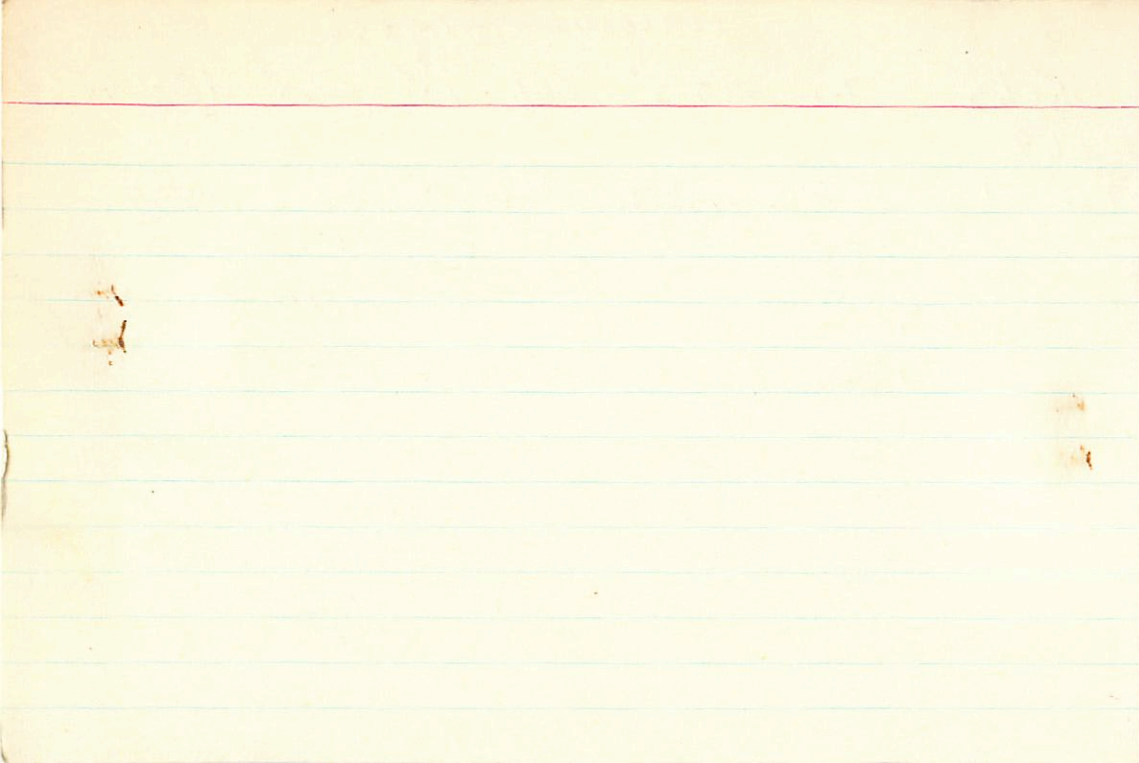
$+0356 \pm 4.6$ $+389 \pm 5.0$ -47.7 ③
 $+0359$ $+99$
 22 39.2 +66 15 7.5 dc3-45.98

216665
 31669
 17251 11.402 1898.2 +66 15 23.06 1897.9
 $\frac{1.844}{9.558}$ $\frac{20.27}{2.79}$

11.199 $\frac{34}{233}$ 21.55 1945.25
 39.3

$\frac{10.64}{34}$ $\frac{19.03}{10.952}$ $\frac{94}{3}$
 670 H. 3

$\frac{18.54}{-16}$ $\frac{1929.7}{-14}$ 750
 37.5
 39.6
 $\frac{65.78}{318.28}$ $\frac{15}{15.49}$



3



-020 ± 2.6
-016
+14 15 6.1 9 10

+0060 ± 3.1
+0067

22 39.5

14995

31677

14258

29.142 1901.6 +14 15 16.86 189

-290
28.852

29.071

14

085

29.105

-4
096

35.7

090

+238

1.12
17.98

17.25

15

17.40

17

17.20

17.30

-1.68

189

1.12

17.98

17.25

15

17.40

17.07

1940.82

746.2

37.3

43.1

-0.288

-1.657

$+003446.5$ $+03744.4$
 $+0028$ $+027$
 22 39.8 -44 30 6.06 +98 2.02

53141
 53141
 NITE +5.5±0.9

31686

47.116 1106.8 -44 30 38.50 1902.1

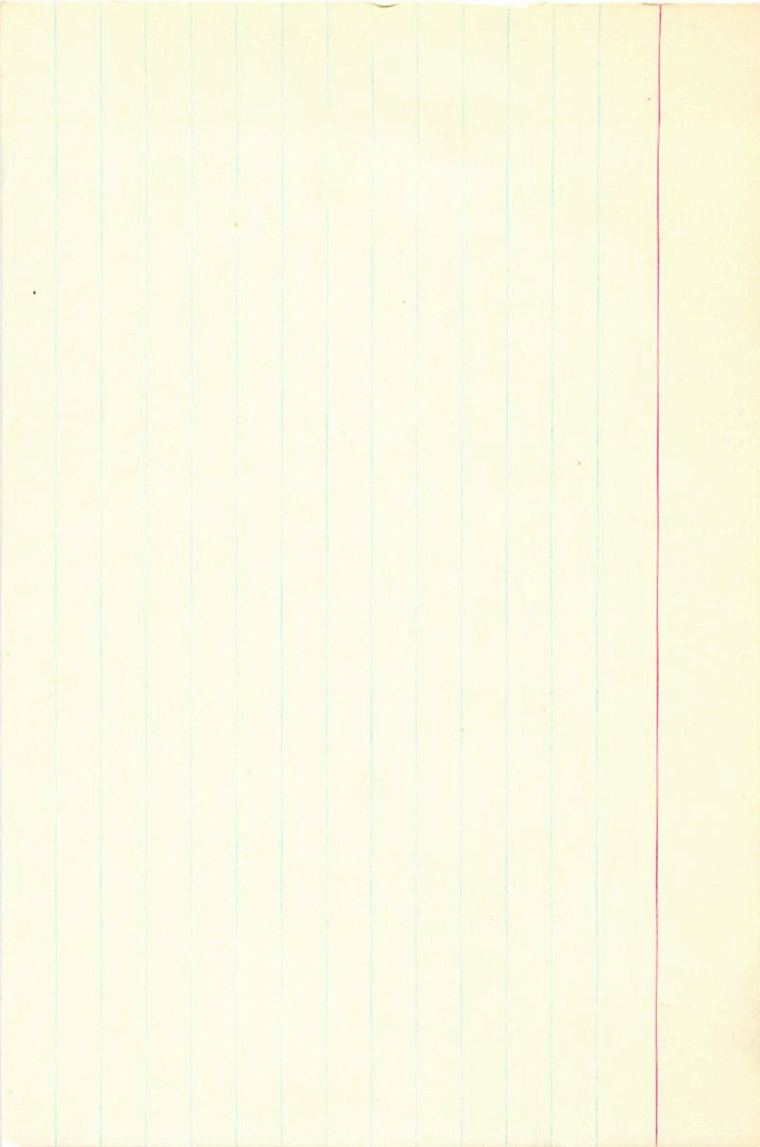
-1.27
 $\frac{46.969}{-1.27}$
 40.27

47.127
 -37
 $\frac{091}{-37}$
 39.14 1941.10

$\frac{091}{122}$
 43.5
 38.65 1958.69

47.126 +122
 -37
 $\frac{091}{-37}$
 99.79
 49.9
 47.5

$\frac{38.98}{11.2}$
 3.48
 $+11.2$



215081

22

40.3

-21

55

7.3

963+708

31691

14263

+0015²⁷

+015²⁷

1030

+0018±4.4

+018±4.9

66

71030

-000652.6 +015-±2.6
-0004 +011

65 Apr 22 40.4 -10 22 2.2 g 100 +14.1 g
215097 22 40.4 -10 22 2.2 g 100 +14.1 g
31693

M264 23.432 1899.5 -10 21 54.46 1896.2

$\frac{030}{462}$

$\frac{-0.81}{55.27}$

4.536
 $\frac{18.548}{496}$
23.421

48.52-1934.05
 $\frac{5-0.20}{55.32}$

38.1

$\frac{447}{45}$
-017

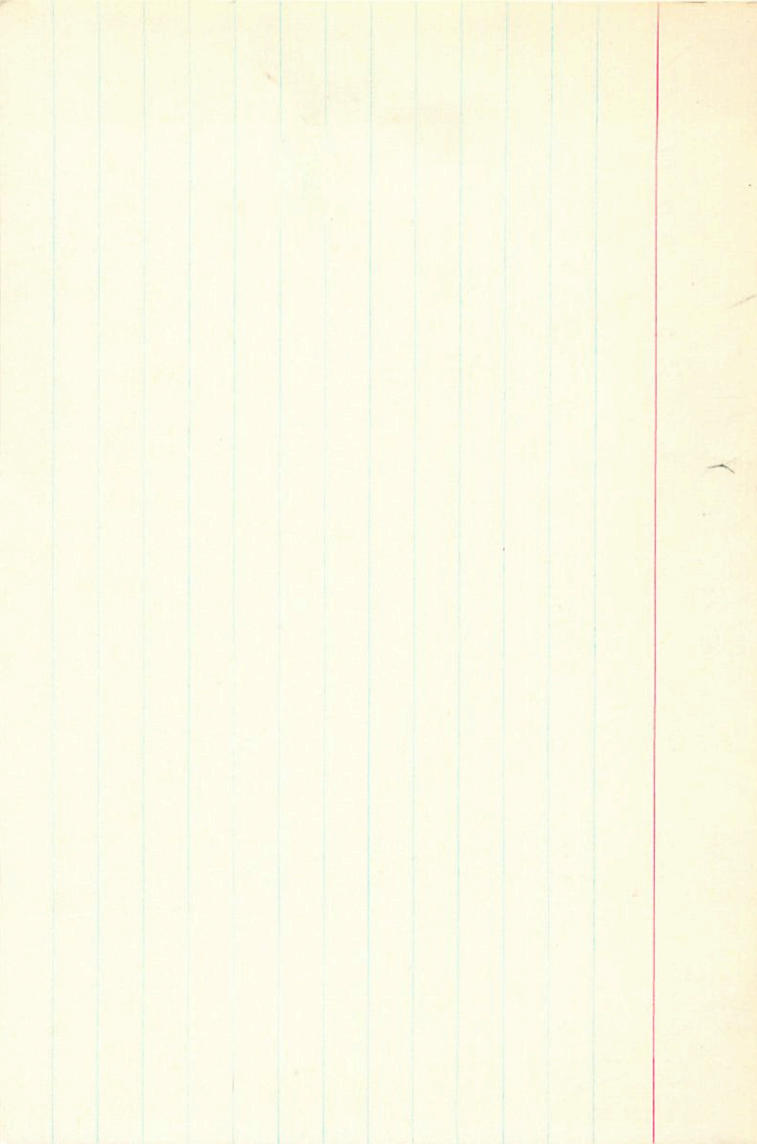
7527
37.6

54.85
 $\frac{5476}{55.10}$

23.446
 $\frac{86}{43}$

1941.22
54.83
 $\frac{14}{+}$

41.4



8650 22 H 0.639 + 30.0 29° 58' 3.1060

H H η pegs

566

+4.3 (only)

3170.6

14 271

2.94 G8II-IV

+4.3a

+0.84

+0.51

JM

+00103

¹¹²
-0200
-H

+0137

+ 23

~~+036~~
~~00060~~

~~-0214~~

~~+016025~~

~~+111
27~~

818 days, $V_0 = H \text{ km}$

+ 0009

+0036 -0555

+

0.844

0.535

0.040

-0011 -00349

- 0.256

0.336

0.906

-0020 -0803

- 0.472

0.774

- 0.421

24

8658.000*

22.000*

40.600*

29.000*

58.000*

0.016*

-0.025*

7.000*

251.189

4.300

0.001

0.039

0.303

-0.059

0.906

-11.023

-0.128

-0.422

-33.850

34

7P_{eq}

215192

31706

14271

22 40.7 129 58 3.1 962 + 4.32

+0006 88 -021 82 N30

+0006 ± 0.9 -021 ± 1.0 66 → N30

Sp. B. P = 818^d

72 576

⊕

5298

22 40.8

-19 06 124 III

215167

31708

4.69 + 136 + 1.565

4.66 + 137 + 1.566

2116

4.10 + 525 J

4.00 + 52 E

4.05 + 52

38

±002

new + 21.6a

-0219 -0280

-0225

-021 -032

-026

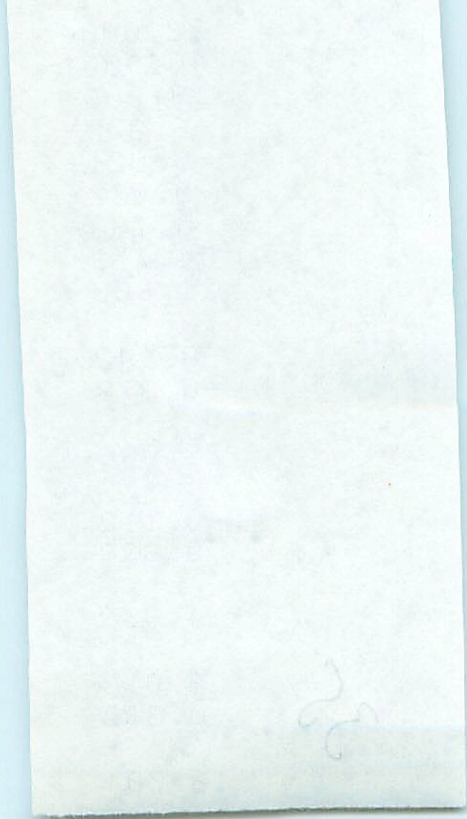
-025 -029

+7
-5

935

wt3
 $M_V = -0.206$

35



22.000*
40.900*
-19.000*
-6.000*
-0.021*
-0.032*
5.100*
104.713
21.600

-0.142
-0.378

-23.005

-0.112
0.338

-4.386

0.018
-0.062

-16.704

35

8649.000*

22.000*

49.900*

-19.000*

-6.000*

-3.025*

-3.029*

5.100*

104.713

21.600

-3.152

-3.378

-24.113

-3.094

3.338

-2.528

0.030

-0.862

-15.488

35

66 Apr
215167

-002152.6
-0017
-02552.5
-032

22 40.9 -19

4.9 gms + 2/6a

31708

14274

53.923 1896.2 -19 5 33.32 1895.2

$\frac{113}{54036}$

$\frac{1.37}{31.98}$

33.185
20825
59.010

2431 1934.31

$\frac{12}{53.969}$
459

40.9

$\frac{33.73}{48}$

1413

$\frac{967}{53.969}$
-069

$\frac{33.25}{25}$

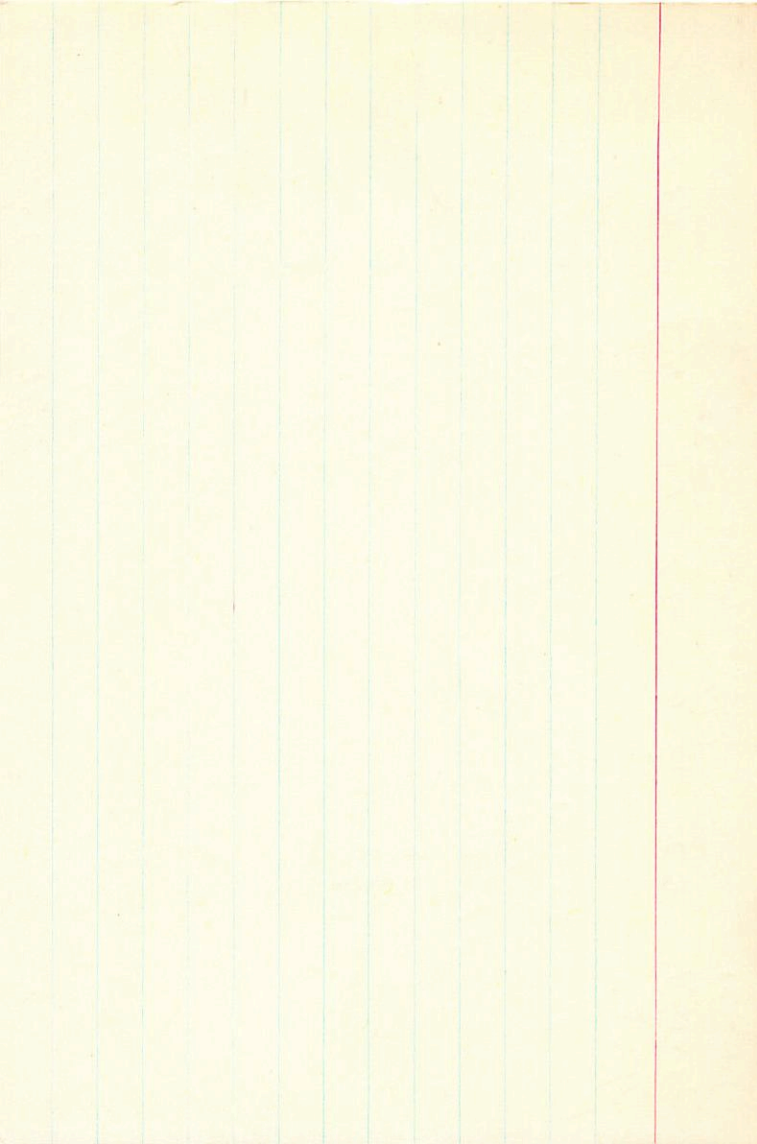
37.1

41.9

53.983
975

33.40 1939.52

$\frac{49}{33.31}$
 $\frac{3330}{1.35}$



66 Agn

HPR8649

W14274

22 40.9 -19 04 9.183 +21.6 a

4.71 +1.37 +1.55

-0.30 -0.25 GC

-0.28 -0.25 GC+

$$\begin{array}{r}
 -339 \ 941 \ -327 \ 545 \ -0.25 \ -0.25 \ +21.6 \ 009 \ -7.1 \ -1236 \\
 -009 \ 003 \ -026 \ 008 \ -081 \ -109 \ +20.4 \ +19.2 \ -6.9 \ 01 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 +11.1 \ -17.8 \ -19.4 \\
 \boxed{-23.8 \ -1.2 \ -15.9}
 \end{array}$$

$$\begin{array}{r}
 +9.2 \ -20.5 \ -22.5 \ 008 \\
 \boxed{-27.7 \ -3.2 \ -15.2}
 \end{array}$$

$$\begin{array}{r}
 +10.2 \ -19.1 \ -20.8 \ 009 \\
 \boxed{-25.6 \ -2.1 \ -15.5}
 \end{array}$$

A0516220

215324

22 41.3

+45

46

7.4 dFS -32.78

31721

14281

19.385

1900.7

+45

45

49.40

1903.4

-897
18.488

11 mm ¹⁹ _{off} ¹⁹ _{off}

13.74

5.170

18.956
962

963

95827.1
4470

49.82
42

58.4 1926.0

51.08

49.48

38

941

49.70

1.2

56
27.8
24.9

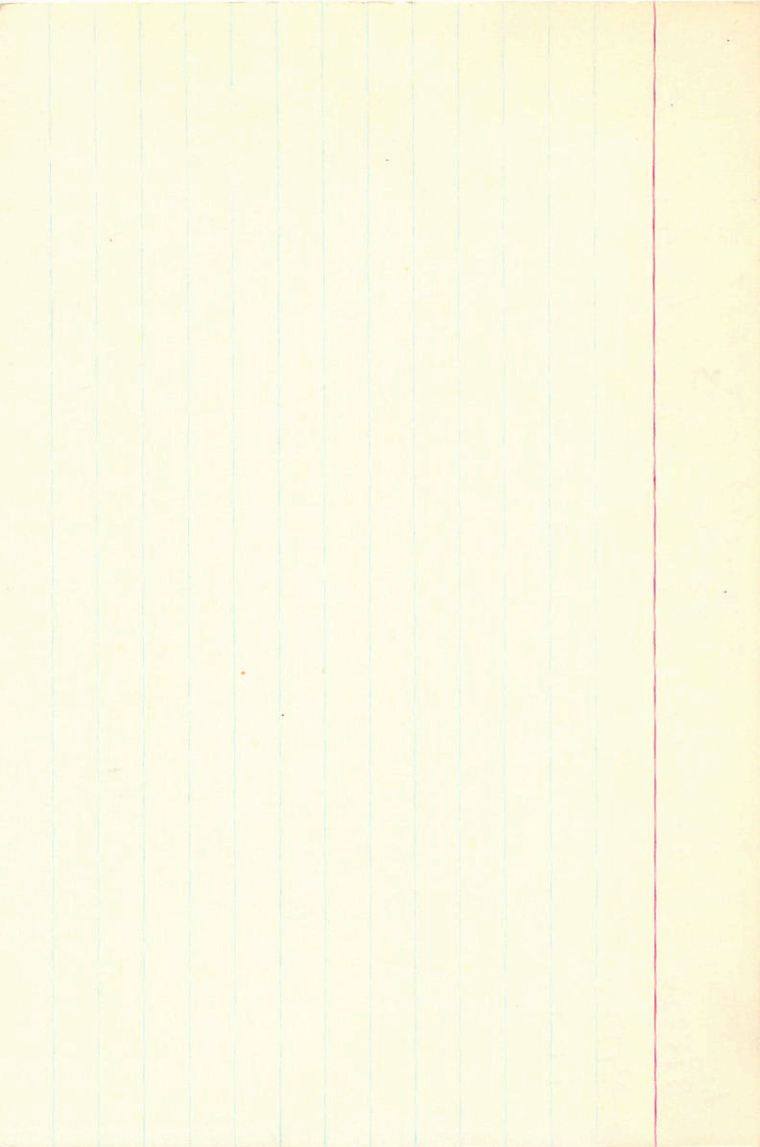
50.03

49.66 1929.6

-228

49.38

18960
66
954



00514226

215359

31731

14282

+0002#3.7 -020#3.1
+0007 -030

22 41.8 +39

12 6.3

3" 8.4

9115 -272

9111 -22.96

X577 -0.9

X277 4.6

49.459 1892.4 +39 12 10.86 1886.4

-012
477

127
12.13

-2579

41.79
7620
49.459
450
451

428
456
420

12.13
19.10 1926.8

51.42
10.39
84

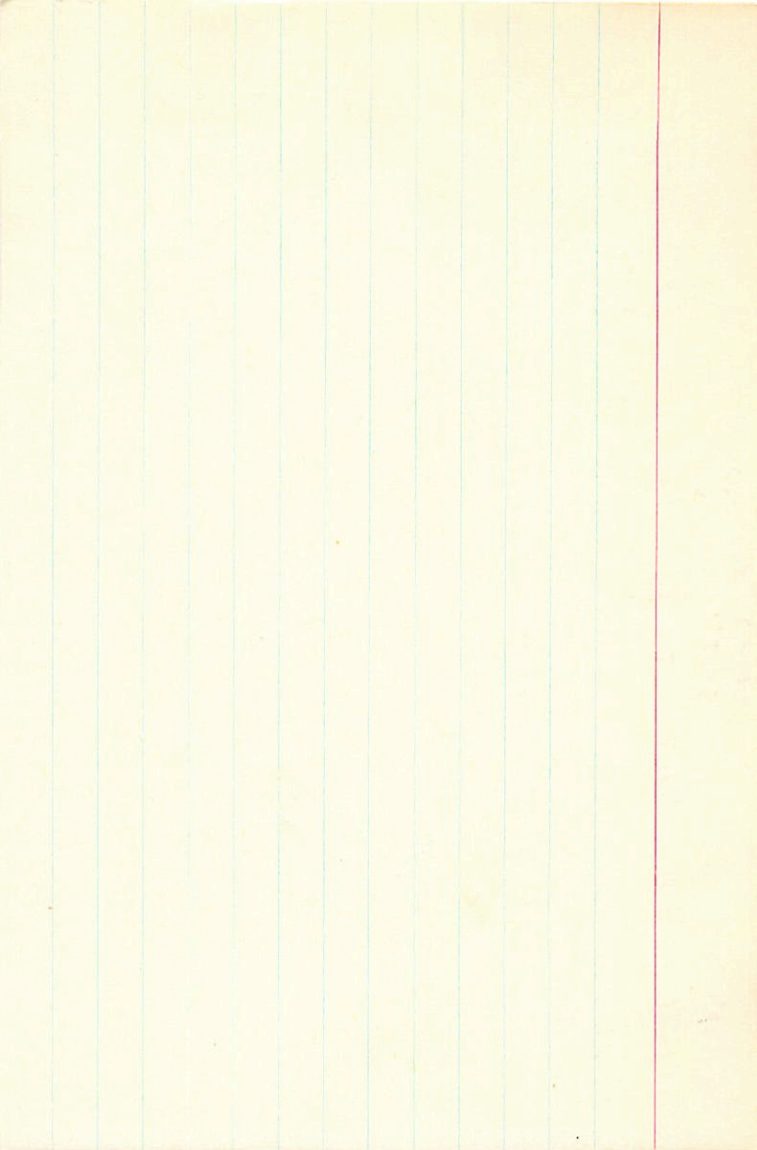
616
30.8
44.11

10.11
10.95
11.3

49.50
499

10.9 1937.6

21
10.69



Coz You

0.0 M

215405

22

42.7

-44

499 N6

+42286(15)

GC31750

12.11

+42.450.7

W14294

5.50+1.32 +2.35

9(4)

Y5509

Print & Run

-4704320

±5 ±4

-037 -019 GC

-012 -007 N30

-052 -022 C

10/11/55-

-0036 ± 48
-0032

-019 ± 40
-011

44.070 1309.1

-46 48

38.26 1403.6

$$\begin{array}{r} 147 \\ \hline 217 \end{array}$$

$$\begin{array}{r} 37.38 \\ \hline 88 \end{array}$$

44.103

$$\begin{array}{r} -39 \\ \hline 124 \end{array}$$

37.69 1538.81

$$\begin{array}{r} 18 \\ \hline 37.51 \end{array}$$

$$\begin{array}{r} 192 \\ \hline 696 \\ \hline -121 \end{array}$$

37.4

9407

$$\begin{array}{r} 1567 \\ \hline 3784 \\ \hline -46 \end{array}$$

47.0

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

44.109

38.00 1555.26

$$\begin{array}{r} -46 \\ \hline 068 \end{array}$$

$$\begin{array}{r} -46 \\ \hline 3816 \end{array}$$

45024
215510

22 43.0 +19 06 6.4g66 -21.8f

30753

-002460 +06159130

14297

-002531.6 +059415 6.07130

195 4045

215588 22 431 +57 50 6-14 F5

T52255 444 295 409 (2 drum) 9586-1260 1464

233 350 381 385

058M W350

1091-1660

1887 1316 1316 1316

1321 1321

1648 162420

1321 1321

6480 194

1464 1091 1091-1660

215588

22 431

+57 53

-106 108

U.M. FS

1078 137 handing

1062-137

-117

-137

34

-106

36

R.A. : 22.700
 DEC. : 57.900
 DISTANCE : = 138.000
 MODULUS : 48
 RAD. VEL. : -10.600

q1 (U) : 0.845
 q2 (U) : 0.450
 q3 (U) : 0.288
 dU : -541.428
 U : -28.971

q1 (V) : -0.260
 q2 (V) : -0.125
 q3 (V) : 0.957
 dV : 157.890
 V : -2.592

q1 (W) : -0.467
 q2 (W) : 0.884
 q3 (W) : -0.011
 dW : -436.427
 W : -20.769

30

215549

22 43.2 +30 11 2150 -0.60w(4)

GC31959

6.37 +0.92 +0.68 N1 III -15

w14300

S=00

w(+4.8)

Y5512

+2904703

w(+4.8)

25

±y_{ac}

-266 -352

A0516245

11^{or} 11¹¹

-240 ±9 -342 ±67

-260 -350

-62 -9 -25 .030

-93 -11 -38 .020

28 A(26)

30 M(10)

27 Yk(6)

26 w(17)

25 ±4

-0205+53 -352+4.0

-0201 -356

-329 544 503 864 -260 -350 -0.6 -176 0 -1.431 ✓

-086-058-245-166 379 -1.436 0 0 / +18-74-73 .0155

-97-13-39

14.263 4453 +80 11 2.24 199.14

1.121

15.384

20.63

22.87

4.39

10.3722

14.76357

7920

707

311.0

17.9

52.42

10.37

10.72

22

70.54

10.02

9.94

19248

26

26.3

349

10.44

-12.43

192.95

14.752

-62.4

215578

31763

A0516254

optimal

10^m

W14303

+0026 ± 5.1

+0027

22 43.5

+011 ± 3.3

+18 59

~~152 37~~

865 -20.78

~~142 -6.2~~

9.0

7.0

1037

7011 Gc

31.943 1903.7

$\frac{-121}{822}$

718 59 11.71 1895.9

$\frac{-60}{11.11}$

31.911

$\frac{8}{919}$

097

11.38 1939.86

$\frac{2}{11.59}$
 $\frac{48}{}$

7.47 + 0.93 + 0.66

-327 945 226 946 +037 +011 -20.7 004 -7 050 ✓
012 001 035 004 035 17.1 -15.6 -19 +6 005

$$-11 + 40 + 3$$

$$+35 - 20 + 4$$

$$-10 + 49 + 6$$

$$+45 = 22 + 4$$

004

8659
215504

22 43.5 -49 57 R01111-113 +2.1 4C

FD1240

PO

6.48 +1.14 2.20 0088-079

GL31762

0685-079

6.50 689 453 595

405

(Doubtful)

+0086±50 -275±5.8 GC 182
-079

+0082 -286 CA

+0084 -280
+12

+21

+0095 -277 →

122

-276

4.5

+21

+094

160

076-1300
+0096-079

074-079

+12
109
+13

457

+10.0

-110.0

+142

0.51
0.12
2.25
3.18

5

—

PI (V)	0.218
PI (V)	-0.217
PI (V)	0.138
PI (V)	0.045
RD. VEL.	2.108
MODULUS	4.208
ISTANCE	4.208
M. DEG.	4.208
M. R.A.	125.000
DEC.	125.000
R.A.	48.950
	22.780


R.A. : 22.700
DEC. : -49.950
M. R.A. : 122.000
M. DEC. : -276.000
DISTANCE : 4.500
MODULUS : 79
RAD. VEL. : 2.100
q1 (U) : 0.845
(U) : 0.136
-0.517
0.18

D. VEL. : 3.100
 MODULUS : 2
 STAVICE : 1.000
 M. DEL. : 1.000
 R.A. : 1.000
 DEB. : 1.000
 R.A. : 1.000

P1 (U) : 0.845
 P2 (U) : 0.130
 P3 (U) : 0.817
 BU : 1.000
 U : 1.000

P1 (V) : 0.300
 P2 (V) : 0.950
 P3 (V) : 0.174

N-1300.000 : 0.000
 -100.000 : 0.000



P1 (W) : 0.407
 P2 (W) : 0.382
 P3 (W) : 0.338

BU : 1.000
 U : 1.000

R.A. : 22.700
DEC. : -49.950
M. R.A. : 132.000
M. DEC. : -279.000
DISTANCE : 4.500
MODULUS : 79
D. VEL. : 2.100

q1 (U) : 0.845
q2 (U) : 0.136
q3 (U) : -0.517
dU : 159.752
U : 11.604

q1 (V) : -0.260
q2 (V) : 0.950
q3 (V) : -0.174
dV : %-1360.662
V : -108.447

37
q1 (W) : -0.467
q2 (W) : -0.282
q3 (W) : -0.838
dW : 184.562
W : 12.900

LL1350 22 43.5 +45 07 dK6 -23 C

R001223

10.5 dK6

+40. -04 C

1430 ✓

-333 73° Taten

+0.318 +0.097 Taten

26M (10)

30Xh (7)

-328 945 707 707 +318 +097-23

4602
-1.0

40215545
22 43.8 -47 12

31769
1.479

6.65 + 0.32 (1.60)
+0.5 ± 5.7
2.53 1891.9
-29
12.84

16.619 1859.9 +0.1
260
359
+0062 +006

17.789

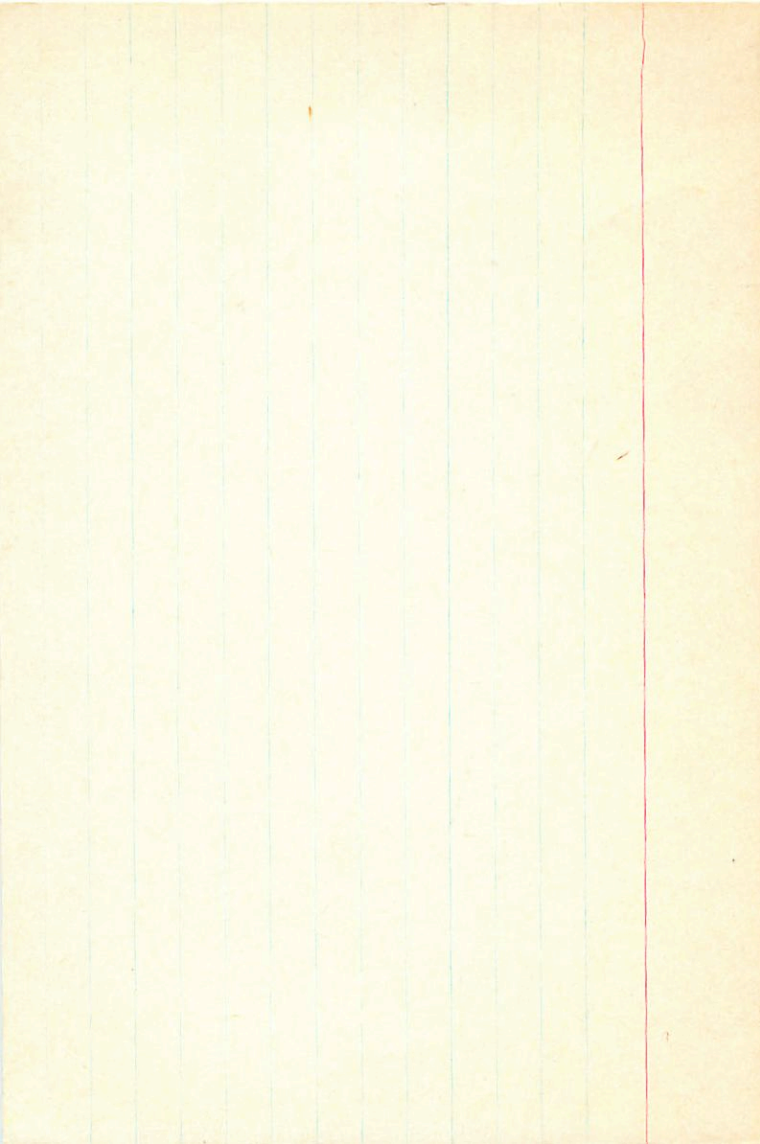
28.742
46.531
347

15.91 1929.05

53.2
12.79
1.05

498
138

745 169 -565 +2523 +0048 | 2571 +15.4 +0.5
-261 957 -117 -6779 +0272 | 0587 -3.0 +0.1
-405 -230 850 -1388 -0065 | 053 8.7 +0.9



+00 5248.0 +00 555.7
 +00 44 +00 6.65 + 31 7.60
 -47 12 +00 6.65 + 31 7.60
 F077 -1050.4(19)

215545
 31269
 11-10

46.618 1545.9 -47 12 12.53 1591.9

-261
-358

-29
12.82

43.0

5.51 1929.05

52.40

8575

17.789

28875

46.618

13.31
5.2
5.9

96.48
12.44
+3

5.48
1.90

1.21
5.3
1.9

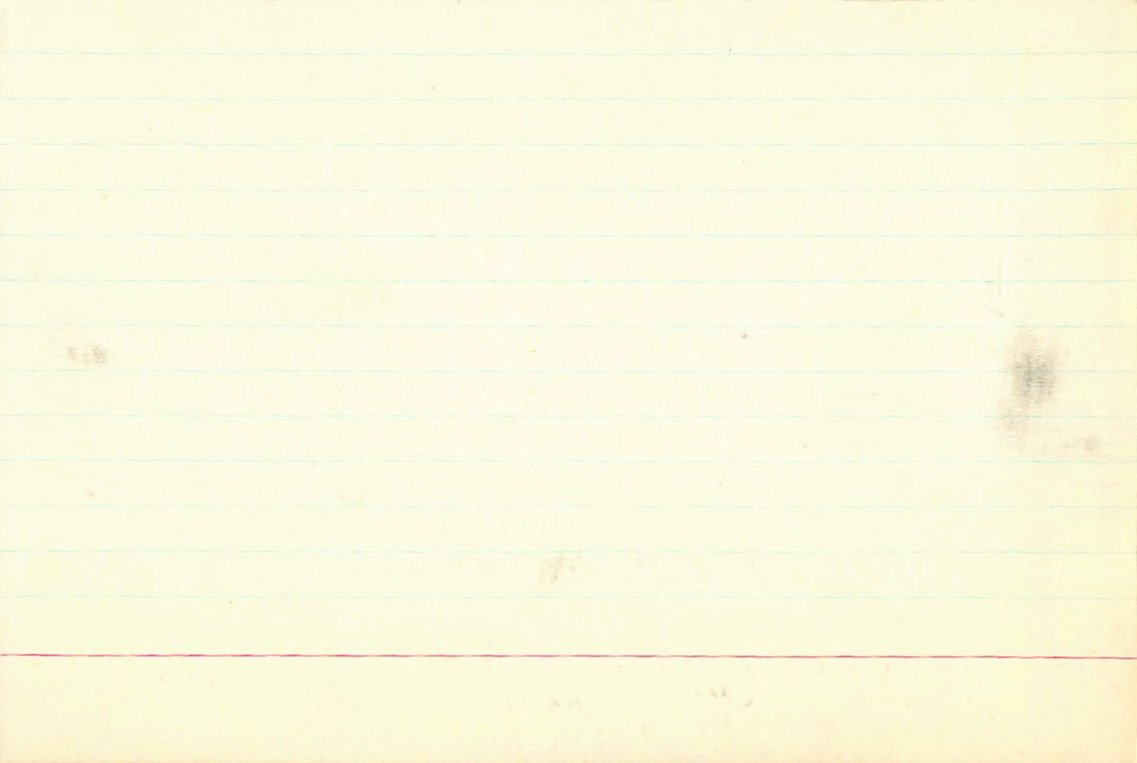
11.44

1554.70

51.0

46.618
5

11.44
-1.8
12.17



-0016 ± 12.2

215657
31787

22 44.5

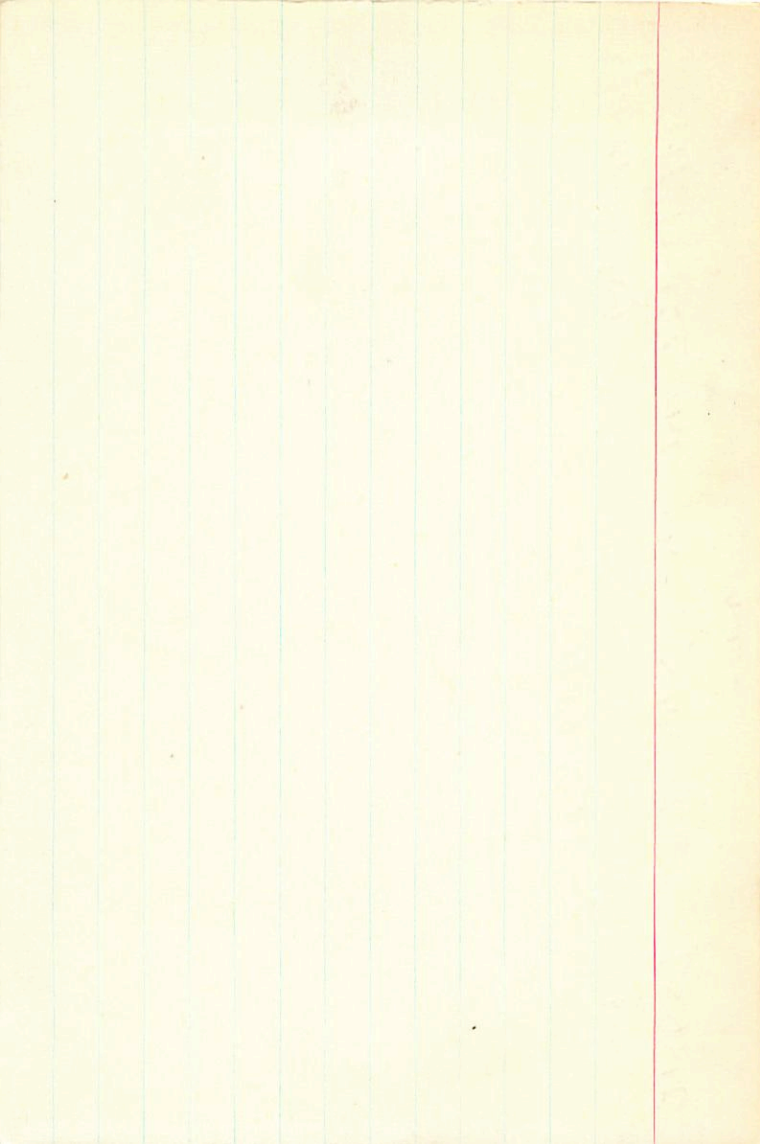
31886 1903.6

-45 14

7.21 + 61 1.68

²⁽¹⁴⁾

6-3B-A + 10.450.5



- 25.5 (10/14)

215696 22 44.6 -16 25 864

C 2972 2.40 +0.685 +1.635 255(2) McLean
w/4310
45518
-1606152
1.74

61 copy

AD516245 10-1132"

→ +35 -06 C

+75 -44 -15 .020
+42 -28 +5 .040

738854 -057408
+35775
-10
+378
0585 ER
+055

20512- C(17)

-202 559

107

-28.8 / 54

G-8 d

25 - 16

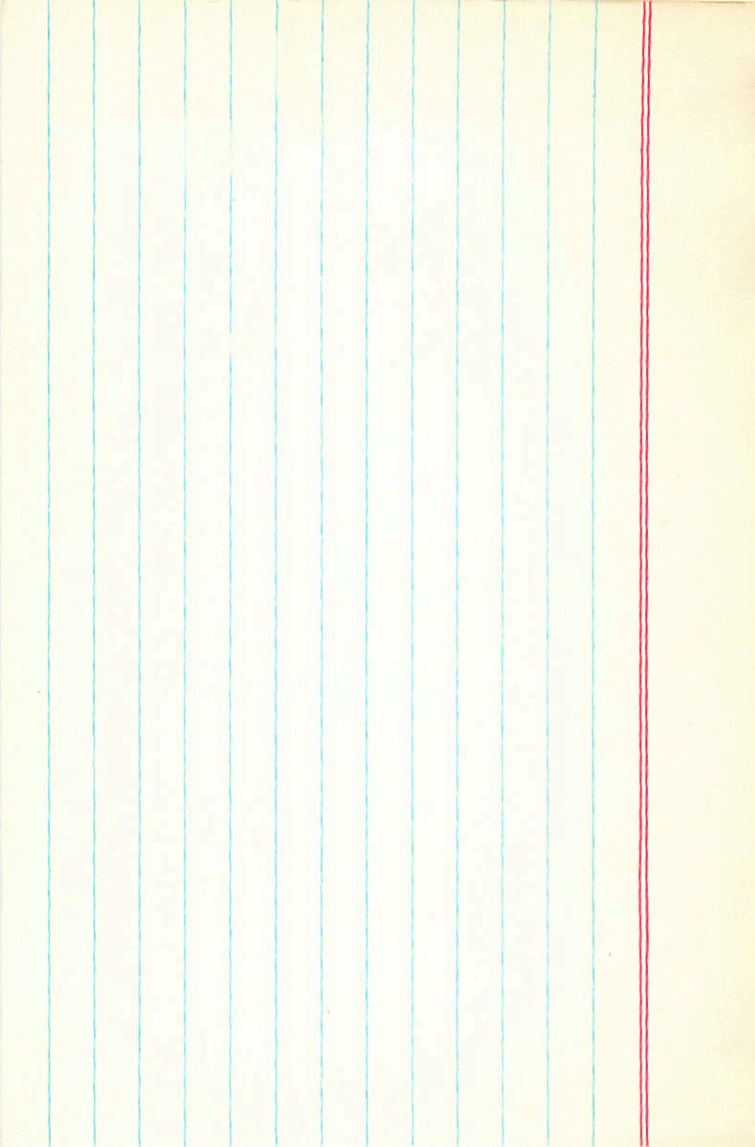
44.6

22

215-696

dcy - 29.46

-29.4



216446 22 47.7 +82 53 5.0 9143-21.1a

31855

14342

+0111 55 +052 62 1230

-3115 ①

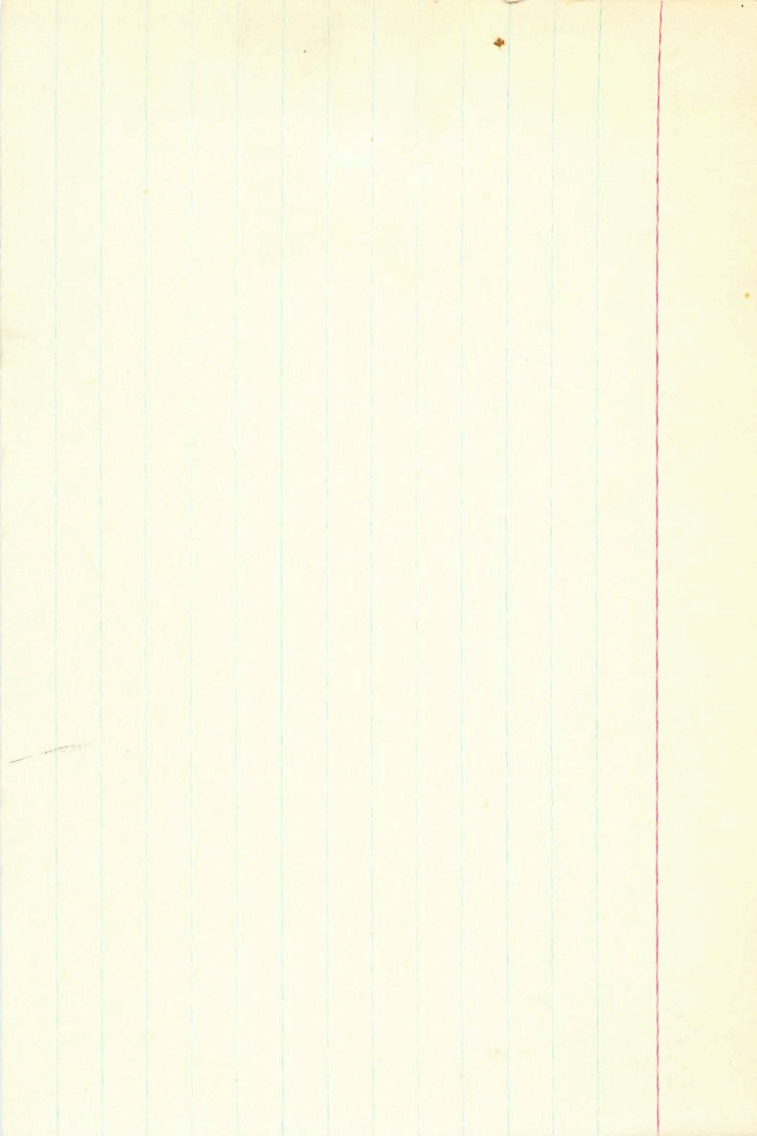
10516294

+0111 ±1.5 +053 ±1.5 647 1230

10³ 3¹¹

+0110 +050 PPR

+020 +050



68 Apr

215721

22 44.9 -19 52

54 967 +23.3a

31794

-0073⁴² -204⁴⁴ N30

MSN ①

14313

-0073±2.1 -20±2.2-66 → N30

