

+250510 13 34.1 474 45 416 -3C
-418 +039 6A2

396(8)

1472

-355-917 965 263 -418 +034 -3 035-3 047

-167 015 383-035 -625 1556 -0.5 +1 0 045

-14 85-2

-13 +11-2

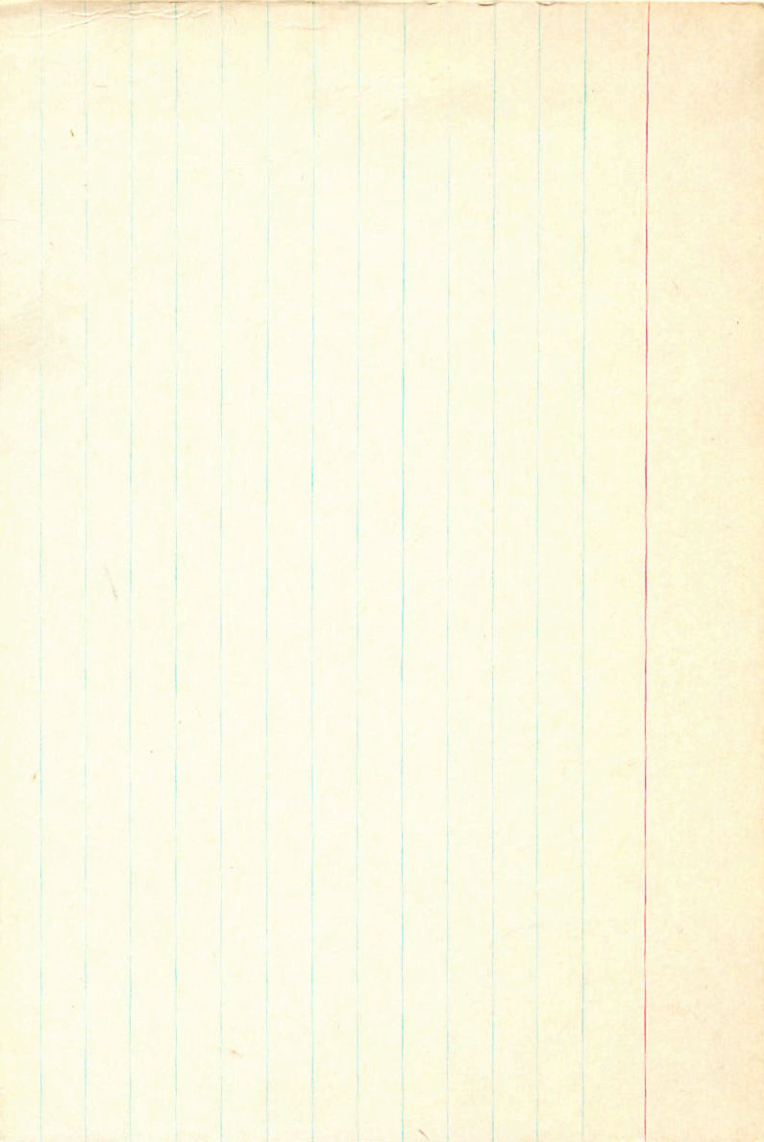
045

+37-27 41

24x4mm 13 24.7 452 10 0

-019 +010

-772	623	127	+0695	+0295	+0950
611	671	424	-0550	+0318	-0232
-177	-402	898	+0159	-0190	+0349



11833F

13

24/

43 50

1839)

① 009
400 ②

Days 100-0500

5910-0165

-0510

1051-012

9155

11833F
h200
h250
h250

Q21-
C14-

LSAD

0209

8/UM

118511

13

35.0 - 7

37

7.6

90.5

-4.86

18413

7.6

90.4

-0.71

8061

57.847

1892.4

- 7

37

2.25

1889.1

-2.8

A058972

+ 0.46

89.3

+ 3.6

2.97

Δm₂₀

39.229

18.865

57.926

82.2

63

24.24

39.85

04.40

3.22

2

1929.12

57.894

12

906

1940.16

26.428

51442890

9.8 x 5.5 / 9.500

1941.34

3.59.26

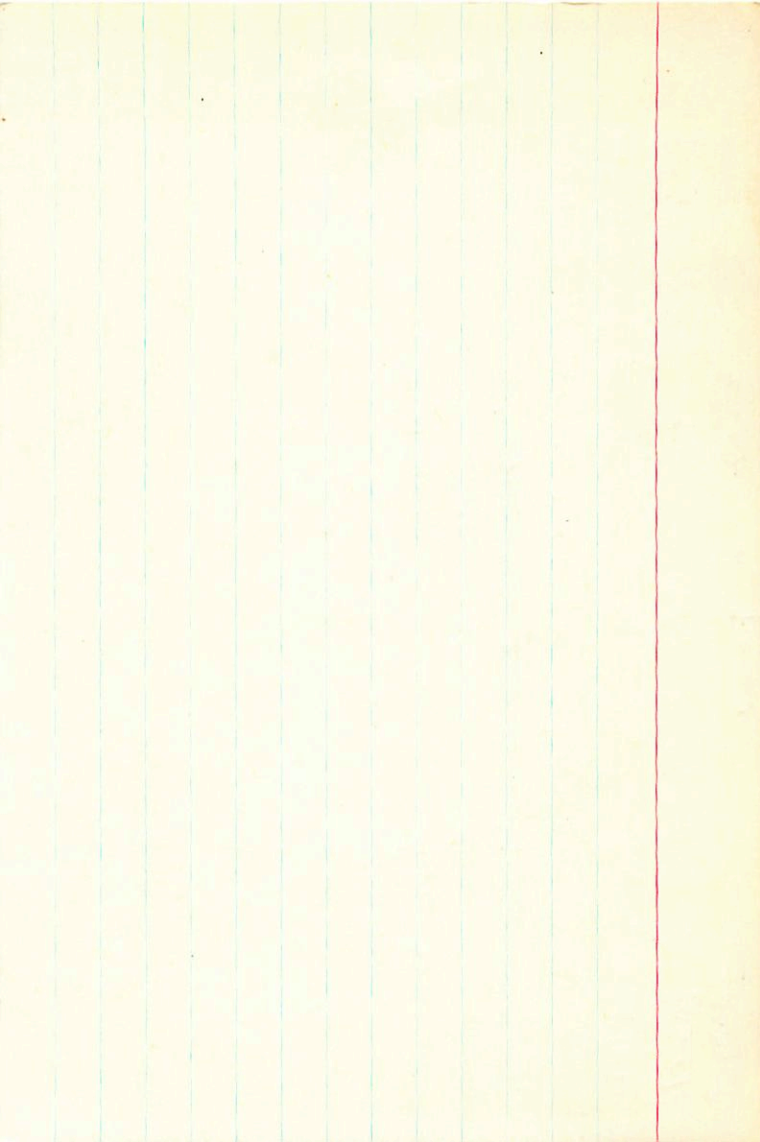
3.64.9

3.64.9

2.6

266

-0008 ± 2.4 -006 ± 2.2



404
18
2439

133-322

35 35.724
15
1752

25.862
151
1411

1503.9

2.60

648431

4902642

6.344

13 35.6 + 19 24

8.82 + 69 404 + 19

434
444

-46.2

+133-318
0-4
-322

+0098761
+0091
-330
-32776.7

+6044-322

5782
1472

26.23 1940.25
+2
26.23

19 1.5
-27
15229.4

1.23

1976-

40055h

disc 1976-

king 8.14h

Sheet 9.55 31

118670

501-141

70X 100 100

501-151

600

431.10

12954 12918

-3455

79

R.A. : 13.800
DEC. : 22.800
PM. R.A. : -153.000
PM. DEC. : -182.000
DISTANCE : 8.000
MODULUS : 258
RAD. VEL. :

Q1 (U) : 00.100
Q2 (U) : -0.770
Q3 (U) : 0.007
QU : -0.190
U : 212

R.A. : 13.600
DEC. : 22.800
PM. R.A. : -153.000
PM. DEC. : -105.000
DISTANCE : 6.000
MODULUS : 158
RAD. VEL. : ~~76.100~~

q1 (U) : ~~47.8~~
q2 (U) : -0.770
q3 (U) : 0.607
dU : -0.196
U : 212.7

MP
(M) 93
(M) 42
79
0.00
-0.181

80

AD. VEL. :
MODULUS :
DISTANCE :
PM. DEC. :
PM. R.A. :
DEC. :
R.A. :
13.400
14.250
0.000
0.000
0.000
10
0.000

U :
U₁ :
U₂ :
U₃ :
U₄ :
U₅ :
-0.270
0.273
-0.281
0.000
0.000

U :
U₁ :
U₂ :
U₃ :
U₄ :
U₅ :
0.612
0.288
-0.071
0.000
0.000

R.A. :	13.600
DEC. :	14.550
PM. R.A. :	0.000
PM. DEC. :	0.000
DISTANCE :	10
MODULUS :	0.000
AD. VEL. :	

q1 (U) :	-0.770
q2 (U) :	0.573
q3 (U) :	-0.281
du :	0.000
U :	0.000

q1 (V) :	0.612
q2 (V) :	0.788
q3 (V) :	-0.071
dV :	0.000
V :	0.000

118670

13 357

+23 17

-342-100

762 +94

050-1010

184-050

152-50

4

2782

943-5446 1608
3123 3223 0243
SCE SCRE

81

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2014

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2016

2017

2018

2019

2020

2021

2022

2023

2024

2025

R.A. : 13.600
DEC. : 23.300
1. R.A. : -152.000
1. DEC. : -90.000
STANCE : 4.000
MODULUS : 63
VEL. : -34.200

q1 (U) : -0.770
q2 (U) : 0.609
q3 (U) : -0.191
dU : 249.883
U : 22.200

q1 (U)

-0062±3.0
-0056
-29 18
-1059

+7.2①

118646 13 35.9

18442

86 B - 2 + 4.2 ± 0.5 C₂(11)

53.062 1500.4

-29 18 22.25 1897.2

$\frac{306}{368}$

524576
23.75
4.07
18.18

-00575-080

28.815
24.295

2.5
2.100

36.978

42.52 1933.17

-0723

53.177
18.6

39.12
21.64
21.37
3.19

4.13
37.1

772-072

$\frac{126}{164}$

136
29.3

18.6
1.93

7.3

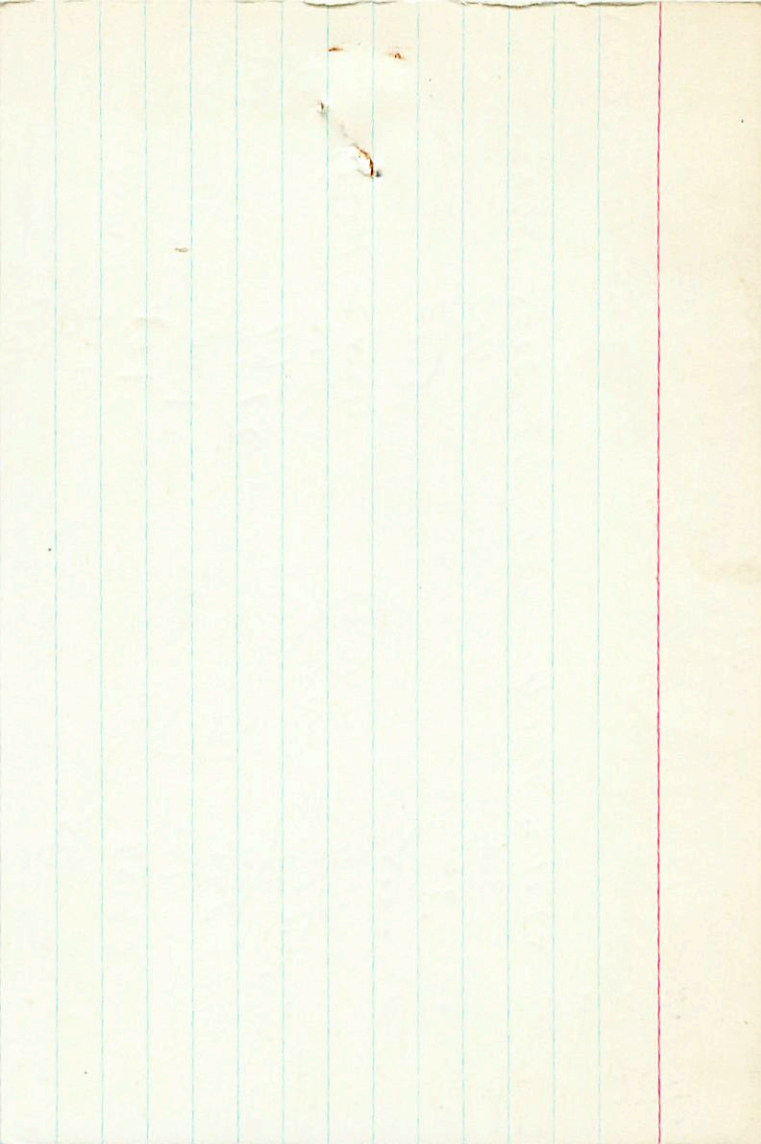
24.09
24.09
1940.96

53.139

3.2
74.2

21.56
21.73

39



398
16 2.08

118646 1335.9 29 18 FLTR =

H15125

184426

5.82 + 0.405 + 0.005 @ 544

~~16 3% 074-020~~
22 590 -0785 064 ± 2.5
44 541 -0741
56 541
62 541

96

201 + 24

247 148.548 2.679 @ 10,1747
412 307 531 201

489 132 / 156

3.50

2.00 2.21 -12.0 -3.3 -0055
12.3 481 -378 -220 -079 +42
12.1

82

01 (U) : -0.770
02 (U) : 0.218
03 (U) : -0.000
04 (U) : 188.797

AD. VEL. : 4.200
MODULUS : 4
DISTANCE : 4
PM. DEC. : 0.200
PM. R.A. : -72.000
DEC. : -83.000
R.A. : -29.000
13.000

R.A.	:	13.600
DEC.	:	-29.300
PM. R.A.	:	-83.000
PM. DEC.	:	-72.000
DISTANCE	:	3.200
MODULUS	:	44
AD. VEL.	:	4.200

q1 (U)	:	-0.770
q2 (U)	:	0.218
q3 (U)	:	-0.600
du	:	189.797

GAZ +705924 13 36.4 170 4F

43124

-40 -02 GAZ

Pa x two = 30

61697 -10 11 0125

2712 (G-17)

-408-903 545 327-40-02-40-019-~~45~~-025⁻³⁰

-163-008 365 017-~~883~~ 169-~~320~~+9+4

-21

~~078~~
028

0247-0

02-04-

0 2

118839

13

36.6

+18

31

6.5

g 106

-11.16

-0032 ± 4.8

-026 ± 4.2

-0035

-029

18454

-11.9 ①

8072

37.911

1902.1

+18

31

8.20

1902.5

+153

38,064

37.940

14
954

37.916

+13
931

942

-122

35.1

+1.24

9.44

8.64

-2
8.62

1934.1

8.23 1940.25

+2

8.25

8.44

-1.00

+35

37.2

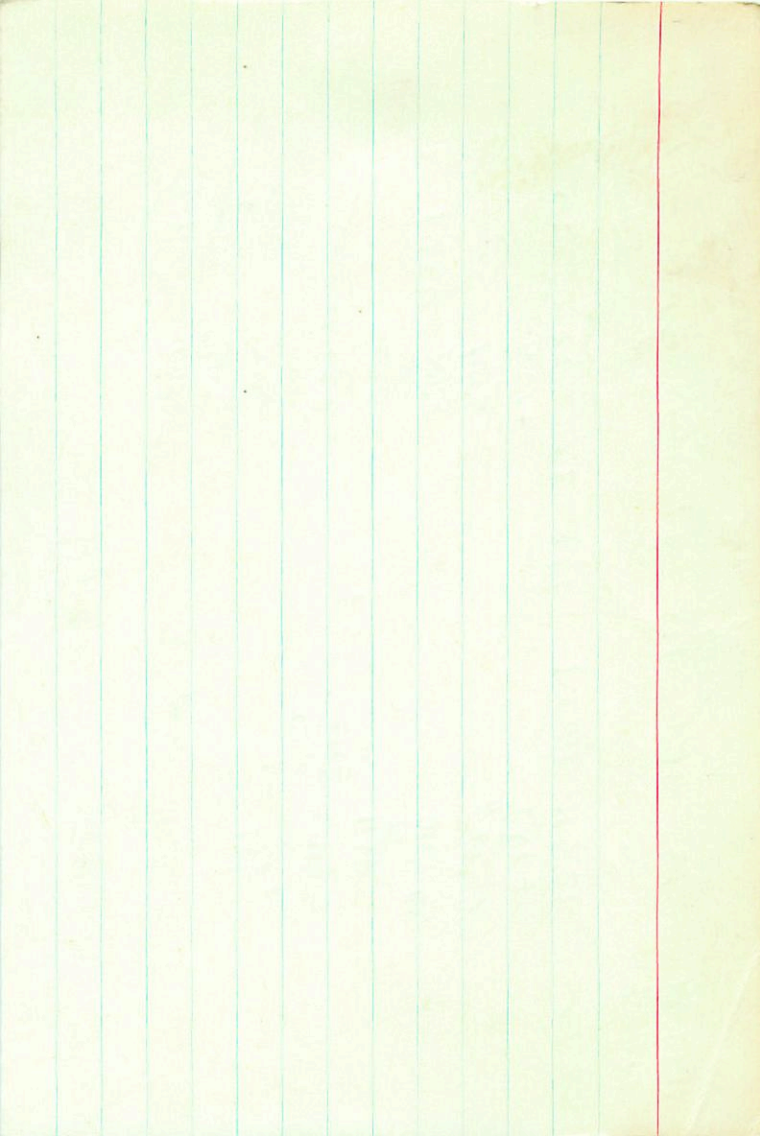
34.7

-0033 -021 *copy*

-047-021

-9360

-3520



118666

13367 -64 19 9F4 F0 III

HR5130

GL18457

5.78 +40 00 C

255 155 434 21676

.245 .166 .643 2.679(2) 10,45
250

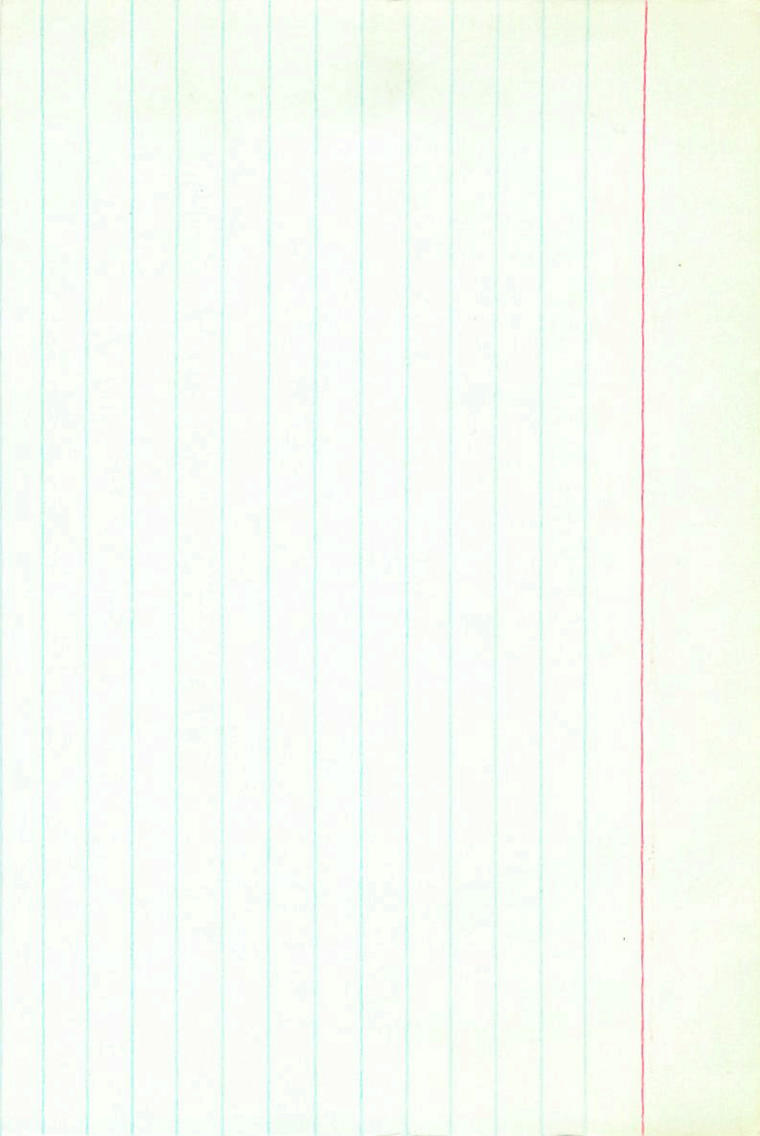
[m] 211 +10

[L] 583 +112
+118

+215

~~Bad m~~

4.00 +9.1 -12.4 +1.7 1K
+185 -145 +29 -050
-003 +4.2



118666 13 36.6 -64 19 F0 III +4.2 4C

FJ1201

5120

0.00
5.78 + 0.40 (1.60)

~~$$\begin{array}{r} -0085 \quad +008 \quad N30 \\ -0068 \quad -074 \quad G2 \rightarrow \\ \hline -0075 \quad -003 \\ \hline -050 \end{array}$$~~

39.403 123

$\frac{247}{908}$

39.081

$\frac{14}{097}$

40.34

$\frac{2428}{-30}{2458}$

$\frac{93}{2426}$

-0081 ± 6.4 -023 ± 5.1

-0106
 -0096

$\frac{+005}{+000} 25.19$ 9.4

39.424
 $\frac{14}{440}$

40.36

24.14
 $\frac{14}{2458}$

$-0100 -0075$

$-01006 -0015$

-0654

$-0684 +003$

+1302698

G63-16

13 37.5 +12 51

-244 (2) -278 (2)
-242 (4)

-20.6 ± 4.8 (15)

9.36 + 0.58 - 0.06 F9 II R

S = .17

Handwritten scribble

-116 -68 -69 .010

-65 -45 -51 .015

-55 -33 -44 .020

+127 -286 Y

-1 -9

+126 -295

-423 -506 225 574 +127 -256 -206 -064 -5 -1.320

054 -027 -115 058 -018 -6.774 -20.0 +18 +5 007

-1 -76 -91
-7 39 -147
+15 -87 -155
-168 -115 -64
008

13 14 -91
-147 -102 -53
006

-6 -67 -79
-8 34 -128
14 12 -79
005

-1 -112 -125
+14 -127 -269
-238 -152 -92
005

-6 57 -203

12 21 -125

VUMM

119227

13 37.8 +74 34 740 GM4-1658
+0097 ± 4.5 - 017 ± 5.9

8080

47.178 1903.0
-454
46722

+74 33 47.27 1908.1
71
47.98

(Handwritten signature)

46.798
52
854

47.92 1944.86
-4
47.88

46.61
72
6
31336
5044

48.3 1930.3

17
48.13

(Handwritten signature)

7006 15 7026 - 009 042
173
170
103

266

+0037 -007 FLY

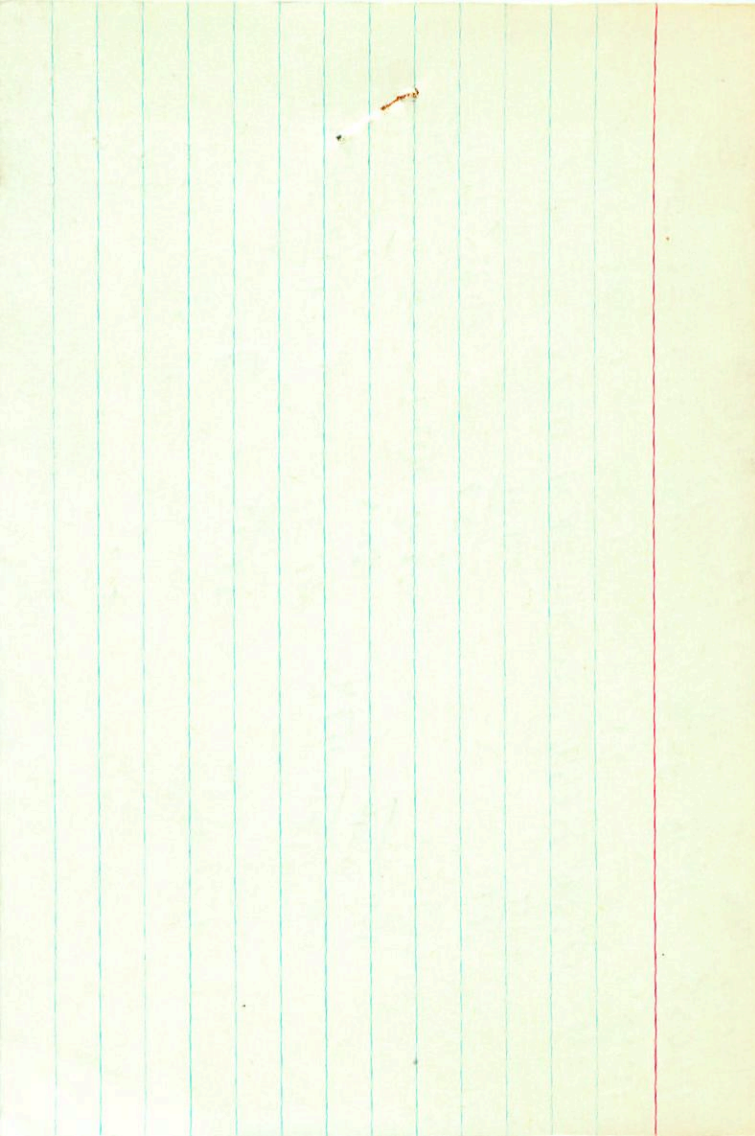
+
2
21
+0039 -006

631
+016-000
BL

~~+0058 -009~~



-767	+537	+348	-0592	-0153	-0185	-0755	-57.4	-124.9
+614	+451	+647	+0470	-0128	+0238	+30.2	-106.8	-76.6
-188	-712	+675	-0142	+0202	+0060	+6.1	-111.4	-105.3



119081

13 38.3

-0052±4.1 +008±3.5
-0055 F003

+28 19 6.4 12 -62.88

18491

141

35
14
20
34
54

20.666 1890.1 +28 19 3.24 1890.3

311
20.977

-48
2.76

20.762
15
777

762
215
39.1

3.12 1928.32
-14
2.98

584.2
29.2

20.73
17
747

-00535 +0055
-00527 +0079
-0696

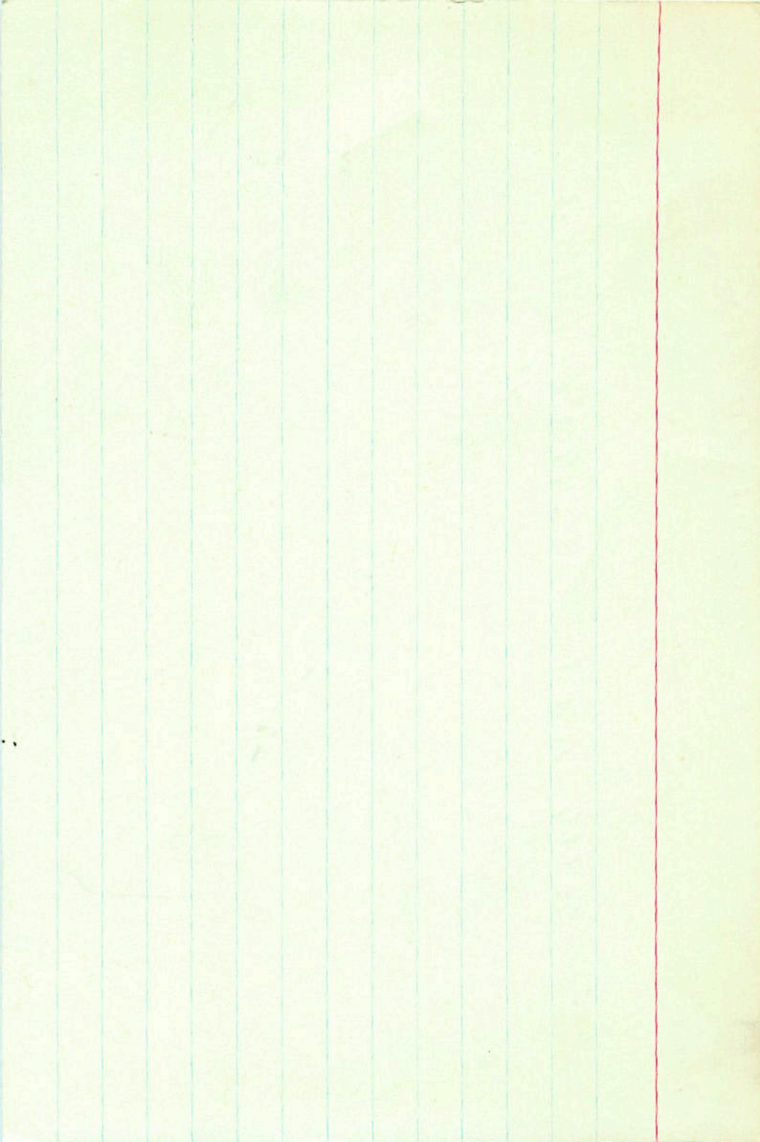
3.0 1930.1
-24
2.74
2.84
+10
38.9

MP

1294 1.11276 246 1214

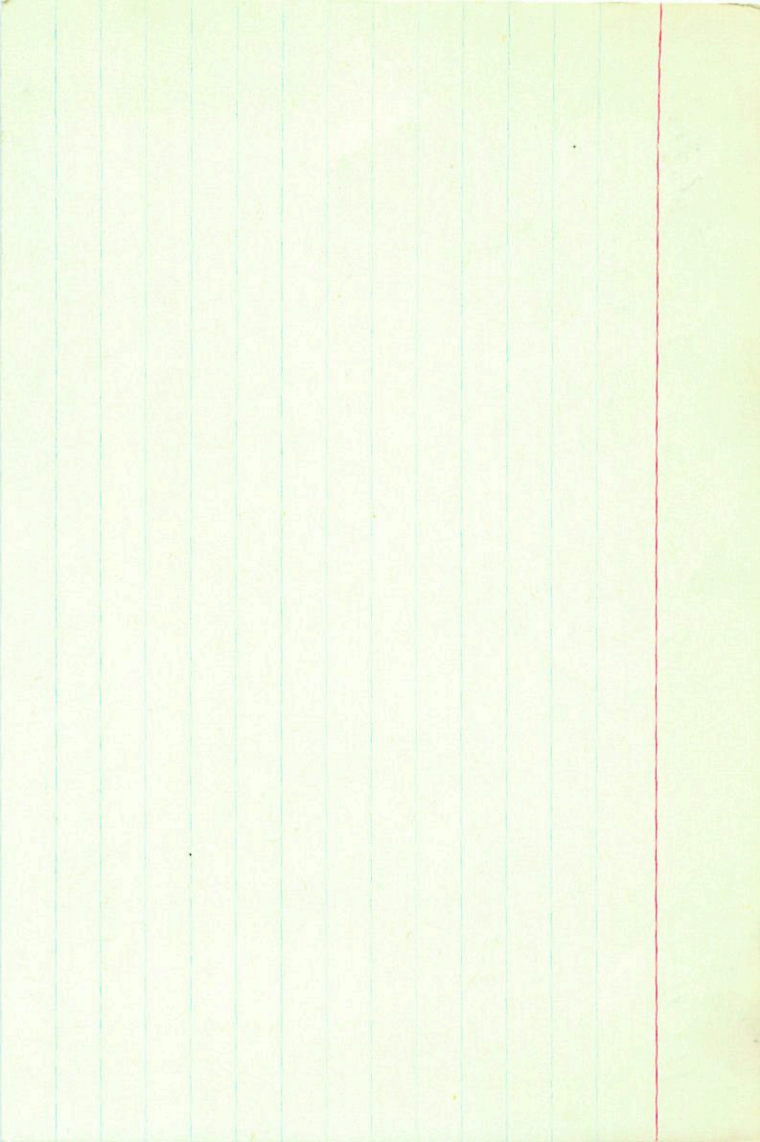
-067 +012

9785 9662 0675
-227 5862 0057
2598 +3.7
0072
5.70



118964 13 38.9 -52-21 12-11 +9.8±0.8^{C2(4)}

8.44 +1.18 2.19



118978

18500

13 39.7 -58 32

40994
 $\frac{15}{149}$
 41149

11.2
 0049
 0046

-020 ± 4.3
 -028
 -021

5.50
 8.1
 84
 466

41045
 -36
 009

$0045 - 023$
 $0044 - 0167$

39.75

4.92
 -55
 5.45

$41,000$
 -14
 986

-0344

465

4.6
 -87
 547

$9647 - 9753$
 $-2634 - 2210$

0370
 0044

$-035 - 013$

0206

2800

119126

18499

8091

40.391

$\frac{083}{474}$

40.405
 $\frac{11}{716}$

40.411

$\frac{17}{435}$
 $\frac{426}{-048}$

36.6

-0015 ± 23
-0013

13 38.7 + 22

1594.7

+24 44

54.14

1893.7

-032 ± 1.9
-03

45 5.8 969 + 4.58

$\frac{180}{55.94}$

54.68 1934.2

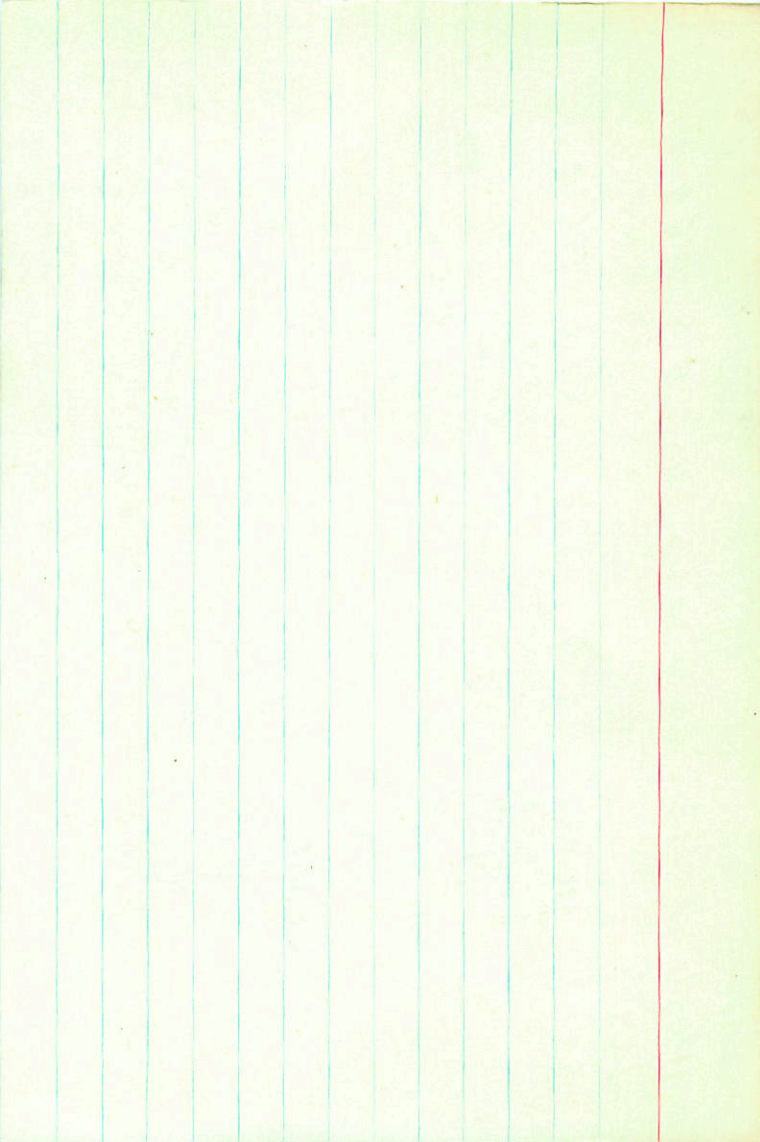
$\frac{54.70}{1928.2}$

54.76 1928.2

-22
 $\frac{54.54}{54.62}$
 $\frac{313}{-1.32}$

37.6

-2 (4)



834 me

119228

13 38.8

+54 56

g m 2 -12.16

HR5154 119228

4.45 +1.70

18504

-0.22 -0.14 GC
-0.25 -0.14 N30

M2A WB-1.3

8093

-0.24²⁴ -0.14²⁶ N30

-0.26 -0.15 RB

-0.28²⁸ ± 1.8 -0.13 ± 1.4 GC → 0.20

-0.24 -0.14

+2 -12 -19

+4 -15 -20 008

-417 - 309 813 524 -022 -014 -17.1 -011 -14 -038
-009 -005 020 010 0 051 -9.8 +10 45 013

+10 +10 -17

+2 -12 -19

+10 +14 -19

008

+4 -15 -20

-0015 ± 7.3 $+019 \pm 7.5$ 9100
 -000 $+003$
 119090 13 38.9 -33 21 5.2 +27.6a

18505 6.0 +1.50 2.20 mm
 8094

7400

53.238 18986 -33 20 42.10 18983
 $\frac{008}{246}$ $\frac{-0.98}{43.08}$ 42.7 1832.5

27.342 7025 192870
 $\frac{258457}{53.1907}$ $\frac{36.50}{43.78}$
 $\frac{27}{53.1907}$ $\frac{43.67}{43.10}$

44.0

44.3

53.21 53.210 -006.
 $\frac{240}{27}$ $\frac{240}{203}$

1956.48
 42.96 003
 $\frac{-28}{43.27}$.16
 $\frac{43.15}{43.15}$ -10

$\frac{000000}{000000}$

475
 52
 11
 $+2$
 -0013
 -016
 $+004$
 $+2$
 $L R$
 $n-m$
 785
 -7.22

$3 \frac{610}{90}$
 $3 \frac{610}{90}$

-0012
 -015
 $+006$
 $+006$

260
 58
 174
 -8
 -22
 $+14$
 $= 250 mo.$

-765
 $+615$
 -192
 $+170$
 $+480$
 $+861$
 -622
 -626
 $+4771$
 $+0544$
 -0437
 $+0136$
 $+0548$
 $+0136$
 $+0245$
 $+0301$
 $+0381$
 $+0592$
 -03.5
 $+297$
 $+16.2$
 -23.5
 $+297$
 1290
 -40.8
 $+130$
 -17.2
 -17.3

$990 mo.$

HD

119372

8.85 - 0.10 - 0.455

89 106 9.35

n-m

+42
-47

119308

7.87 10.05 10.05 2 89 + 08 6.40

+42
-47
+51

$$-171 \pm 17.0 \quad -192 \pm 17.0$$

119070 13 39.0 -48 13 650 +5.0 ± 0.9 ^{C(14)}

19508 9.18 +77

58.732 1904.7 -48 12 44.13 1904.7

775

59.507

4/1.8

-179-150

8.70

35.43

-176 -164

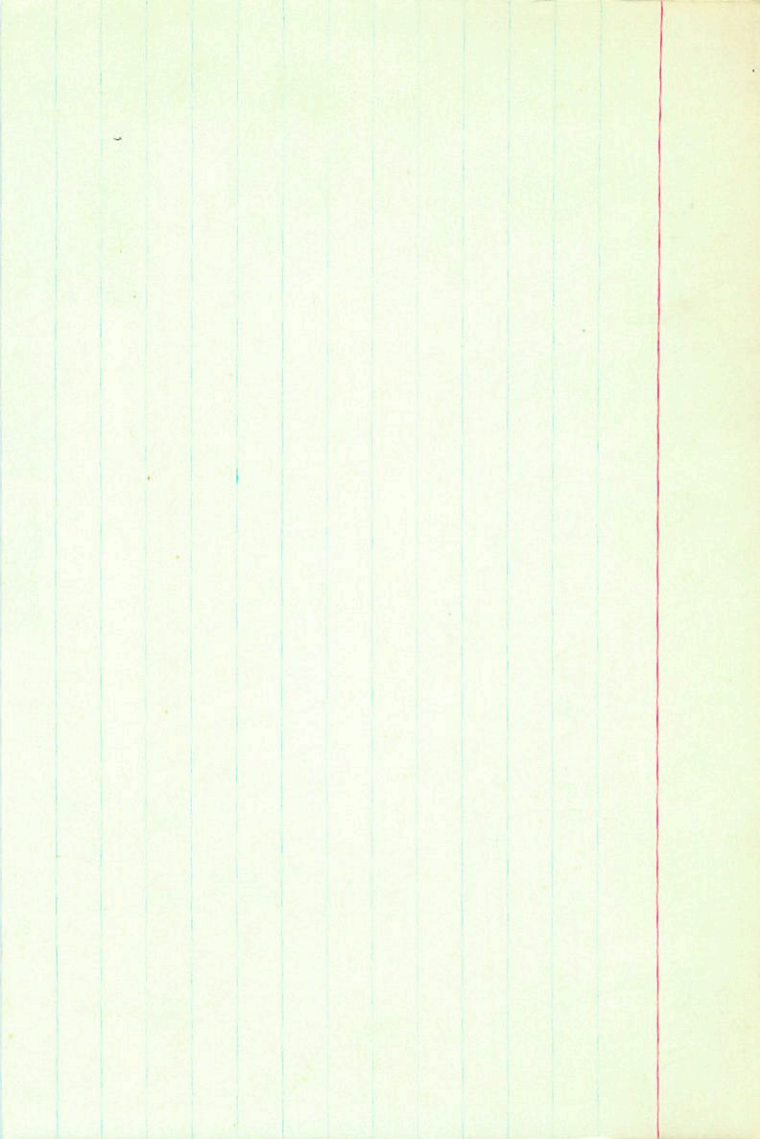
-763	004	-647		46365	-0031	}	6364	41.8M		
616	308	-725		-5139	-2394		-7533	26.6	-3.2 = 38.6	
-196	951	237		+1635	-7393		-5758	-31.5	-3.6	-35.1
								-24.1	41.2	-22.9

35.7M

+23.4-3.2 = 20.2

-27.7-36 -31.3

-21.1+1.2 -19.9



82V_m

119149

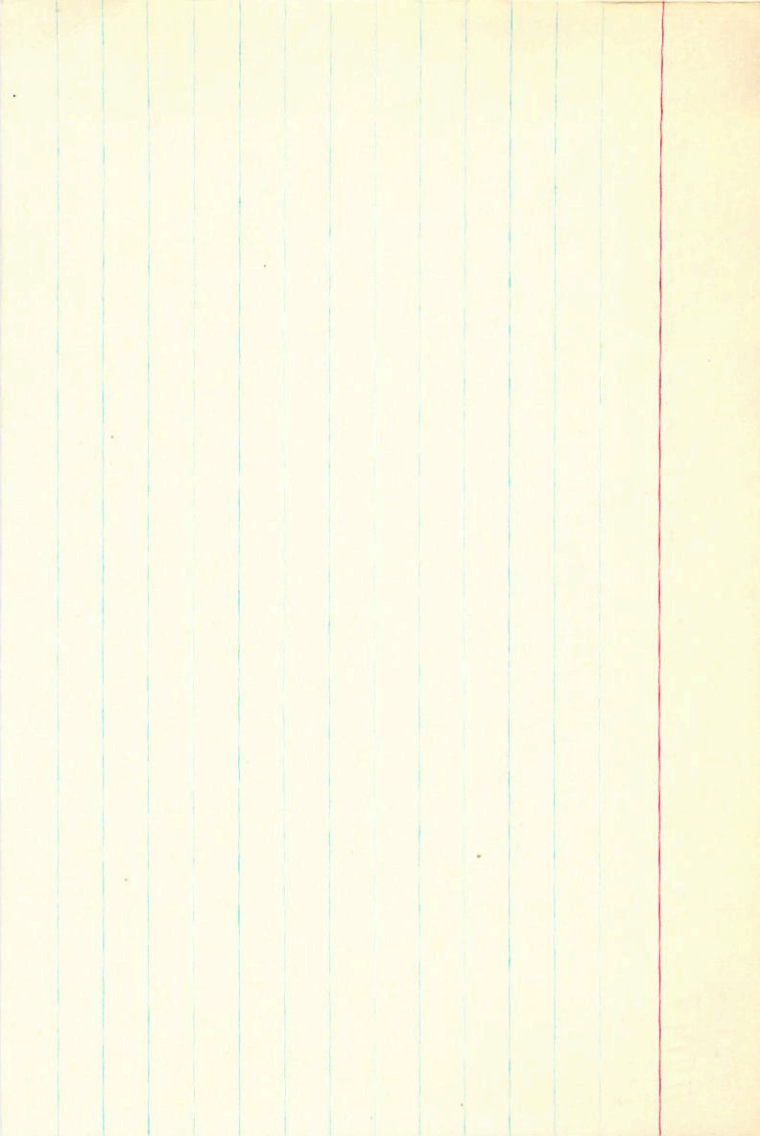
18509

8095

13 39.0 -08 27 52.2 g m 2 -36.66

73
-0063 +036 74 N30

-0065 ± 10 +037 ± 1.0 6-6 → N30



114976

133549 765 09

5142

4136

0538 - 0137 FDS (E)

040 180 1022 2903

7709 9526

0549

(B-N) 035 (E)

4369 7216

1052

630

NO 650

4812

100717

05-216-0266

11 8 2.4 611 28

UZ Prep

13

39.4

-13

17

-25

9.3 +0.37 (1.60)

$7.0 = 2500$

+027 +053

- 2 - 11

+1 +3

+026 +045

-763	374	-57
616	668	-417
-196	643	740

-0940	+0798
+0759	+1425
-0241	+1372

-0142	²⁵⁰ -3.6	+10	+13.2
+2194	+728	+83	+10.9
+1130	+283	+10	-18.5

119782

13 39.7

+22 cet

20

AK

+77.574

A 6.02

113

196

793

①/Man

-0127 003

18827
18827
18827

-11357 +0286

022
+0043
+0022
916

-0123 354

-0117
-0111
-0111

1.88

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16.20

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-042-040

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-042-040

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-042-040

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-042-040

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HR5162

13 39.9 465 04

SD
-24
-5 C

14
17
19

~~+052 -0196C
+055 -014N
+054 -016~~

+088 ± 2.0
-019 ± 1.7
-013 - 016
27.57 96.8
1.67
25.58

WB103

56.524 98.6 + 100.76
42.7
1.89
+100.90
0087

4084
27.78
-35
07.40
4084
+00776 -0168
0450

56.606
0
6607

0530
6050

56.50
31
56.2

27.98
-1
27.94

56.619
30
433

72.12

27.50 057-013
74
1.36

7708 9927 0522
-6370 -1209
+0067

60.00

86.641
14
646

27.248
-45
27.103

14

0

15

-422-507 907 421 7054-016 -5 -015 -4.5 -033

023 -006 -049 014 043 -261 -2.1 +1.9 +0.5 015

+4.9 -16.6 -6.7

-17 -10