

-12.2618

8⁸

31.9

-12 45

528

pk 203

34.19
36.423-1

-12
-13

55
5.04

73583

45
22

3442 VV

+25.3
+12

2576

627

81.5
81.5
5.65
2.4

Yale Zone -0.58 +0.55

-1 -5

9.1: K8. +3.7

-0.062 +0.050

2. sec
CSEH VHT 85
-58 VHT 85

-0.52 +0.44 VVR

943 112-054 885 0.41
9.15-0.44



Faint, illegible text, possibly bleed-through from the reverse side of the page. The text is arranged in several lines and appears to be a list or a series of entries, but the characters are too light to read accurately.

528.000*

8.000*

36.400*

-13.000*

-5.000*

-0.058*

0.047*

2.450*

30.903

25.300

0.303

0.509

22.231

0.155

-0.812

-15.735

-0.098

0.286

4.227

+43° 1844

8 30.8

+43 38

256

8 37.2 14.1

+43 17.97

-159 -264 AGRB

8:31 170 -242

9:25 165 -245

45

Hs. p. II 1215 -0.170 -0.297

8.9 158 +7:

~~-0.170 -0.297~~

5:17

2:22

9.30 8.69

+0.405②

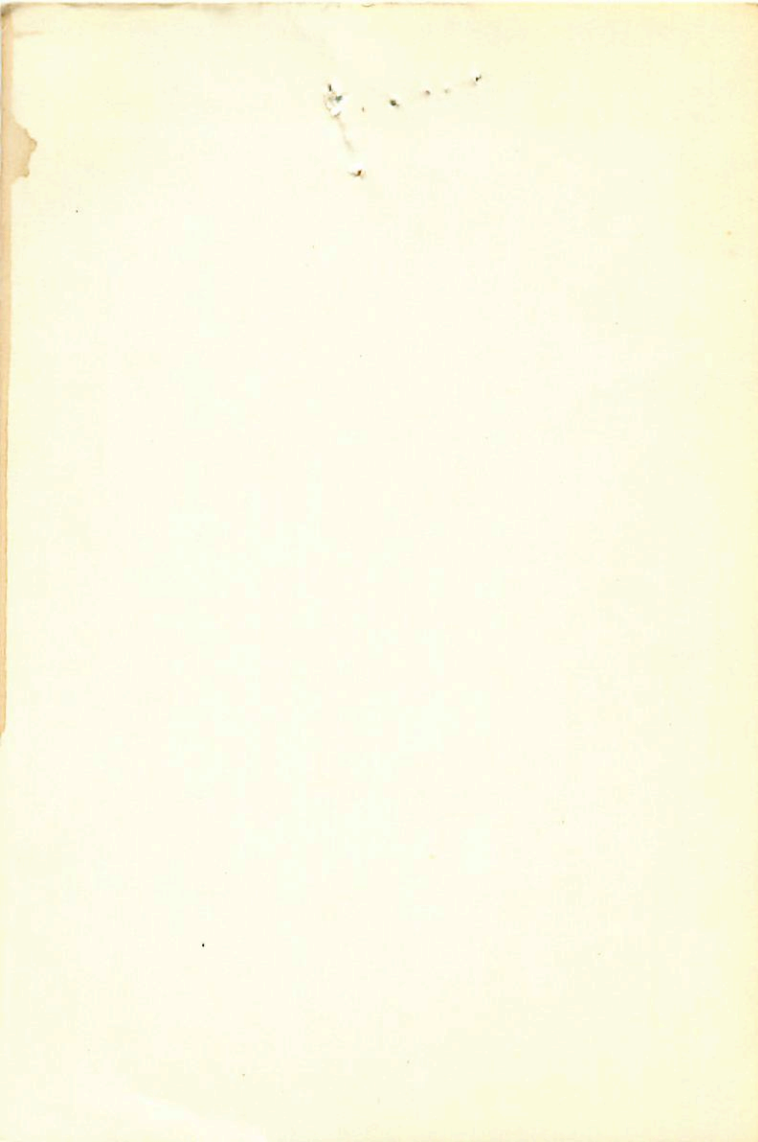
1:50

-156 -335 v

-195 -315 2:25

+56.1

5:15 145 -315



1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900

1901
1902
1903
1904
1905
1906
1907
1908
1909
1910

256.000*

8.000*

37.200*

43.000*

18.000*

-0.195*

-0.315*

2.250*

28.184

56.100

0.682

0.792

63.655

-1.397

0.030

-37.688

-0.817

0.609

11.150

256

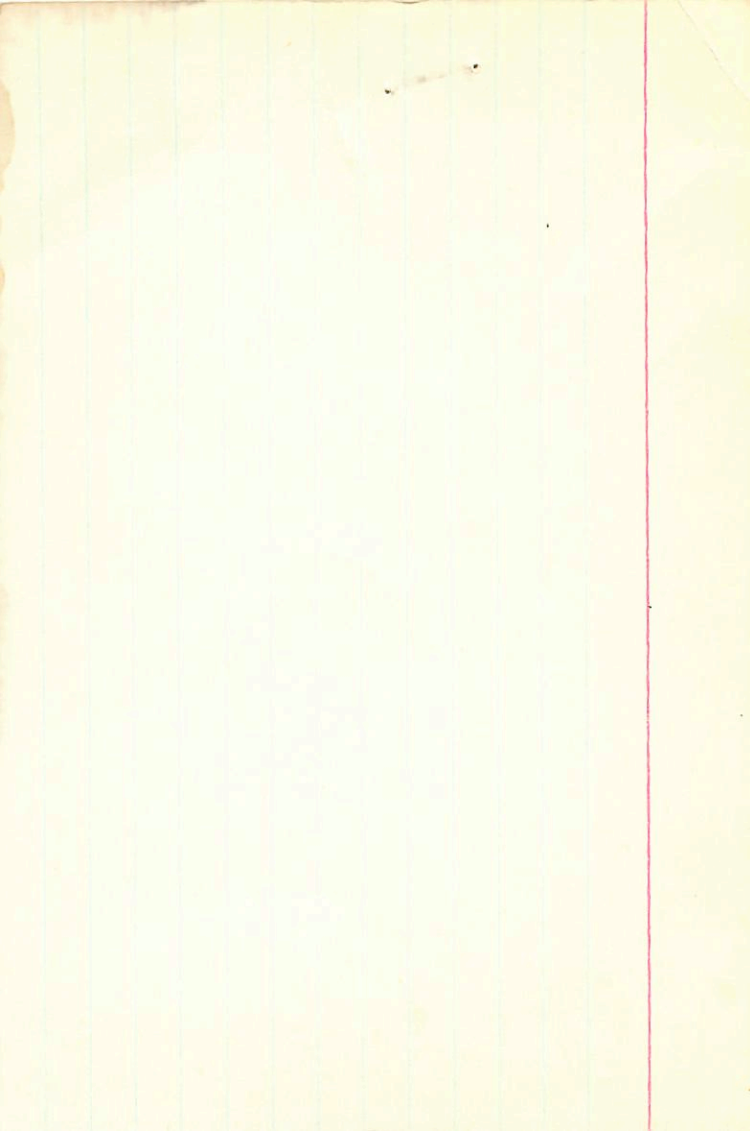
8 37.2 +43 18

+4301804

9.30 +1.08 +0.23 ①

+0.405 ②

1954
+56.1



q1 : 57.284
p3 (U) : 283.383
p2 (U) : 0.795
p1 (U) : -0.084
-0.481

VEL. :

MODULUS : 79.000

STANCE :

DEC. : 1.800

R.A. :

-325.000

DEC. :

-327.000

R.A. :

43.300

:

8.400

R.A. :	8.600
DEC. :	43.300
1. R.A. :	-227.000
1. DEC. :	-295.000
STANCE :	1.800
MODULUS :	23
VEL. :	56.000
q1 (U) :	-0.601
q2 (U) :	-0.084
q3 (U) :	0.795
dU :	588.803
	57.984

881

°

5

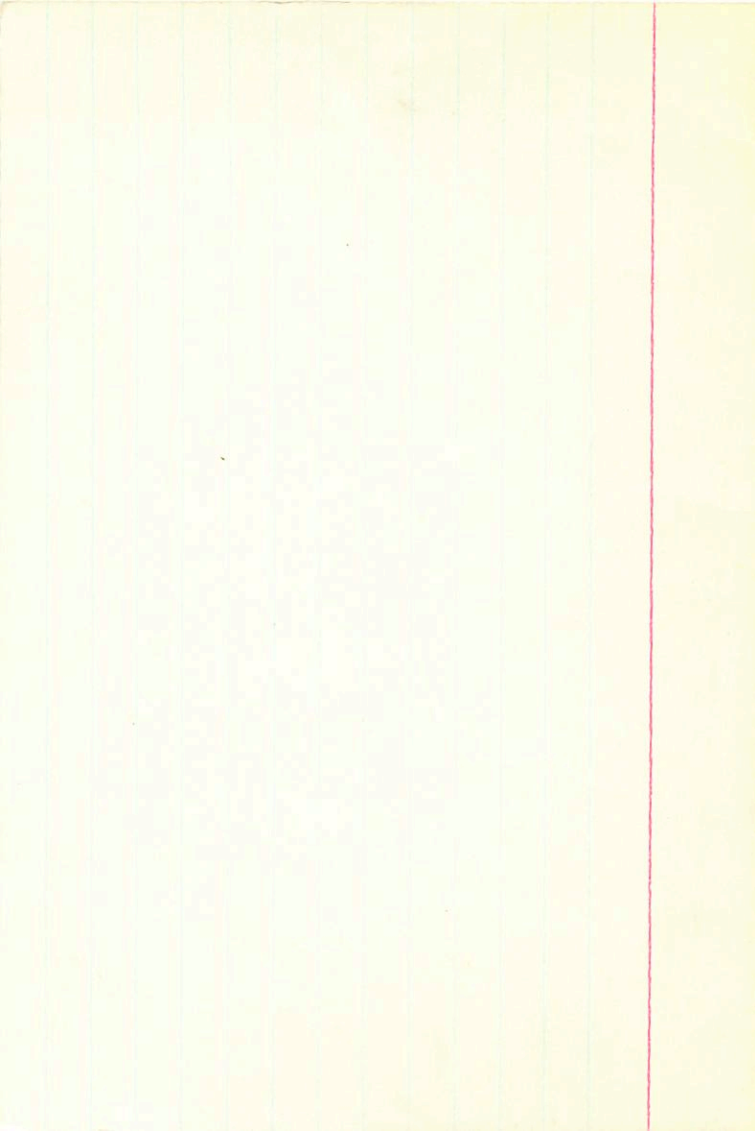
35.6

+42

13

1855

24201622



73668 8 37.1 +0.5 57 863 7808

-17.1W(3)
-20.3L(2)

A05693 26'' Δm=1 7.24 +0.60+0.08612R

-22.78W(3)
-20.0

~~260 449 244 210 (4)~~

-320

+180

726 354 178 346 ①

+602007(80)

726 376 180 379 344
745 371 169 374

72

-317.3

+179.4

A

-318.5

160.55

B

-46 -27 -10 .035

-50 -32 -9 .030

-324.74

+186.58

A

-303.74

+203.58

B

94(28)

381

8.46 4747267 442

210(5)

955

+012073.6
-31772.9

40120

4.181 1892.4
71 75 56 4429 1886.7

688
493
3.408
4.008
23
031

11.19
48.73 1936.27

48.81

5.039 14013
+010775.1
+ 121
+5 57 5.06 1858.4

-31875.7
-294.06 1858.4

-521
4.518
4.420
23
11.72 18427

23.42
11.90

4.913

-5°2603

8 32.8

35.1

8 37.5 29.2

-5 58

8

-6 18.15

529

49

73

7000

861

295

McC-AC +.136 -.156

9.8 MO +8.4

+186 -124

-60

+180-150

K3

Handwritten notes and a large bracket on the right side of the page. The text is faint and appears to be bleed-through from the reverse side. The bracket spans a significant portion of the page's height.

529.000*

8.000*

37.500*

-6.000*

-18.000*

0.136*

-0.150*

1.300*

18.197

-6.000

-0.781

0.575

-17.670

-0.536

-0.738

-5.323

0.153

0.352

0.665

0513

1.45

-15.7

1.0

0.9

-3205613

8

39.7 - 22 47

1582 4410)

474
+64

11.7: +0.005:

106 + 101 -

$P_{0.6}$ 0.6
 $P_c = 76.5$ -18

106 0 10 25

43 ✓

713 ✓

-542 541

+24°1981

8

34.5

+24

41

530

8

40 6.7

+24

20.62

McC-AC - .094 - .019

10.7: 158 + 8.0

125.1481 8 4/5 ✓ +24 59 578

+54.78 25p?

⑪ 51.5

+52.5

9.32 0.31 -0.16 +22

-0.48 -345

-0.3

-345

+52.9

1000

2082.0
+42° 1922 (821)
GMS-23 8 35.6 +42 13 881
W5764 (W324) 8 41.4 56.0 +41 52.47
0-6-12024 59 (40) 8.55 83 W035-
H074379 W324V AIT 85 -25.9 63W N247
8.08 dms 1614
G.C -0.281 -0.649
46 41 73

Q⁺ down
-0.277 -0.655

242 2 4950
new
HSC
N25

RAD. VEL. : 100
MODULUS : 2.000
DISTANCE : -342.000
PM. DEC. : -23.000
PM. R.A. : 22.000
DEC. : 8.700
R.A. : 100

d1 (M) : 0.185
d2 (M) : 0.336
d3 (M) : 0.475
PM : -38.423
M : -38.423

d1 (U) : 0.118
d2 (U) : 0.170
d3 (U) : 0.170
PM : -147.489
M : 22.433

d1 (C) : 0.085
d2 (C) : 0.225
d3 (C) : 0.389
PM : -1245.94
M : 110.884

d1 (S) : 0.170
d2 (S) : 0.389
d3 (S) : 0.589
PM : -1245.94
M : 110.884

R.A. : 8.700
PM. DEC. : 25.000
PM. R.A. : -53.000
DISTANCE : -345.000
MODULUS : =
RAD. :

1.50

8.700
41.900
- 372.000
- 655.000
2.000
- 25.500
- 0.610
- 0.854
0.785
979.180

0516
M3
1436
1.43

022
050
1.50

-10

021

UM

- 0.000
0.907
0.004
- 290.200

-524

- 75.119

-527

-394

- 1210.500
- 45.617

401

+7.2031

8

40.6

+07 02

+6 51

42104

43.1
45.7394

+6 41.01

W5800

Ross 682 205

28 M(7)
7 Y(8)

-2363W

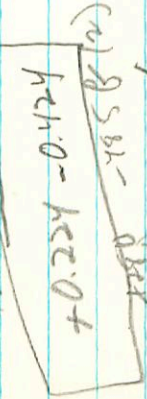
430 286

34 V(10)

dmu

sect
1283

471 G



2
10.36 + 1.28 + 1.20

9.54 + 0.602

998

9.8 MO

McL-H

M6 12.1.37 +221 -415

W 1258

42

24

24.000*

8.000*

45.700*

6.000*

41.000*

0.235*

-0.430*

2.850*

37.154

-25.000

-1.533

0.662

-73.523

-1.744

-0.573

-50.497

0.035

0.483

-10.802

4702031

CC489

5800

845.8

+0640

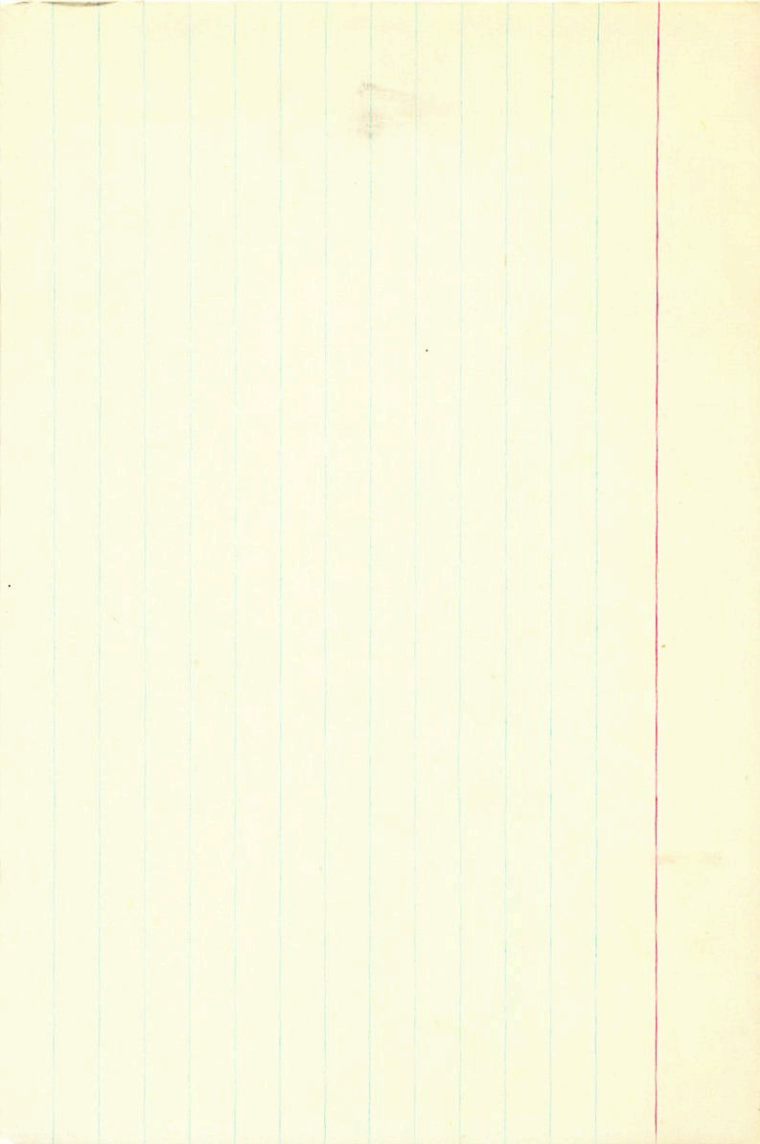
103

DMO

-2363W

10.33 + 1.28 *Manford*

+221 -415 MCE



+29.26222 8 40.3 +29 33 117

8 46 4.0 +29 12.01

Mc. 120.26

11.0 20 +8.1

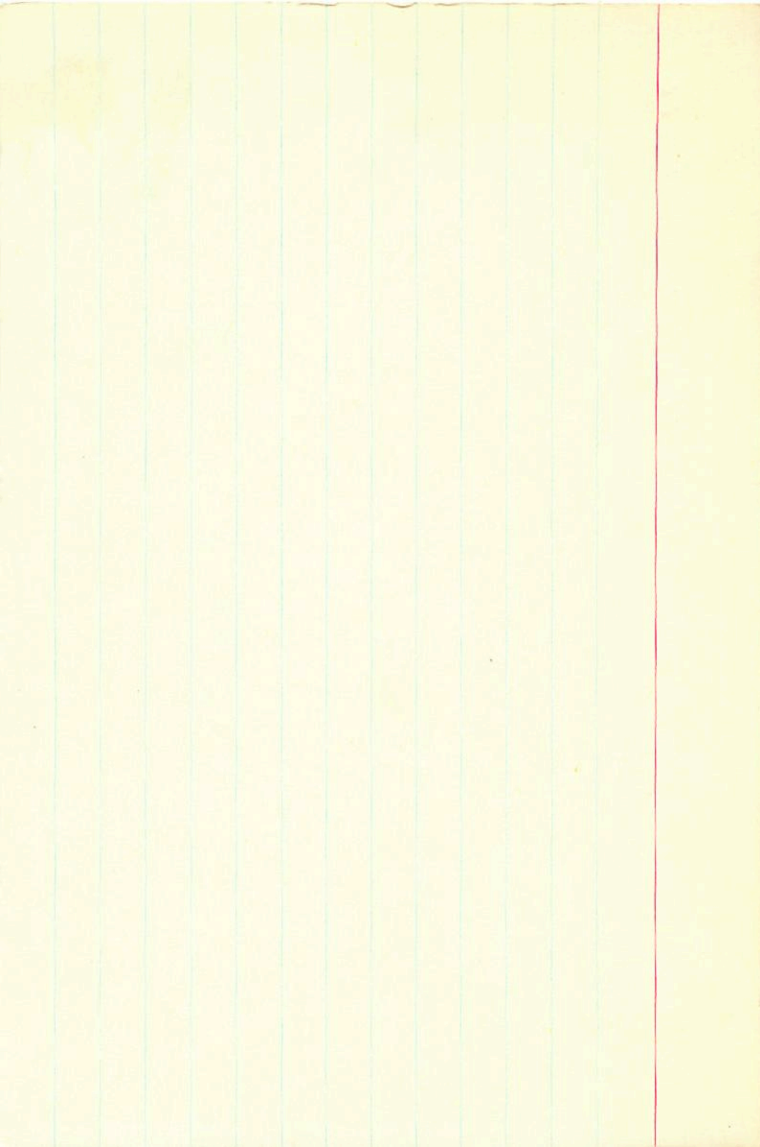
2W

CC490 8 46.2 +36 41 10.0 dm1 +1c

5805

-21-52

307 M ✓



581

9 47.5 + 66 18

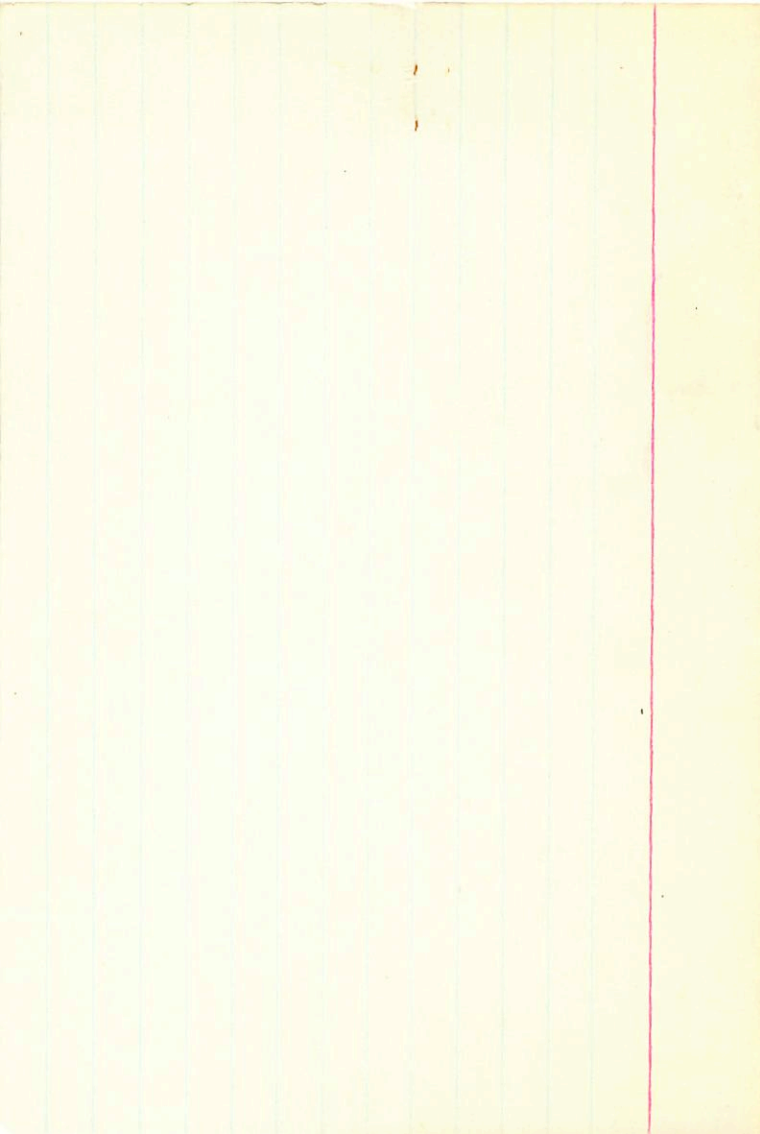
+ 660582

9.28 + 1.335 + 1.225 (2)

+ 0.57 (2)

+ 0.091 + 0.109 BAC

- 209



+66°58.2

8

39.0

+66 39

531

8

43.2
47.5 32.6

+66 28
+66 18.00

8.5
4.2
1.2

ADP
MAD
MAD
MAD

478 1086
-888 954

1172
-0757
-5.7
0650

~~ADP~~
-27.5
-07.5
-5.7

Green. Reb. t.091 t.108

9.1: MO. 8.7

105
204
+0.091 +0.108

804
779
722

+086 +107 APR

9.28 8.42 +0.57②



40070152

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

1000 00

Handwritten notes in the right margin, possibly including the number '1000'.

Handwritten note in the right margin.

Handwritten note in the right margin.

Handwritten note in the right margin.

531.000*

8.000*

47.500*

66.000*

18.000*

0.091*

0.108*

1.050*

16.218

-20.900

-0.457

0.686

-21.748

0.436

0.415

-1.599

0.222

0.598

-8.895

0.726,
0.55

-20.2

31

4.7

-9° 26' 70

8 43.0

-9 16

535

8 47.6360

-9²⁷ 37.21

B.6
23

9.70 107 0.62

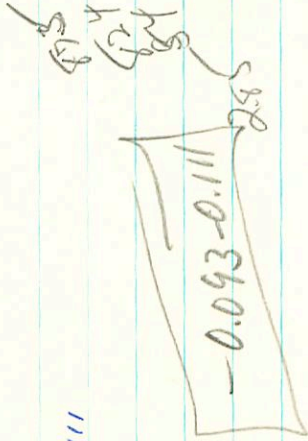
393

33

9.11

McC-AC - .093 - .111

9.3: K8 + 7.4



+8° 2131

8 42.9
45.74
8 48.0527

+8 24
+8 13
+8 2.77

534 *

ADS 7064; d=2"
Δm=0.1 mag.

9.08 1.34 1.20 -0.22 @ 20W

100 @ 200W

√ 168 + 0.14 √

McC-AC -0.056 -0.005

√ 162 + 0.04

63
+4
100
0.82

774
549
765

9.4: Mop +8.7

1912.16 83.6 1.93 2 -

1915.98 90.5 2.07 18 -

1922.29 93.0 2.18 17 -

-0.056 -0.005
-10.0
1.25

1

1891

1892

1893

1894

1895

1896

1897

1898

1899

1900

1901

1902

1903

1904

1905

1906

1907

1908

1909

1910

1911

1912

1913

1914

1915

1916

1917

1918

1919

1920

1921

1922

1923

1924

1925

1926

1927

1928

1929

1930

1931

1932

1933

1934

1935

1936

1937

1938

1939

1940

1941

1942

1943

1944

1945

1946

1947

1948

1949

1950

1951

1952

1953

1954

1955

1956

1957

1958

1959

1960

1961

1962

1963

1964

1965

1966

1967

1968

1969

1970

1971

1972

1973

1974

1975

1976

1977

1978

1979

1980

1981

1982

1983

1984

1985

1986

1987

1988

1989

1990

1991

1992

1993

1994

1995

1996

1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

2024

2025

534.000*

8.000*

48.000*

8.000*

3.000*

-0.056*

-0.005*

1.250*

17.783

-10.000

0.159

0.666

-3.830

-0.002

-0.554

5.492

-0.214

0.501

8.888	:	R.A.	
8.878	:	DEC.	
-8.888	:	R.A.	
4.888	:	DEC.	
8.838	:	STANCE	
15	:	ODULUS	
-18.888	:	VEL.	
-8.834	:	(U)	p1
8.834	:	(U)	p2
8.838	:	(U)	p3
184.887	:	UB	
-8.888	:	U	
-8.888	:	(V)	p1
8.888	:	(V)	p2
-8.884	:	(V)	p3
84.812	:	UB	
8.847	:	V	
8.871	:	(W)	p1
8.884	:	(W)	p2
8.881	:	(W)	p3
-338.448	:	WB	
-8.887	:	W	

R.A. : 8.800
DEC. : 8.050
R.A. : -63.000
DEC. : 4.000
STANCE : 0.830
ODULUS : 15
VEL. : -10.000

q1 (U) : -0.634
q2 (U) : 0.394
q3 (U) : 0.666
DU : 194.867
U : -3.799

q1 (V) : -0.065
q2 (V) : 0.830
q3 (V) : -0.554
DV : 34.912
V : 6.047

q1 (M) : 0.771
q2 (M) : 0.394
q3 (M) : 0.501
DM : -220.440
M : -8.237

121
0:44
~~see ste~~

2 (2) 2
8.9 11.8 + 17.9
8:22
9:56

4933 2367
8668 - 9716

25:54
37
+35
35

258

9:56 11-148 M 28 (2)

1:20
1:54
2:25

1 Sheer 900
25-258-258

0.195 - 0.294

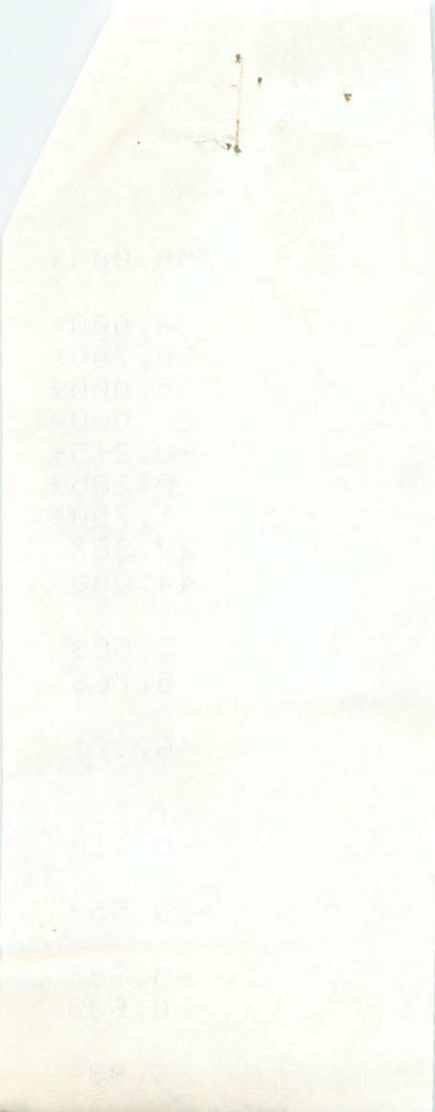
184 - 293
- 293
- 0.203
- 0.156
E. B. box

152 kg
42118.1
37 M (B)

8 50.744
8 44.7
35

435.1890

0562
172
486
-257
119



258.000*

8.000*

50.700*

35.000*

26.000*

-0.215*

-0.285*

1.750*

22.387

44.000

0.588

0.766

46.871

-1.282

-0.110

-33.559

-0.935

0.633

6.934

10.047
047

44.500
18

1.300
-324.000

-327.000
37.400

0.850
0.850

VEL.

MODULUS

DISTANCE

PM. DEC.

R.A.

DEC.

R.A.

DEC.

R.A. :	8.850
DEC. :	35.400
PM. R.A. :	-239.000
PM. DEC. :	-294.000
DISTANCE :	1.300
MODULUS :	18
VEL. :	44.200
	-0.642
	0.049

+71° 48.2
 Y 2113

8 41.6
 8 46.0
 8 51.164

+71 21
 +71
 +70 59.68

679
 695
 575.70
 676.60

* S32

ADS 7067; $d = 4''$ binary
 $\Delta m = 0.2$ mag.

91 A (23)
 78 M (7)
 117 K (6)
 97 G (8)
 86 S (6)
 53 U (2)

W 5947 0.5
 5945 4.74

A +47.563W
 B +47.323W

AB 8.06 +1.34 +1.21 +5.2R
 5.03 +1.39 +1.28 5K

G.C. 12268 -1.341 -0.354
 G.C. 12269 -1.353 -0.387

8.5: M10 +9.2
 to: 0.89

aperta means the brighter. Other calls relative parallax in mas for comp.

-1.348 -0.370

1531.90 23.9 743 YE
 1867.30 37.9 6.43 SA
 1898.17 41.1 5.43 3.000
 1908.49 45.4 4.78 18 -
 1912.44 46.7 4.74 14 -
 1921.43 48.7 4.24 35 -

118.10 -410 G(1)
 1352 -862 G2
 7.17 +6.2 R

AB
 -1345.875 0.35
 +47.4

0562
125

14310

247

117

Faint, illegible text, possibly bleed-through from the reverse side of the page.

532.000*

8.000*

51.100*

71.000*

0.000*

-1.345*

-0.375*

0.350*

11.749

47.400

4.813

0.651

87.398

-1.193

0.487

9.091

-4.384

0.582

-23.925

M	:	-58.229
QM	:	N-4411.061
d3	(M)	0.265
ds	(M)	-0.559
d1	(M)	0.792
N	:	0.521
qn	:	N-1198.257
d3	(N)	0.487
ds	(N)	0.871
d1	(N)	-0.029
N	:	23.542
qn	:	4817.332
d3	(N)	0.921
ds	(N)	-0.409
d1	(N)	-0.245
RAD. NET.	:	47.200
MODULUS	:	13
DISTANCE	:	0.220
PM. DEC.	:	-370.000
PM. R.A.	:	N-4147.000
DEC.	:	71.000
R.A.	:	9.820

9-14

R.A. : 8.850
DEC. : 71.000
PM. R.A. : % -4147.000
PM. DEC. : -370.000
DISTANCE : 0.550
MODULUS : 13
RAD. VEL. : 47.900

q1 (U) : -0.642
q2 (U) : -0.406
q3 (U) : 0.651
dU : 4817.395
U : 93.245

q1 (V) : -0.056
q2 (V) : 0.871
q3 (V) : 0.487
dV : % -1168.927
V : 8.291

q1 (W) : 0.765
q2 (W) : -0.276
q3 (W) : 0.582
dW : % -4411.091
W : -28.956

+5° 66-98

8 44.2

+5

28

536

8 49 12.7

+5

6.64

Pass 684 +.05 = 13

10.5: K8 +7.3

|

50.7
F 5/10

55
+70 00

+124 a

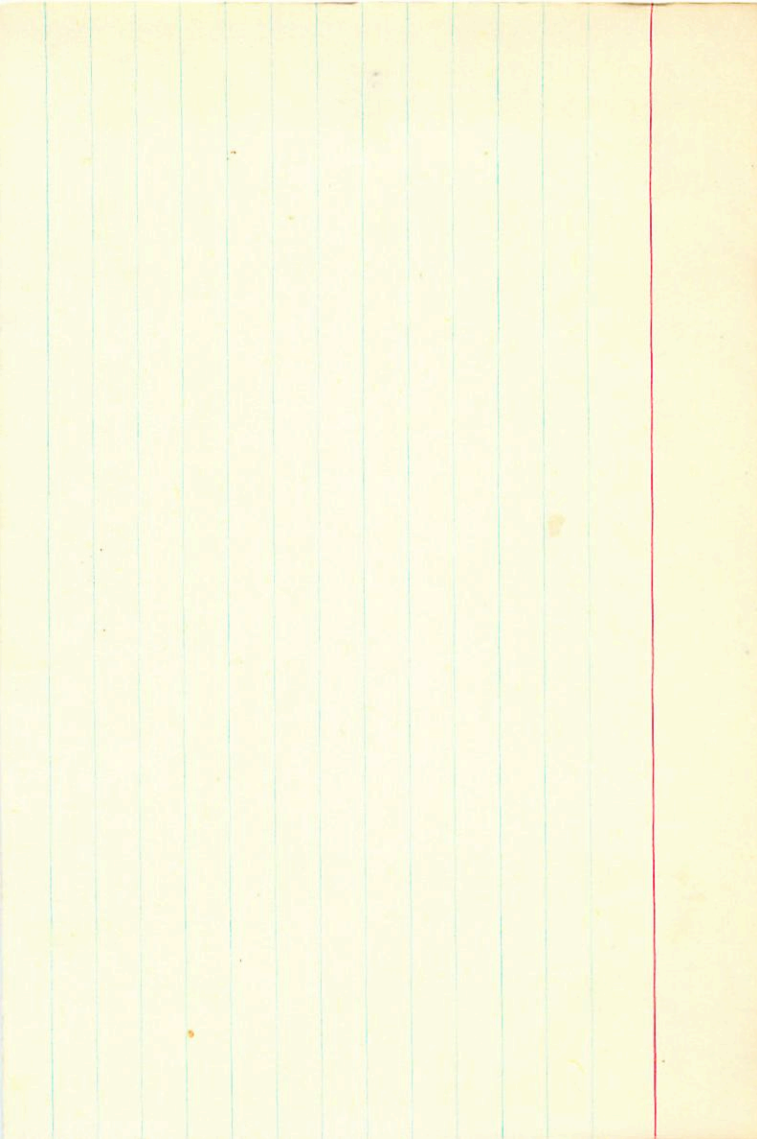
AD57076

0658

11325

-1.349 -384 GAZ

-1.347 -370 GC



G-46-9
LFS 616

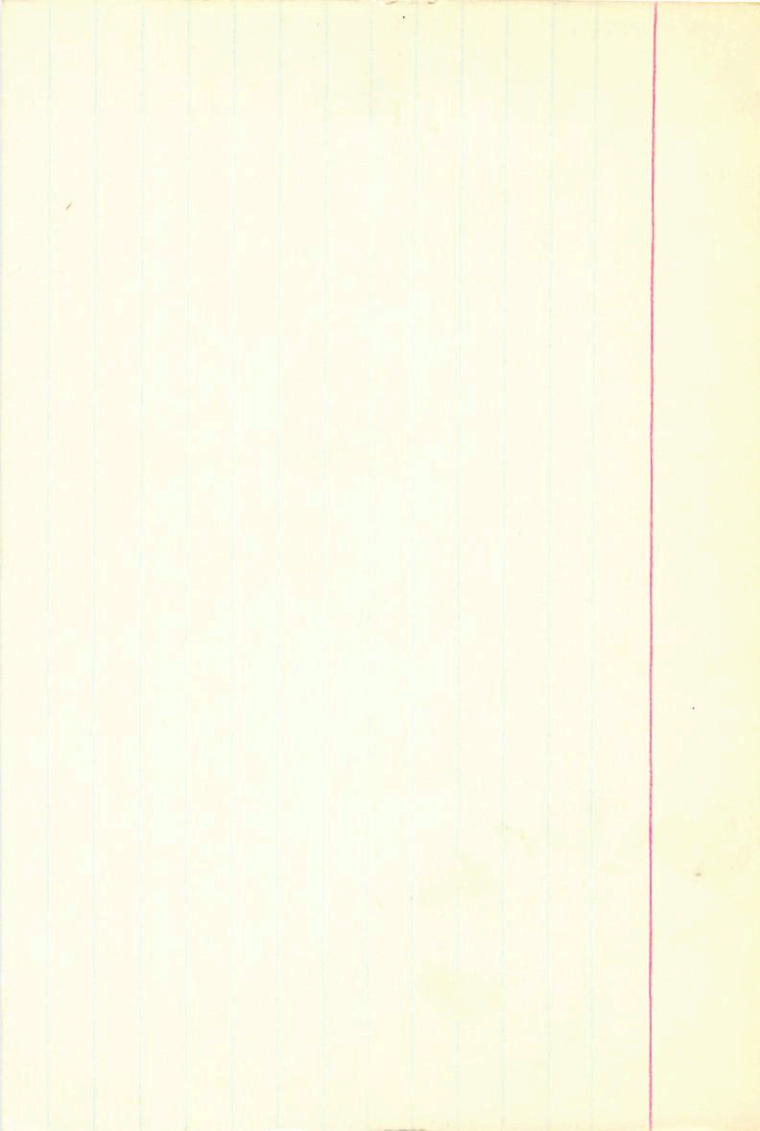
537

+22099

8 53

9.99 + 138 + 1.21③ 9.05 + 0.67③

+0.11 -1.08 in



+11° 1940

8 46.9
8 52 5.0

+11 42
+11 20.36

259

330
028

M C-AC -0.14 -0.05

4568
-8897

+1597
-9878

10.0 K8 + 7.5
+0.038

80108 -0268

+21° 1949

Y 2146

8 50.2

52.8

8 55.739.2

+21 6

+20 56

+20 44.01

261

W 5-897

26 m(8)

57 v(12)

-46.1 63W

+644 -187 461.5

+664 -170 Y →

Ci 20.500 +0.66 -15

+650 -144 G(13)

+0.666 -0.163 Y

-1 -9

-2 +1

+0.663 -0.171

+0.644 -0.180

654 -180

7654 -180

+1.6

-82 -2 +1.6

-225 -59 +216

9.1 K8 +75

1.75

+0.045

466

822

256

385

1

644

480

1.15

440

175

660 -180

470



?

0.47
1.80

988

-570
4.124

+218
~~4.124~~

+2°.2116

8 51.5

+2 25

262

8 56 25.5

+2 2.91

Inc C-AC -0.051 -0.067

10.6 MO + 8.5

0.973
153.715
0.294
0.267
0.729
1.281
-942.271
-0.329
0.932
0.047
-0.047
-0.5250.313
0.750
0.244
-0.049
-42.000
17
1.120
-100.000
892.000
20.720
8.200
R.A. DEC.
M. R.A. DEC.
DISTANCE
DULUS
VEL.

R.A. :
M. DEC. : 8.900
M. R.A. : 20.750
STA. DEC. : 600



RAD. VEL. : 27.200
 MODULUS : 100
 DISTANCE : 2.000
 PM. DEC. : -342.000
 PM. R.A. : -53.000
 DEC. : 22.000
 R.A. : 8.700

p1 (U) : 0.218
 p2 (U) : 0.178
 p3 (U) : 0.768
 q1 : -147.409
 U : 29.233

p1 (V) : -0.082
 p2 (V) : 0.252
 p3 (V) : -0.288
 q1 : -1242.04
 V : -170.087

p1 (M) : 0.782
 p2 (M) : 0.339
 p3 (M) : 0.272
 q1 : -282.702
 W : -23.829

R.A. : 8.700
DEC. : 25.000
PM. R.A. : -53.000
PM. DEC. : -345.000
DISTANCE : 5.000
MODULUS : 100
RAD. VEL. : 57.900

0.57
q1 (U) : *U²³* -0.618
q2 (U) : 0.176
q3 (U) : 0.766
dU : -147.409
U : 29.633

15.3
q1 (V) : -0.082
q2 (V) : 0.955
q3 (V) : -0.286
dV : %-1542.64
V : -170.807

289
q1 (W) : 0.782
q2 (W) : 0.239
q3 (W) : *0.72* 0.575
dW : -569.705
W : -23.659

2082.0

+42° 1922 8 35.6 +42 13 881

0115-23 012321 012321 8 41.9 56.0 +41 52.47

W 5764 59 (40) 8.58 93 1035

0612024 012321 8.11 8 25.9 63 1614

4074377 012321 8.11 8 25.9 63 1614

G.C -0.281 -0.649 6.6 9.1 8.7 8.3 KS-

Q+ draw
-0.277 -0.655

to: 959

674 10 2.45 25.1

-242 2 up 200

-250 287 674 10 25.1

250

R R-5

8.07 0.38 9.92

~~1.50~~

1.50

|