

+19'948-27

12 1.8

+20 15

634

12 6 39.0

+19 43.27

McC-AC +.183 - .298

1.3 MO +8.4

635

12 2.7 +6 14

12 7 33.6 +5 42.28

11.2! Mo + 9.4

WOR 22

$\Delta m = 1 \text{ mm}$

1960.34 346.7 1.44 4602

+41°509-35

12 3.5

+41 49

636

12

8

19.0

+41

17.28

McC-AC +.025 +.234

10.53 MO +8.7

$$\underline{+40^{\circ}S/2-31}$$

$$12 \quad 5.2$$

$$+40 \quad 31$$

$$637$$

$$12 \quad 10 \quad 0.3$$

$$+39 \quad 59.29$$

$$McC-AC +.163 - .165$$

$$11.2: 110 + 8.7$$

12 6.1 +17 30  
12 10 56.4 +16 58.29

638

Ross 127 -44 -47

12.2 190 +8.7  
+0.031

+18° 25' 81

12 7.8

+18 23

639

12

12 38.0

+17

51.31

M<sub>CC-AC</sub> - .043 +.011

10.6: K<sub>S</sub> + 7.1

+38° 23' 16

12

8.1

+38

17

641

12

12 53.3

+37

45.31

F.B. Lex. - .088 - .107

9.5 K5 + 6.9

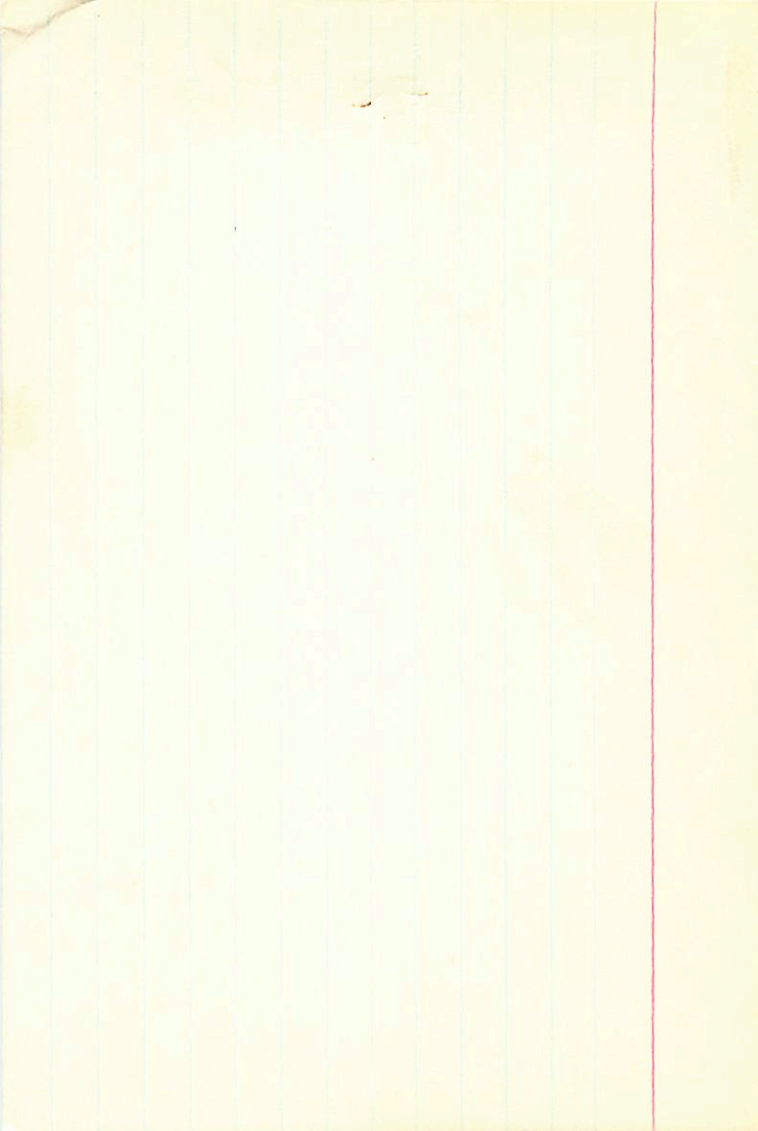
641

12 08

+3502316

601-820-  
-058-107





+6° 25' 73

12 8.6  
<sup>12</sup> 11.1

+6 28  
<sup>12</sup> 56

292

12 13.527.2  
<sup>12</sup> 15

56.31

ADS 8486,  $d = 2''$ ,  $\Delta m = 1.5 \text{ mag.}$

W 7340

DR6 443.763W

G.C. 16745 -0.289 -0.085

9.5 K8 +7.9

838

715  
<sup>505</sup>

-0.289 -0.082

(12)

-327 0.46

-300 -70 20  
340



0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

0000-500

292.000\*

12.000\*

13.500\*

5.000\*

56.000\*

-0.300\*

-0.070\*

2.000\*

25.119

34.000

1.070

-0.068

24.569

-0.942

-0.386

-36.788

-0.317

0.920

23.330

+60° 22913

12 9.2

+60 55

642

12 13.9 52.5 +60 23.32

47  
103  
47

McC-AC -109 -040

10.3 MO +8.3

-7°3382

12 9.8

-7 1

643

12 14 40.7

-7 32.68

McCAC -0.073 -0.034

10.7 K8 +7.7

— 12 10.7 +47 24 138

12 15 26.1 +46 52.33

1900917 -1.70 -1.04

11.50 +8.1

292

12 13.5 +5 56

265097

+0.49(2)

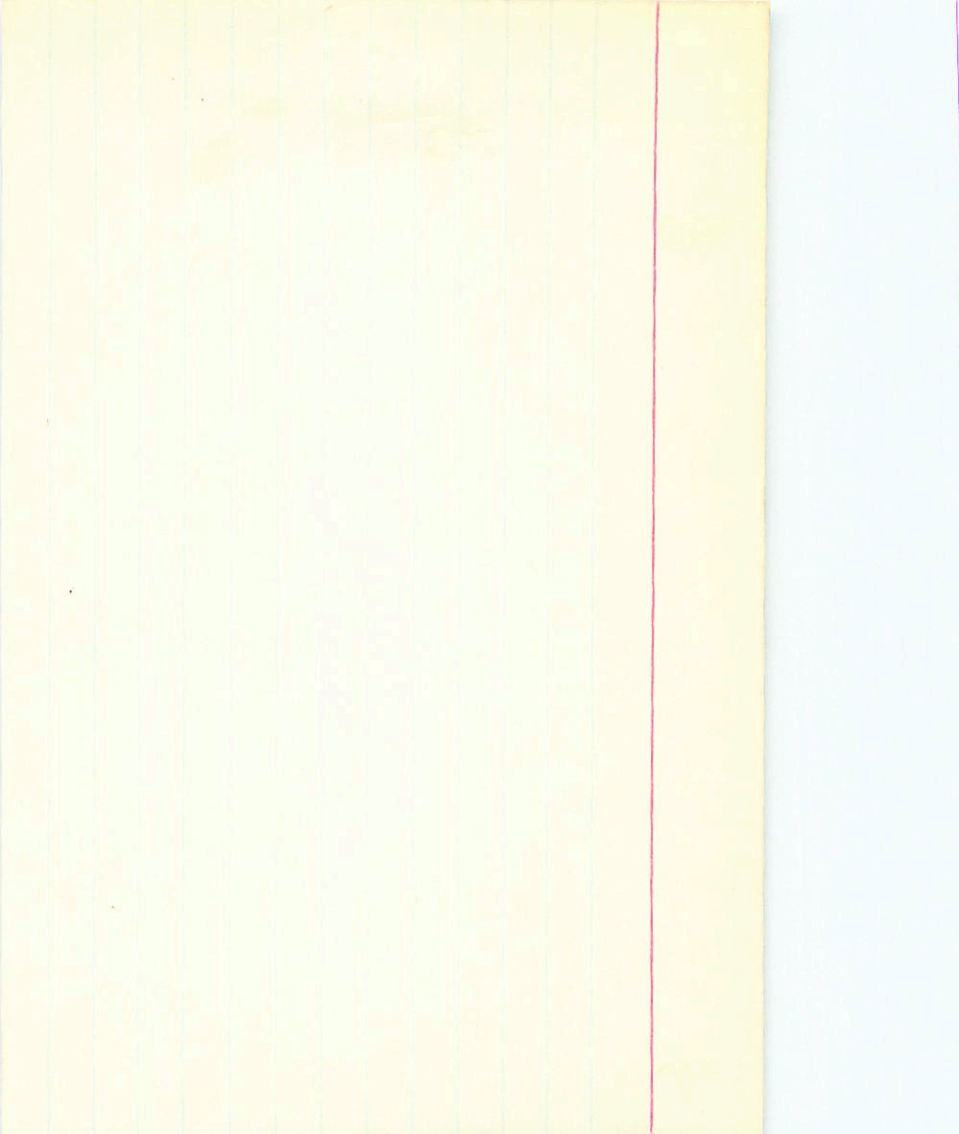
9.46 +1.22 +0.96(2)

ADS

512ms 10<sup>2</sup>  
ms 4KB

+42.7





+59° 39910

12 12.7

+59 38

646

12

17 19.8

+59 6.35

MCC-AC -319 -113

11.85 Mo +8.2

645

+53 35

12 12.7

+53 3.35

12 17 22.7

11.1 190 +8.6

+32°83-24

12 13.3

+31 57

\*  
647

+32°83-25

12 18 4.5

+31 25.36

McC-AC +.031 -.007  
+.040 +.016

11.1: M -  
11.6: - -

\* Both spectra are faint; dwarf  
characteristics are uncertain.

648

12 14.2 +34 50

12 18 57.6 +34 18.37

11.1 110 + 8.0

+33°2227

12 15.1

+33 26

650

12 19 51.6

+32 54.38

G.C. 16869 +0.92 -2.94

10.0 K8 +7.4

+49° 2384 - 35

651

12 15.2 +49 14

12 19 52.7 +48 42.38

McC-AC 1.027 t.041

10.39 K8 +7.1

f28.2110

12

15.3

f28

25

139

12

20 4.6

f27

53.38

-146-013 MC-AC

10.8 1078.6



15T901

17

20.4

-46 21

420 RB

1320-61

245.5 0.78

1303 1.60

-726 331

1214 1306

10.84

-1082

331

0.95

412

1056

0.25

410.8

5814

9.8



R.A. : 12.350  
 DEC. : -46.350  
 R.A. : N-1055.000  
 DEC. : -381.000  
 DISTANCE : 0.250  
 MODULUS : 15  
 RAD. VEL. : 43.000

p1 (U) : -0.888  
 p2 (U) : 0.238  
 p3 (U) : -0.451  
 pU : 2813.008  
 U : 21.257

p1 (V) : 0.494  
 p2 (V) : 0.189  
 p3 (V) : -0.849  
 pU : X-1991.838  
 U : -99.254

p1 (M) : 0.108  
 p2 (M) : 0.252  
 p3 (M) : 0.252  
 pM : N-1871.179  
 M : -17.430

51-143

R.A. : 12.350  
DEC. : -46.350  
PM. R.A. : % -1052.000  
PM. DEC. : -331.000  
DISTANCE : 0.950  
MODULUS : 15  
RAD. VEL. : 42.000

*0.89*  
*0.24*  
q1 (U) : -0.863  
q2 (U) : 0.228  
q3 (U) : -0.451  
dU : 2613.008  
U : 21.527

*10.2*  
q1 (V) : 0.494  
q2 (V) : 0.189  
q3 (V) : -0.849  
dV : % -1994.838  
V : -66.554

*4.85*  
q1 (W) : 0.108  
q2 (W) : 0.955  
q3 (W) : 0.275  
dW : % -1871.176  
W : -17.420  
*-9.3*

+21° 2415

13<sub>2</sub>

16.2

+21

6

653

12

20.6  
21.0

+20

34.39

50

Yale Zone - .403 - .069

-394 -069 (12)

-390 -090 L

6.68

9.8 K8 +7.4

1002-1107 +0.55 (1)

9.54 +0.44 (3)

50

916

54

656

586

7

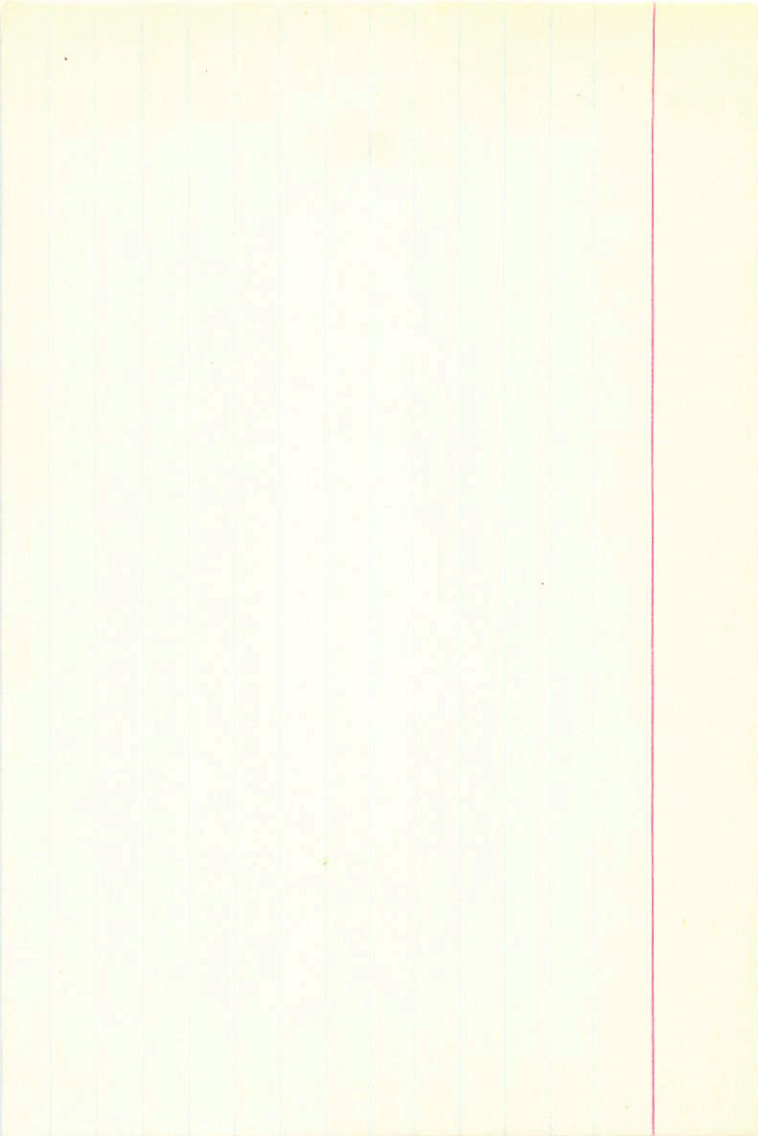
653

12

15.9

Sheet 4

-052-1135 M<sub>6</sub>-A C



-22° 3363

12 15.9

-22 21

652

12

20 50.1

-22 52.61

McC-AC -0.52 +.038

10.8: MO +8.0



+28° 34701

12 16.3

+28

42

654

12 21 4.3

+28

10.39

head 411 -09 +1.19

11.35 110 +8.4

+4.2612      12    16.8    +4    44      41

12    21    39.0    +4    12.40

1

MUL-AL 0022-122

106AD

+32° 22' 44"

Y 2862

|                  |      |
|------------------|------|
| 12               | 18.1 |
| <sup>12</sup> 12 | 20.4 |
| 12               | 22.8 |

~~50.7~~

|     |       |
|-----|-------|
| +32 | 42    |
| +32 | 25    |
| +32 | 10.42 |

655

W 7441 HO 108153

28 S+ (3)

dk4 -19C 3W

G.C. 16942 -0.365 -0.220

~~789~~  
738

8.7 K8 +7.3  
+0'030

|        |        |
|--------|--------|
| -0.356 | -0.232 |
|--------|--------|

-355 -230 -24.0  
205

-324 -190 (6.1)  
-377 -227 L

655

12 22.8 + 82 10

+3202244

864 + 0.92 + 0.67 ① 8.18 + 0.36 ②

66

-242

655.000\*

12.000\*

22.800\*

32.000\*

10.000\*

-0.355\*

-0.230\*

2.050\*

25.704

-24.000

0.915

0.128

20.453

-1.782

0.019

-46

+22° 2471

12 18.3

+22

39

656

~~20.7~~

~~+22~~

~~23~~

12 231/52

+22

7.42

4.6 988

$$10.01 + 1.13 + 1.08 \text{ (1)}$$

$$9.57 + 0.43 \text{ (2)}$$

Yale Zone = 095 - 181

9.9 K8 + 7.3

919

-172 147 L

859

-40 -145

656

148202471

12 18

9.9







199 915

12 268 - 15 43

- 27.05

2319 1250

122-483

1796

122-

045

12-

0.202

U : 67.879

q3 (U) : 3250.133

q2 (U) : -0.492

q1 (U) : 0.133

RAD. VEL. : -27.000

MODULUS : 15

DISTANCE : 0.950

PM. DEC. : -771.000

PM. R.A. : X-1746.000

DEC. : -25.700

R.A. : 12.450

R.A. : 12.450  
DEC. : -55.700  
PM. R.A. :  $\frac{1}{2}$ -1746.000  
PM. DEC. : -771.000  
DISTANCE : 0.950  
MODULUS : 15  
RAD. VEL. : -27.000

q1 (U) : -0.859  
q2 (U) : 0.133  
q3 (U) : -0.495  
dU : 3520.133  
U : 67.879

0.505

6211

12 270 +53 49

~~4738~~

616677

1930-205/6

1218 8124 145

2202

841

271

68



RAD. VEL. : -89.800  
 MODULUS : 51  
 DISTANCE : 1.850  
 PM. DEC. : 145.000  
 PM. R.A. : 2-2052.00  
 DEC. : 53.800  
 R.A. : 13.

p1 (U) : -0.859  
 p2 (U) : 0.432  
 p3 (U) : 0.390  
 q1 : 2547.715  
 u : 89.356

p1 (V) : 0.285  
 p2 (V) : 0.792  
 p3 (V) : 0.343  
 q1 : 2-3371.98  
 v : -81.242

p1 (W) : 0.885  
 p2 (W) : -0.441  
 p3 (W) : 0.893  
 q1 : -794.299  
 w : -89.481

R.A. : 12.450  
DEC. : 53.800  
PM. R.A. : % -2062.00  
PM. DEC. : 145.000  
DISTANCE : 1.650  
MODULUS : 21  
RAD. VEL. : -89.000

q1 (U) : -0.859  
q2 (U) : 0.422  
q3 (U) : 0.290  
dU : 5247.715  
U : 86.356

q1 (V) : 0.505  
q2 (V) : 0.792  
q3 (V) : 0.343  
dV : % -2371.60  
V : -81.242

q1 (W) : 0.085  
q2 (W) : -0.441  
q3 (W) : 0.893  
dW : -794.566  
W : -94.401

660

12 27.8 +31 16

+310223

9.13 +102 +0.87  $\text{\textcircled{A}}$  +0.355  $\text{\textcircled{2}}$

-013 +074

+10.30







+55°/532

12 19.5

~~21.8~~

12

~~24.6~~

+55 22

+55

+54 50.44

657

Berg. Mitt. No. -03 -21

9.9: K8 +7.3

+75° 4685

12 21.1

+76 14

659

12 25 6.7

+75 42.46

Green. Arb. -229 +.117

10.7 K8 +7.6

+21° 52' 50

12 23.4

+21 9

661

12 28.2 10.4

+20 37.50

48

272

Ans 961 - 07 - 17

10.2 Mo + 8.0

+29'2295

12 24.4

+29 31

663

12 29.1 7.6

+28 59.52

9  
93

E.B. Lex. +.05 - .11

10.2 MO +8.5

$+41^{\circ}2303$

12 26.4

+41

12

665

12

31 2.1

+40

40.55

McC-AC - .156 + .029

10.3 K8 + 7.4

125° 40829

12 26.3

+24 37

664

12 31.0 2.7

+24 5.55

49

hlof 425 -43 -07

10.3 MPp +8.0

— 12 28.2 +34 53 296

12 32.952.2 +34 21.59

47  
11/12  
11/12

9

IncC - Harvard -0.047 +0.024

10.3 190 +8.3