

115 85  
-089 14900 -520  
23 35.2 -45 47 A2  
and 26.35  
MWHG 609  
MWHG 24  
MWHG  
-725

222095 ⑩  
32836 NW 126 29  
4.73 040 270 1.111 25th  
472-089 1480

4.73 108 108

29  
2

Ac = +31 2.16  
4.73 040 270 1.111 2.886 089 54  
2.886 089 54

X100  
X 5  
P  
100 hrs see memory  
W plants

165

070 = 6  
066 = 2

142

330  
1104

143

1513

04

0724 +08  
0214

107.7  
14.1  
443  
734

~~1000000~~ -0000  
+33  
+889

FNS

0730 -0145

9538 9814

355

~~1000000~~  
+33  
+889  
+0000

13.11.28 26.35

115R 1498

0724 -0002  
0214  
443

+52 $\frac{1}{2}$  - 62 (34) Resonance 1963 Mar 12, 24  
 +22 $\frac{1}{2}$  +1 (6) Campbell 1925

+5/6 - 32

R.A. : 23.600  
 DEC. : -45.800  
 PM. R.A. : 104.700  
 PM. DEC. : -14.500  
 DISTANCE : 4.630  
 MODULUS : 84  
 RAD. VEL. : 3.400

q1 (U) : 0.875  
 q2 (U) : 0.319  
 q3 (U) : -0.364  
 dU : 280.776  
 U : 22.442

q1 (V) : -0.396  
 q2 (V) : 0.904  
 q3 (V) : -0.159  
 dV : -199.281  
 V : -17.348

q1 (W) : -0.278  
 q2 (W) : -0.284  
 q3 (W) : -0.918  
 dW : -76.704  
 W : -9.589

Observer:

8959.000\*

- /

STAR

TIME

23.000\*

M05.200\*

-45.000\*

-47.000\*

0.072\*

-0.000\*

3.950\*

61.660

5.000

0.207

-0.366

15.639

-0.159

-0.158

-11.208

-0.085

-0.917

-9.937

Comments:

8844

-38645  
+104  
23 12.9 173 57 40V

21948

W

560

32266

W350

~~072~~

154

1082

2866

58

119945

+0191

~~068~~

143

1060

1

101

+60928

~~012~~

148

1886

2868

101

+0352

+040+0151

2

144

258

1074

1372

B (6 2) 013

V 580

02

Bud 51

-25

56

41.34 5.54

-032

152

1882

4010

716 081

995 1.323

9681 9557 0418  
-2506 0957 0015

+11

U.83464 29.6V

8844.000\*

23.000\*

12.900\*

73.000\*

57.000\*

0.040\*

0.015\*

5.600\*

131.826

-2.800

0.182

0.434

22.749

-0.089

0.874

-14.197

-0.004

0.218

-1.148

5.7  
14.25 13803

155 124

16-15

-1

8487 109745

107,1

22 118 145 12

A1E A0111

211096 73.4 401

-54 3 110

31105 1300 0.54

SV

-006 171 1.031

2.888 219

+7 +10773

(27)

+100647

+10047

1618500

~~1000~~  
358  
1032

-006 = a  
038 = 2

+10771

+10791

1097 +1003

22.2  
1452

~~1370~~  
1361

169  
334  
1033  
1207

(1)

13110

1109

+3

5.5  
1005

121

416 898

9890

0937

2.4

PV

-9.4 49360

1487

1000

1352 + 8 07170

-14.939  
-192.953  
-0.158  
0.812  
-0.562

-14.648  
-63.674  
0.982  
0.068  
-0.178

24.744  
302.416  
0.106  
0.580  
0.808

-9.400  
85  
4.650  
3.000  
109.000  
45.200  
22.200



+002473.8  
+00844  
+00922.6

211096 22 11.8 +45 12 5.5 10-9.48

31105

13584

45601 1856.2 745 11 3184 1856.6

$$\begin{array}{r} -395 \\ 203 \end{array}$$

$$\begin{array}{r} -45 \\ 21.39 \end{array}$$

5.5 1925.9

43.95  
1452  
45.70  
442  
440

2522  
2072  
50

27.8

438  
2035

31.22  
16  
31.34

31.8

31.6

31.6 1924.7  
-23  
31.3

45424  
434



At 115 105, 125

103, 1

7/5/11

6.70 -0.88 -0.26 6E

8240

Sn Si

21

80.2

+23

10

205087

12th -9 635 Hampton

-18 (4) 1000

6.3

-063-187 752 2.794

-59

183

753

2.794 2

100355

note of (2) Huber

27

105

765

2.843

94

411

ADSP

1098

28.41

3.16

01

+7

73.0

+0020

+003

N30+

8.37

+00236

+0037

-38

+0317

27

-12.5

+034

350

7.25

8021

9999

0285

7.25

-5977

0261

0229

6.0 = 25.6

6.49

+2.1

2598

Red

1000

6240.000\*

21.000\*

30.200\*

23.000\*

10.000\*

0.034\*

0.000\*

7.250\*

690 635  
220 1865

281.838 1646

-12.500

0.118

-0.249

124 125

36.431 123

-0.009

0.904

13 13

-13.934 13

-0.109

-0.347

20 16

-26.419 14

Σ Par 188228  
27431

+0177 ± 2.4  
+0195

-13852.1

19 57.8 -137  
-73 03

-4.0417  
+0.189L

7550 12245

3.55 -0.02 40E

+077 -1350  
-2.0

50644 1405.2

-73 243.98 18969

+087 -1324  
+083 -130F  
+083 -133

-793

44.901

+7.05  
X.93

50.589

42.40 1439.81

9565

549 1275

42.49

47.8

688  
+783

42.6

43.44  
-5.71

48.9

50.846

44.79

195584

-20  
826

0

✓  
-877 481 -956 292 +083-133 +0.1 127 0 -185  
073 111 040 061 055 715 0 0 0 023

+2 +31-8  
+23-19-11

+21

-15

-8

32K

19.988 ✓  
-73.888  
278.888  
-133.888  
2.888  
36.81  
-2.888

0.475  
-0.562  
-0.677  
531.859  
28.665

0.218  
0.821  
-0.528  
-435.958  
-14.773

-0.852  
-0.103  
-0.513  
-253.988  
-0.196

943 / -5062  
-4624  
-0515

75910

98498

072 110'

-008

25.00 24.45  
-249 26.85

1.5 55 ft. 8

-73 02

40 21 2.83

188225

27631

~~2541~~

3.95 -03 -06 C

-008

145 959 32.897 5025

H118-13

12134 143  
80.51 12134 143  
0.5 967

+07227 01330

Bunk 1

0824

733 9941 47709

1538

311  
19 19 534  
19 534

H079 1133

05134 -8822

0097 H10  
2757 25 2645

-8024 311



A. : 19.900  
 C. : -73.050  
 A. : 248.600  
 C. : -133.000  
 CE : 3.100  
 US : 42  
 L. : -1.100  
  
 U) : 0.475  
 U) : -0.562  
 U) : -0.677  
 dU : 517.668  
 U : 22.325  
  
 J) : 0.218  
 J) : 0.821  
 J) : -0.528  
 JV : -442.351  
 V : -17.859  
  
 D) : -0.852  
 D) : -0.103  
 D) : -0.513  
 W : -227.582  
 W : -8.923

(12) 9-20-11 6 11

2008

159 11/11/11  
 159 11/11/11  
 159 11/11/11

159 11/11/11  
 159 11/11/11  
 159 11/11/11

40512000 19 43.y 445 00

-212

0211 101 114 1034 7.822 1.247

-0272

Plt. 45 ~~000~~

V 2.76

140 3.78  
-11.9100

+045 +040 2.6  
+047 +048 FR3

NO 2.76 +2926 +36 +4.1  
2.76 +0714 185 -20.2  
NO 2.76 -0672 53 -3.8

+046  
+046  
-3  
+043  
+044  
+5  
+049

+0889 +2037  
+0510 +0204  
-1759 +1057

+436 4877 -164  
+250 +088 +964  
-563 +114 +150



S Logg

fm = 393

426 152

7528

(97105) 60

19 43.4 +45 62

89.5 #

186882

or 215560

287 -02 -10 35

3005mm  
8234

2737

(164)

89.5 #

+80 490

+0484 W 80  
F 124

-08 1 118

1089 2.822

10520

432 ~ 484  
19409 2.415

1267  
228

or 3405  
10 2.775

1056 1047

-26.0

4469

9011 | 0648  
9031 | 0040

+1.1

10 2.775  
2.7

John  
2709, 1  
ROBIE

-2609

17.54 71 2000

20.1

July  
Pvt Samuel

566-1 (7)

Forster

-14 to -8 (2) Campbell  
-23 to -15 (2) Harper

Aug 99 137

APTS 183/189

7528.000\*

19.000\*

43.400\*

45.000\*

0.000\*

0.056\*

0.047\*

2.700\*

835 345  
4677 4265

34.674

-20.000

0.312

-0.193

118 119

14.685

0.085

0.965

18 15  
~~18 15~~

-16.346

-0.124

0.178

9 -10

-7.844

9162K  
2025 84.9

18 38.7

752 09

Rg 1.12

Pod 1/1/1/1

90% 0763  
-4326 -5371

E=005  
N05.58

12,000  
A02

6.00

-028

84 125

852 858

2.813 2A0P?

40007 1024 Working

250  
1108

804024

12,000  
-0201.1024 GC

19.0

M<sub>y</sub> = 70.2

80035 1025  
8004 2134

200

6.17  
14.81

V0 5.48  
5.75

-0032

0220

-685 2216

10014027

6555 3212

0297

-211 216 5787

-7552 9471

6011

6.00 23 8450

Huck MEM 92, 233 1990 - site = 28 000  
Pittman DKO 14, 399 1976 - 23.9 ± 6.2 (9)

7028.000\*

18.000\*

38.700\*

52.000\*

9.000\*

0.001\*

0.027\*

5.750\*

141.254

-19.000

0.125

-0.139

20.271

0.007

0.911

-16.297

0.028

0.388

-3.428

53.65 1888.5

43.762 1882.0

5.2 ± 0.2  
2.2 ± 1.000

L344 63443.17 03.0 -87 10 -21.3

154810 21313 156-26 (3)

042-157 1147 2845

6163 M1

5946-052 1.556

21313

(Number)

4  
-27  
605

745 21313

1003-027

-21.3

104-027

Feb

7746 21313 -2524 10286

8440

1476

110

708 21313 -1325 -9676

5774

708 21313

213

R.A.	:	17.050
DEC.	:	-37.150
M. R.A.	:	-4.000
M. DEC.	:	-27.000
DISTANCE		
q1 (U)	:	± 6.050
q2 (U)	:	± 1.150
q3 (U)	:	-0.979
DU	:	19.593
U	:	24.039
DISTANCE		
q1 (V)	:	0.588
q2 (V)	:	0.784
q3 (V)	:	-0.198
DV	:	-109.207
V	:	-13.485
DISTANCE		
q1 (M)	:	-0.795
q2 (M)	:	0.606
q3 (M)	:	0.038
MP	:	-65.554
M	:	-11.437

B -18.3 ± 1.2 (m) AM

6/29/17 16 35.0 +53 00

1501100/17 -DIG 138 910 2.804

892.90/2 E(87)012

89240 -12.99 2867 816 0.58 10596 1180005  
196

242 -12.28 2738 1.23 0.40

-10.86 250007,1 A05 6129 C = 5184  
12 5184  
B 9184

-206 135 2107,1 6834 -4486 / 2314 0.800

-2076 -10 151 Polymer -7300 -89357 / 0013 0013

A4524

19.5 55,391

FG A45 1071 8.11 26.88 7.8 26.45  
-0.8 -0.6



17  
-200  
-10.9

-20.7  
-10.8  
-17.2  
-11.1  
-19.8  
-19.4  
-11.5  
-17.8

C -14 to -2 (4)

D -34 to -10 (3) Harper

145674

6036

7925

-9.5

12.20 33.37  
8.12 0.54

16

08.1

+58

04

6.33

ATV

56  
32 140 1009 2.757

150 0.555

~~-0.21 + 0.20~~

~~0.27 + 0.22~~

~~10.122 10.318~~

1.22(4)

DAD, 103

-10

Pu = 18.0

16.1

+58.1

-54

+25.5

8.75

-9.5

7591

-6584

635

664

+0.44

1.300

-5447

8387  
+0.7

9.27 - 1 27.35

0406  
0013

HSI - 2768 Market Super Yang Market 19

$$\begin{array}{r} 3.810 \\ 173 \\ \hline 3.983 \\ 3. \end{array}$$

39  
-0032  
-0036  
+0034  
+0024  
+0013.9  
2.53  
930  
97  
1.56

$$\begin{array}{r} -0034 + 0205 \\ -00413 + 0234 \end{array}$$

$$\begin{array}{r} 3.779 \\ +20 \\ \hline 3.809 \end{array}$$

-0327  
-028.5 + 020.5

$$\begin{array}{r} 3.15 \\ -37 \\ \hline 2.81 \end{array}$$

4474

Observer:

16.100

- /

58.100

-51.000

STAR

22.000

TIME

5.750

141

-9.500

-0.356

0.934

-0.012

143.055

20.318

0.648

0.257

0.717

-55.958

-14.716

-0.673

-0.249

0.697

59.971

1.850

Comments:

1,981

60,897

0,697

-0,249

-0,673

-14,801

-56,562

0,717

0,257

0,648

22,886

161,235

-0,012

0,934

-0,358

-9,500

141

5,750

25,500

-54,000

50,100

16,100

6023

16 07.2 45 04

Ap

145389

21736

-00236  
-244

+0427 W<sub>0</sub>SD  
+044  
1124

4.27 -07 -28 J

B 999 (44)

-00241 +0354

-0301

~~-026 +038~~

-28 08 ~~787~~ 787

123 787  
246  
1033

B 999

-0284

150

-022-1044

(44)

-015

-118306 (39) Antikman G SAV M, 274

16.1  
+451

-31

+44

415

-15

6023.000*	16.100
	457100
16.000*	-31.000
7.200*	44.000
45.000*	4.150
4.000*	68
-0.026*	-15.000
0.038*	
4.400*	
75.858	-0.358
-15.000	0.907
	-0.221
0.207	226.304
-0.223	18.622
19.066	0.648
	0.412
-0.006	0.641
0.643	18.681
	-8.349
-10.095	
	-0.673
0.068	-0.086
0.733	0.735
	51.894
-5.804	-7.517



Alber lty/Mu

16 07.2 495.04

60023

-12 134 <sup>52</sup> 76.7 <sup>311</sup> 2.2846 -12.9

-021 124 783 2.2846

145384

-012 119 801 2.291 2.28

-015 127 994 2.286

124 587 2474

1.035

0.7

244

23

787  
3  
10

Out

-8,472  
53,518  
0,735  
-0,086  
-0,673

-9,978  
10,874  
0,641  
0,412  
0,648

18,869  
209,103  
-0,221  
0,907  
-0,358

-16,800  
72  
4,300  
40,000  
-31,000  
45,100  
16,100

99101

16 072 455 04 1716 2075

App - 15.26

25.58 3586  
1427 0.52  
-161 208  
1716 2075

160

145389

78 128 7842785

4.26 - 0.04

17.465 App 5.25 137  
17.6 377 Unit 1379

21736

-50267 +03259 N30  
-5030711 +03251162 7000

-030 +028 6C  
-030 +032 N30

92294

-5030711 +03251162 7000

4 0 7 2

-030 +030

125

7842785

161

MV -019

Pc -2000

114 1156  
035

4151

VD 415

TL 2291

61

-31

6237 -6707 5440  
7417 2046

2570.5

4.3

-9736

-118

113399  
140  
1445

12.32 2670

1/50

-886 -464 707 207 -030 +030 -15.4 021 -11 099

-027 019 +014 -010 -081 156 -11.0 +5 +1.0 018

-1 +20 -4

+15 -12 -2

-2 +23 -3

+19 -13 -3

012

Q New  
6023

16 07.2 +45 04 Ap

145389

21736

4.27 -07 -25 25

Concession

+00236  
+13  
+27

+803 +117 -012

2791 (3)

FRY

$\frac{237}{1037}$   
2874  
833

+0284  
+635  
+183  
+4

-15.6a  
17.4

Put

+5  
4.12  
4.4

-650  
+103  
-02

50 V0 = 4.12  
-12  
-315  
= -0.3

NEW ORLEANS  
1072-4110 MW

APEND -  
-103M +104T  
-4  
-104T +104T



50th

143459

15 58.1 -8 16 56 A1 -19.48

21502

~186

9207

-0011 41 -02035030

-0011 2.6 -01752466 -7030

4M 8.0M

Uo 6.2M

Uo

6.2M

6.2M

6.2M

6.2M

6.2M

6.2M

22.35 118.1

22.85 -121.8

22.75 131.2

22.8 121.9

5.77

PM 11.5

03155 10312.918

5905 (18045)

15 51.9 = 60 20 AIR

P<sub>0</sub> - 6

14284

21354

479 42-24-18-12

5725 406 (405.5) C

-21

(3)

121,213

5.77

624

173

1044

2.536

1118814

-14::

Hz

-3645 - 70.85

178

256

090

a = 45

177

1043

n = -L

187

-025

1074

15115 0.80

E(18) 024

No 5.64

1.413

-2330

4728

-4982

10947 1.85

-2688

10839 3.4

4.156

41.53

15.29 25.20

71.0



on 12/1 263

15 50.4 -25 11

5905

142014

21320

5905.000\*

15.000\*

51.900\*

-60.000\*

-25.000\*

-0.025\*

-0.079\*

3.900\*

60.256

-14.000

0.211

-0.003

503

23.976

-0.255

-0.580

-7.115

-0.212

-0.094

-11.430

my/2021 (65) RvdR Wiscory

50840  
5716

18 148 +33 36

49 1987

136844

-98.43 13.41

BGM

P -203

AGD  
Amada  
WERY

95177

1320 0.54

Nov 2 233

8152  
-7640

-9277 / 0527  
3734 / -0053

Apr 24

+ E 20 -25 (57)

Pedman

AGD

14.59 26.55

9.889

127972

1.119

11678

10000

100

11/11

R. A.	:	15.300
DEC.	:	33.100
R. A.	:	0.000
DEC.	:	0.000
DISTANCE	:	0.000
PERIOD	:	10
VEL.	:	0.000
U	:	-0.516
V	:	0.791
W	:	-0.328
dU	:	0.000
U	:	0.000
dV	:	0.667
V	:	0.612
dW	:	0.425
W	:	0.000
dU	:	0.000
U	:	0.000
dV	:	0.000
V	:	0.000
dW	:	0.000
W	:	0.000

7144 024 187 980 2.418

70441

14 214

546 57

A1E

12662

675 109 2326

-2422 -20.44

~~2422~~

0320

209 0.91

2524

-1055

0226

9676

-7458

9944

-1683

0318

6942

-2439

0200

6041

-116

2868

Albany

over

10 4.2 1/2  
10 6.5 0

1/2

14.350	R.A.	:	
-46.950	DEC.	:	
0.000	PM. R.A.	:	
0.000	PM. DEC.	:	
0.000	DISTANCE	:	
10	MODULUS	:	
0.000	RAD. VEL.	:	
-0.674	q1 (U)	:	
-0.078	q2 (U)	:	
-0.735	q3 (U)	:	
0.000	PU	:	
0.000	U	:	
0.652	q1 (V)	:	
0.404	q2 (V)	:	
-0.641	q3 (V)	:	
0.000	PV	:	
0.000	V	:	
-0.347	q1 (M)	:	
0.911	q2 (M)	:	
0.222	q3 (M)	:	
0.000	MP	:	
0.000	M	:	

110423 -0068-0017 00249 4025 -27 0:00 ASD X

Wavelength at least 500 nm, HR 4524, 3144

110423 0.03-0.02-1.333 148 5.50 -0.03 -0.070 482-507

110423 ~~0.012~~ <sup>0.012</sup> ~~0.012~~ <sup>0.012</sup> 440.75 722.5 -17.4 -10.4-13.6 -28.0 483.7

+2.56 -6 (3) <sup>487</sup> <sub>209</sub>  
486 222 147 <sup>487</sup> <sub>209</sub> <sup>487</sup> <sub>209</sub> <sup>487</sup> <sub>209</sub>

Ex long 918

090 150 1010 2.885